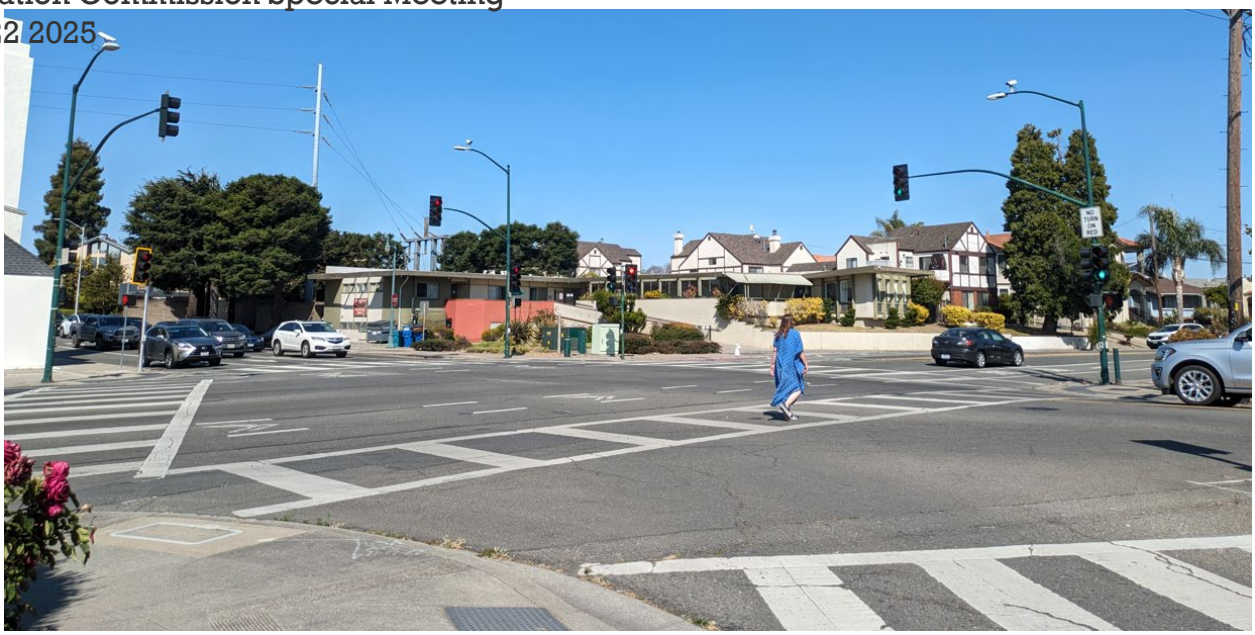

Gibbons/High/Fernside Intersection Analysis for the Fernside Boulevard Traffic Calming and Bikeways Project

Prepared for
City of Alameda

September 2025

Parametrix

September 2025

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Executive Summary

This technical analysis evaluates design alternatives to improve safety at the Gibbons Drive / High Street / Fernside Boulevard (Gibbons/High/Fernside) intersection in the City of Alameda as part of the Fernside Boulevard Traffic Calming & Bikeways Project (Fernside Project). The near-term Fernside Project includes buffered bike lanes, pedestrian safety improvements, and traffic calming on Fernside Boulevard west of High St. The long-term concept includes pedestrian median islands and a two-way separated bikeway on the north/east side of Fernside Boulevard, pending external funding availability. The City Council approved the near- and long-term concept plans for this project on March 18, 2025, and also directed staff to return to Council after conducting a traffic study that evaluates the safety, operational, and redistributed traffic effects of the proposed concept for the southwest corner of Gibbons/High/Fernside. City Council also directed staff to evaluate the potential to implement intersection improvements with the near-term project instead of the long-term project.

The existing five-leg intersection presents safety challenges with lengthy pedestrian crossings, high-speed turning movements, and crosswalks without pedestrian signal heads at the Gibbons Drive leg. Between 2017-2021, 22 total crashes occurred at the intersection, six of which resulted in injury. Improper turning was the primary cause in 55% of all crashes.

Three concept alternatives were analyzed for integration with the Fernside Project:

- Alternative A: Realign Gibbons Drive and restrict northbound Gibbons to right-turn only (estimated construction cost: $600,000)
- Alternative B: Realign Gibbons Drive and retain all turning movements with new signal control at Gibbons Drive/High Street ($850,000)
- Alternative C: Low-cost improvements using pavement markings, flexible bollards, and signage, also known as “quick-build” ($150,000)

Intersection Safety and Traffic Operations analysis for the Gibbons/High/Fernside intersection reveals important performance differences in the long term, as summarized below:

- Alternative A: Provides the most substantial safety improvements while providing the best intersection operations in both near- and long-term implementation.
- Alternative B: Provides nearly the same safety improvements as Alternative A, but results in much longer vehicle delays, especially for northbound High Street, with the long-term Fernside Boulevard project.
- Alternative C: Provides minor safety improvements, and results in longer vehicle delays with the implementation of the long-term Fernside Boulevard project.

This report also analyzes redistributed traffic effects of Alternative A, which would restrict northbound Gibbons to right-turn only onto High Street. Alternatives B and C would not noticeably alter traffic routes on Gibbons Drive or other neighborhood streets.

The report finds that Gibbons Drive currently functions as a cut-through route with over 50% of its 2,200 daily vehicles passing through the neighborhood without accessing neighborhood residences. Speeding is common on Gibbons Drive, with 15% of drivers traveling faster than 31 mph despite the 25 mph speed limit.

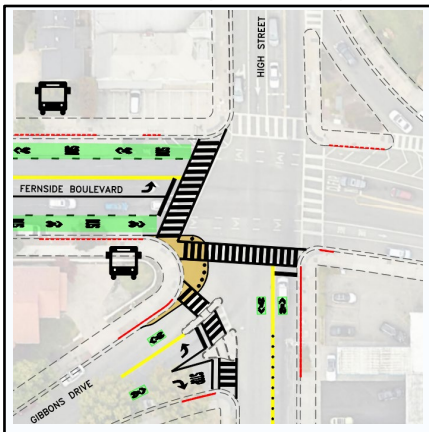
The analysis concludes that Alternative A would reduce northbound cut-through traffic traveling on Gibbons Drive by approximately 20%, but would also redistribute 40-50 vehicles per peak hour to Southwood Drive and Bayo Vista Avenue, and 25-35 vehicles to Cornell Drive north of Gibbons Drive. This would result in an increase from approximately 150 vehicles per day to an estimated 400-500 daily vehicles on Cornell Drive and 550-650 daily vehicles on Bayo Vista. Although the resulting volumes are low and remain at the lower range for Neighborhood Local Streets, the redirected traffic is likely to include cut-through drivers who may continue speeding on residential streets.

The recommendation from this analysis is to implement Alternative A, which provides optimal intersection safety improvements with minimal operational impacts. However, it is recommended to implement at the same time or soon after neighborhood traffic calming measures to address potential impacts from redistributed traffic on nearby streets. Therefore, the recommended implementation sequencing is as follows:

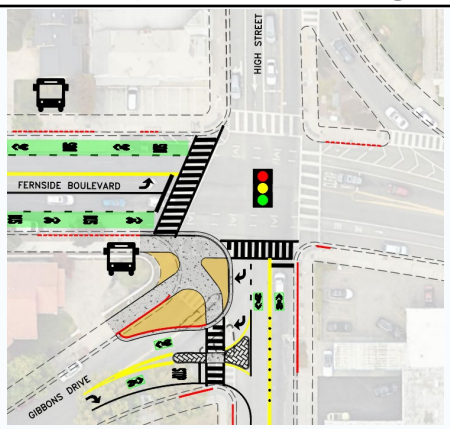
1. 2026: Install “quick-build” safety improvements on the southwest corner of the intersection as part of the near-term Fernside Project and assess adding speed humps on Gibbons Drive.
2. After 2026: Implement neighborhood traffic calming on Gibbons Drive, Southwood Drive, Bayo Vista Avenue, and Cornell Drive (not currently included in an existing project), followed by implementation of Alternative A on the southwest corner of the intersection.
3. 2030+: Implement the long-term Fernside Project with two-way bikeway installation, removal of westbound right-turn slip lane, and remaining intersection improvements (currently planned for after 2030, pending external funding availability).

The phased implementation approach accelerates safety improvements while managing traffic redistribution in the neighborhood.

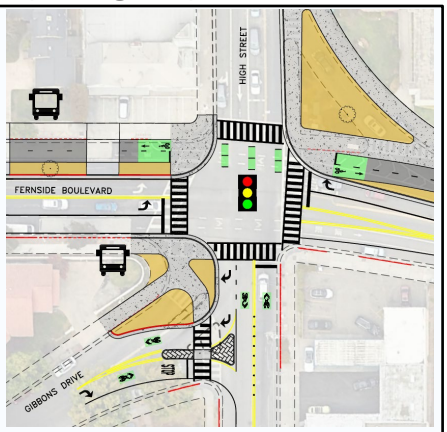
Recommended phased implementation is depicted in the following concept design sequence:



1. Quick-Build Improvements (2026)



2. Alternative A with Neighborhood Traffic Calming (after 2026)



3. Alternative A with Long-Term Fernside Project (2030+)

1. Purpose

This report evaluates design alternatives to improve safety at the High/Fernside/Gibbons intersection in the City of Alameda as part of the multi-phase Fernside Project. High/Fernside/Gibbons is a complex intersection with five legs that serves vehicular access to the High Street Bridge at a gateway to the island. The intersection should be simplified for pedestrian and multi-modal safety, and to support intersection operations with the long-term Fernside Project. The Fernside Project includes a future plan for a two-way bikeway that the traffic signal phasing must accommodate. This report presents three design alternatives for the intersection and evaluates their performance in two parts:

1. Intersection Safety and Operations: This analysis evaluates how well the design alternatives improve safety and simplify traffic operations for High/Fernside/Gibbons with the long-term Fernside Boulevard corridor design.

2. Neighborhood Traffic Circulation: This second analysis evaluates the effect of the same design alternatives on neighborhood traffic circulation on Gibbons Drive and parallel neighborhood streets.

The discussion concludes with a design recommendation for the High/Fernside/Gibbons intersection considering both these analyses. This report recommends a phased implementation that balances safety improvements, intersection traffic operations, redistributed traffic on neighborhood streets, and construction timeframe.

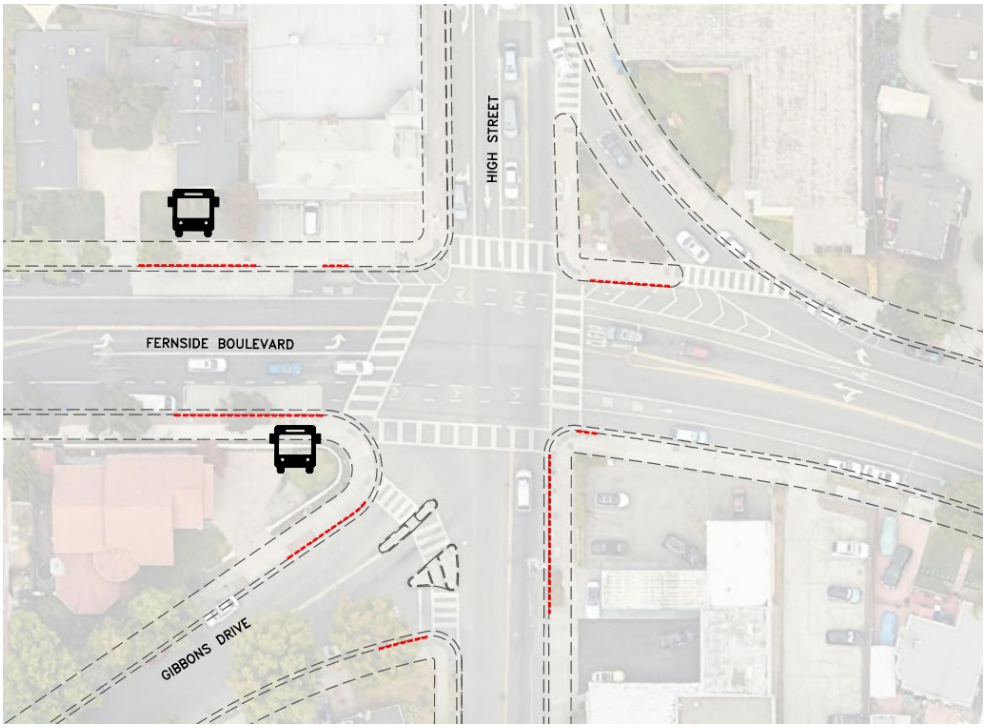
2. Background

The Fernside Project will reduce traffic speeds and improve safety and mobility for roadway users, while implementing adopted plans and policies applicable to the corridor between Tilden Way and San Jose Avenue.[1] This corridor project began community engagement and design alternatives in 2023, presenting near-term options for construction in 2026 with planned repaving and long-term design alternatives for implementation after 2030. As a result of this outreach and analysis, the City Council approved near- and long-term concept plans on March 18, 2025. The near-term design includes buffered bike lanes, pedestrian safety improvements, and traffic calming on Fernside Boulevard west of High St. The long-term concept includes pedestrian median islands and a two-way separated bikeway on the north/east side of Fernside Boulevard, pending external funding availability.

The High/Fernside/Gibbons intersection (Figure 1) currently operates with five approaches, each with traffic signal control. The intersection has long pedestrian crossings and a layout that allows high vehicle speeds. During the concept development and outreach for the Fernside Project held in winter 2024/2025 and Spring 2025, the High/Fernside/Gibbons intersection was identified by staff and community members as an important location in need of safety and operational improvements for people walking, biking, and driving.

[1] https://www.alamedaca.gov/Departments/Planning-Building-and-Transportation/Transportation/Fernside-Boulevard-Traffic-Calming-Bikeways-Project

Figure 1 - Existing High/Fernside/Gibbons Intersection



Source: Parametrix, 2025.

City staff and the consultant team evaluated the potential for a future roundabout but determined that the available right-of-way is not sufficient. After determining that a roundabout would not be feasible, the team developed an intersection design concept (Alternative A, Figure 2) that simplifies the south side of the intersection by removing the Gibbons leg and limiting northbound Gibbons traffic to right-turn only onto High Street. This design aims to simplify the intersection, shorten pedestrian crossings, reduce vehicle speeds through the intersection, and reduce traffic signal wait times.

Because of the safety needs at the intersection, at the March 18, 2025 City Council meeting, staff also presented the option of constructing these improvements with the near-term Fernside Project in 2026 instead of with the long-term concept after 2030. The City Council directed staff to return to Council after conducting their planned traffic study evaluating the safety, operation, and redistributed traffic effects of the concept. Cost estimates are provided for comparison and consideration.

This traffic study presents the design concept presented to City Council (Alternative A) alongside alternative concepts (Alternatives B and C) to answer three key questions for study:

1. How well do the alternatives improve safety, simplify operations, and reduce vehicle speeds at High/Fernside/Gibbons as part of the long-term Fernside Project concept with a two-way bikeway?
2. What effect do the alternatives have on cut-through traffic on Gibbons Drive and how will traffic redistribute on parallel neighborhood streets?
3. How do project phasing options balance the High/Fernside/Gibbons intersection needs with broader traffic calming needs in the neighborhood?

3. Alternatives Summary

Three potential alternatives for the High/Fernside/Gibbons intersection to address existing safety and operational concerns are evaluated in this study:

A. Realign Gibbons, restrict northbound Gibbons to right-turns only

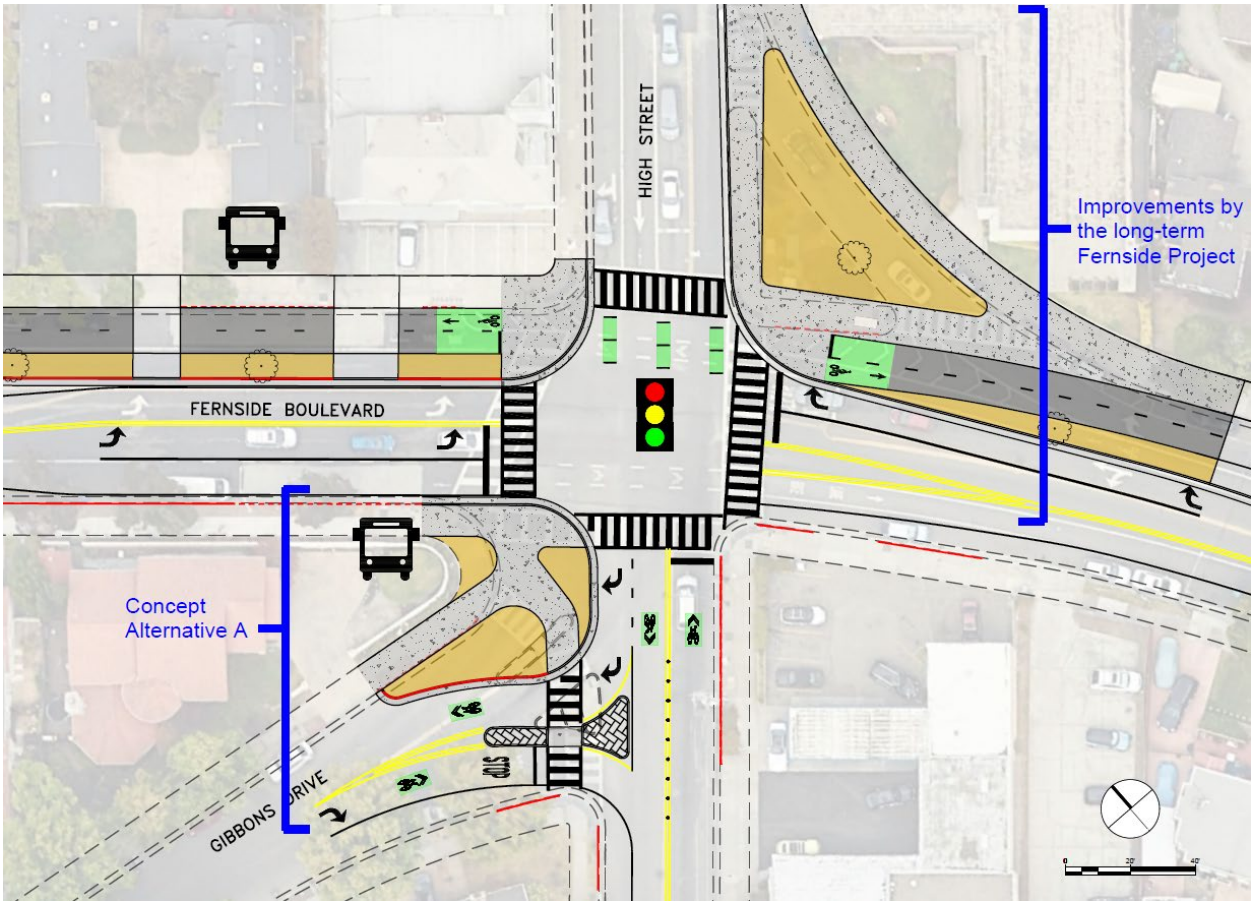
B. Realign Gibbons, allow all northbound turning movements with traffic signal

C. Low-cost improvements using pavement markings, flexible bollards, and signage ("quick-build")

Each of these alternatives is described in more detail and displayed in context of the long-term two-way bikeway planned for installation by the Fernside Project. The Fernside Project will implement improvements on the north side of the intersection; each of the alternatives differ primarily in the improvements shown on the southwest corner of the intersection.

Alternative A (Figure 2) would realign Gibbons Drive to intersect High Street south of Fernside Boulevard. This concept would restrict northbound Gibbons vehicles to right-turns only at High Street. This concept would install a concrete curb extension that would provide additional area for pedestrians at the southwest corner of Fernside and Gibbons and would shorten crosswalk lengths. The estimated cost for implementing these improvements to the Gibbons leg of the intersection (not including the improvements on the north side of Fernside Boulevard) is about $600,000.

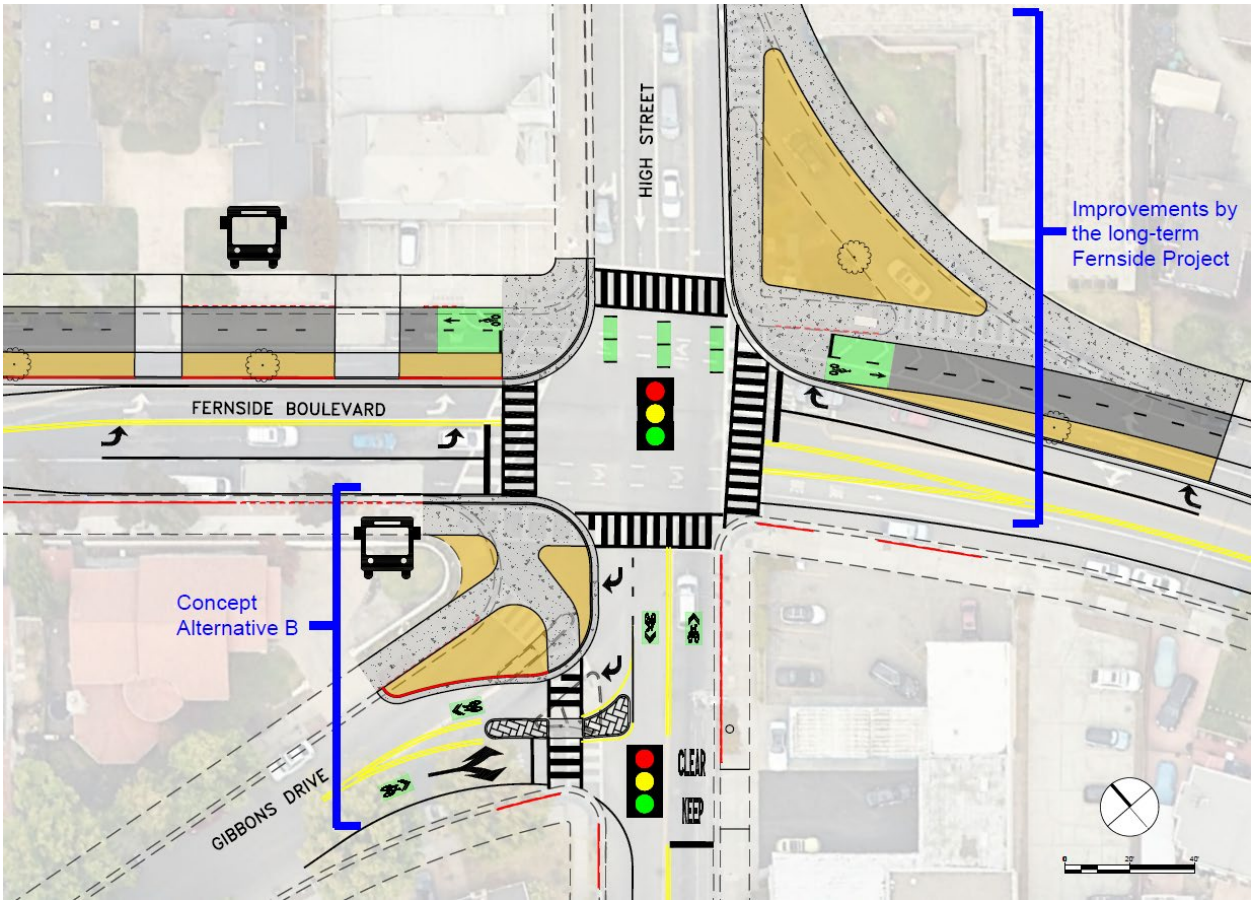
Figure 2 – Alternative A



Source: Parametrix, 2025.

Alternative B (Figure 3) would implement similar realignment of Gibbons Drive to High Street and concrete curb extension at the southwest corner of Fernside and Gibbons. A new traffic signal would retain the ability for vehicles traveling northbound on Gibbons to turn left onto High Street or Fernside. Due to Alternative B requiring new traffic signal equipment, it would be the most expensive of the alternatives, with an estimated cost of about $850,000.

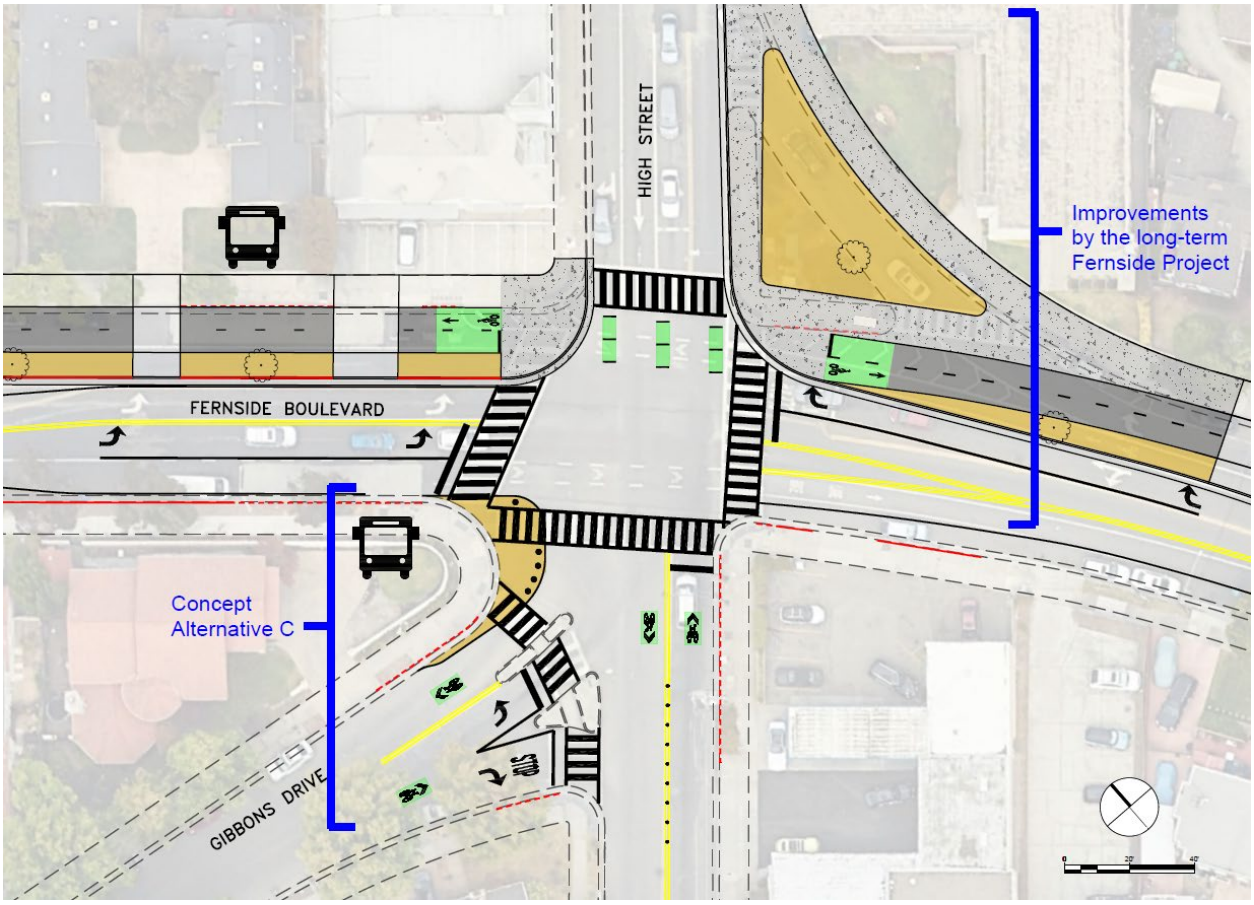
Figure 3 - Alternative B



Source: Parametrix, 2025.

Alternative C (Figure 4) would construct an expansion of the southwest corner using low-cost materials such as pavement markings, flexible bollards, and enhanced signage, also known as "quick-build" safety treatments,. This concept would provide a painted extension of the southwest intersection corner of Fernside and Gibbons, outlined with bollards, to calm traffic and provide additional protection for pedestrians crossing the southern leg of High Street. In long-term implementation, pedestrian signal heads for the crosswalks on the Gibbons Drive intersection leg would also be installed. The estimated cost for this alternative is about $150,000.

Figure 4 - Alternative C



Source: Parametrix, 2025.

4. Analysis 1. Intersection Safety and Operations

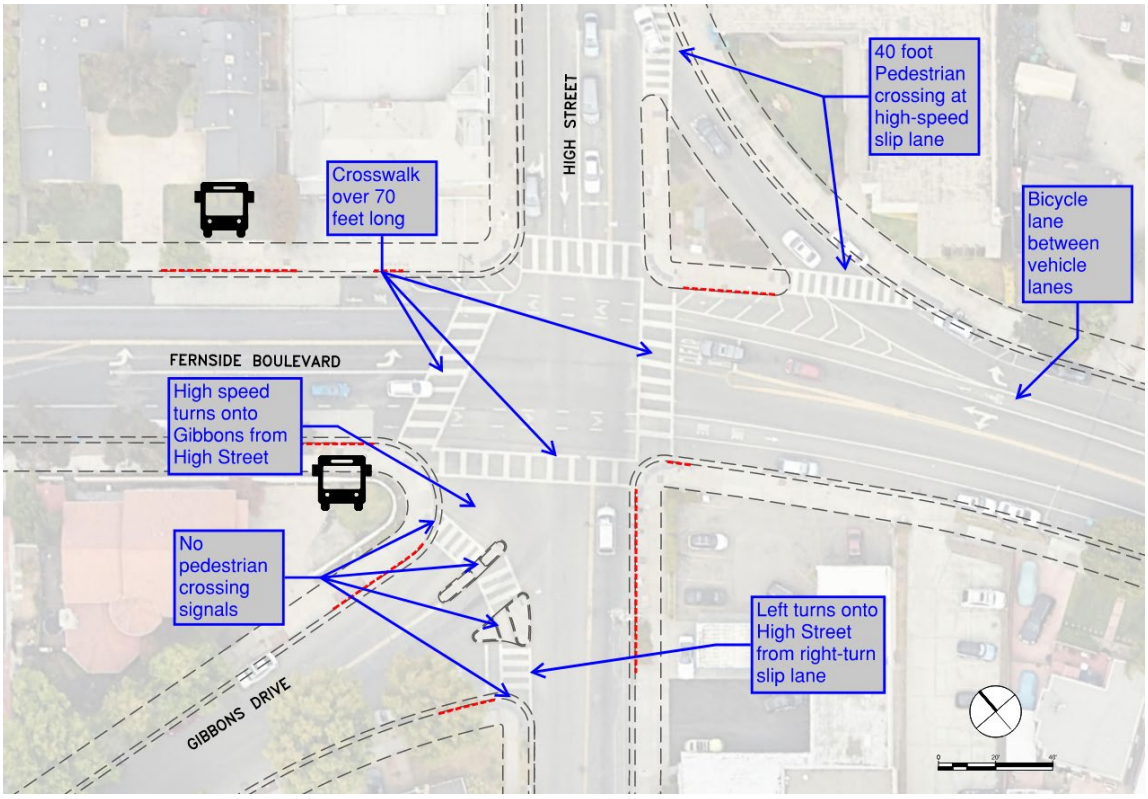
This section addresses the first study question by analyzing how well the alternatives improve safety, simplify operations, and reduce vehicle speeds at High/Fernside/Gibbons. The evaluation incorporates the long-term plan for a two-way bikeway on the north and east side of Fernside Boulevard scheduled for implementation after 2030.

4.1 Existing Conditions: Intersection Safety

The existing intersection configuration presents pedestrian safety concerns based on crash records, public meeting feedback, and direct observations (Figure 5). High vehicle speeds are common; on Fernside Boulevard, 15% of vehicles travel at least 10 miles per hour over the speed limit. Marked crosswalks at this intersection are long, measuring more than 75 feet across the west Fernside Boulevard leg and south High Street leg. These two crosswalks provide access to AC Transit bus stops located on the north and south side of Fernside Boulevard west of High Street.

The right-turn slip lanes entering northbound and southbound High Street allow drivers to maintain higher speeds when turning, and pose risk to pedestrians at additional conflict points adjacent to the intersection. People crossing Gibbons Drive must traverse three vehicle lanes separated by median islands that do not comply with Americans with Disabilities Act accessibility standards. There are no pedestrian signals at the Gibbons Drive approach; pedestrians crossing Gibbons Drive have no indicators of when it is safe to cross and must use their judgment for when there is a gap in vehicle traffic. This arrangement poses a specific challenge for people who are blind or have low vision.

Figure 5 - Intersection Safety Existing Conditions



Source: Parametrix, 2025.

On-street striped bike lanes exist on Fernside Boulevard and are marked through the intersection. In advance of the intersection's westbound right-turn slip lane, bicyclists are exposed to a 100-foot-long mixing zone with vehicles entering the right-turn lane, and must subsequently travel for another 200 feet between two vehicle lanes. People commenting during the community outreach for the Fernside Project identified this configuration as a barrier preventing cyclists of all ages and abilities from comfortably using Fernside Boulevard.

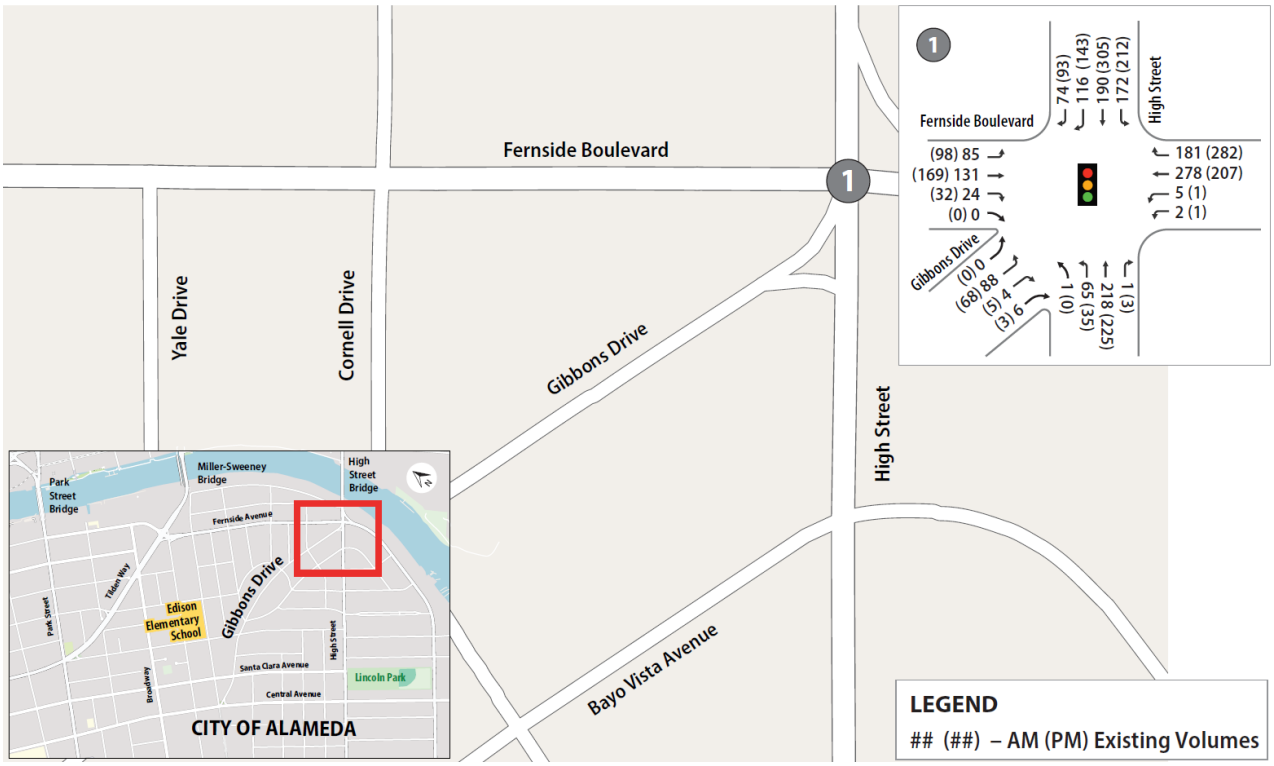
The intersection also presents safety and operational challenges for drivers. During field observations, some motorists traveling northbound on Gibbons Drive appeared to be confused while navigating the intersection approach lanes and understanding the traffic signal indications. One vehicle was observed turning left onto northbound High Street from the right-turn slip lane. Many southbound High Street vehicles were observed turning onto Gibbons Drive at high speed.

There were 22 crashes reported at High/Fernside/Gibbons between 2017 and 2021, six of which resulted in injury. One of these crashes involved a pedestrian, and one involved a bicyclist. The primary collision factor in 55% of the crashes was improper turning; other common factors include unsafe speed and failure to yield. Five of the 22 crashes occurred at night.

4.2 Existing Conditions: Intersection Traffic Operations

Traffic counts were conducted on Wednesday, May 21, 2025 at the intersection of High/Fernside/Gibbons. Counts were performed between the hours of 7 AM–9 AM and 4 PM–6 PM; these times encompass the typical weekday commute peak hours. Existing peak hour vehicle turning movements are displayed in Figure 6.

Figure 6 - Existing Peak Hour Vehicle Volumes AM & PM



Source: Parametrix, 2025.

Intersection operations analysis was performed following the approach contained in the *Highway Capacity Manual, 2000*.[2] Analysis was conducted using Synchro 11 software (Trafficware) based on physical roadway network infrastructure geometry and existing intersection signal control.

The counts data and the HCM methodology were used to generate estimates of vehicle delay during the peak hour of AM and PM traffic. Vehicle delay reflects additional travel or wait time experienced by a vehicle compared to ideal travel time expected for the analysis conditions. Delay results are frequently simplified into Level of Service (LOS), which is a qualitative grade that describes operating conditions and service measures experienced by vehicle roadway users, and is expressed on a scale from "A" (free-flow travel) to "F" (stop-and-go traffic with long queues).

Vehicle delay and LOS are common metrics for evaluating intersection operational performance; this analysis applies these measures to the Gibbons/High/Fernside intersection within the context of the Fernside Project's primary objective to improve safety for all roadway users. Vehicle delay and LOS provide insights into the relative performance of alternatives, understanding specific vehicle movements that are more difficult to service with the traffic signal timing, and other effects such as potential redistribution of vehicles onto local streets. However, LOS also has limitations, as it provides a simplified view of vehicle system performance that may not fully reflect the complexities of traffic flow and integration with other traffic-influencing factors, such as operation of the High Street Bridge.

Table 1 indicates that High/Fernside/Gibbons currently operates at acceptable LOS C during the AM and PM peak hours, with average vehicle delay of 31 seconds and 21 seconds, respectively. Eastbound Fernside Boulevard experiences the highest delay at 50 seconds (LOS D) during the AM peak, while northbound High Street and Gibbons Drive operate at LOS D during the AM peak period. PM peak hour operations show comparatively better performance across all approaches, with delays ranging from 13 to 32 seconds and no approaches operating worse than LOS C.

Table 1 - Existing Delay and LOS

		AM Peak		PM Peak	
Intersection Approach	**Direction**	**Vehicle Delay (seconds)**	**LOS**	**Vehicle Delay (seconds)**	**LOS**
High Street	Northbound	38	D	30	C
High Street	Southbound	21	C	19	B
Fernside Boulevard	Eastbound	50	D	29	C
Fernside Boulevard	Westbound	24	C	13	B
Gibbons Drive	Northbound	42	D	32	C
High/Fernside/Gibbons	**Intersection Average**	**31**	**C**	**21**	**C**

Source: Parametrix, 2025.
Notes: LOS = Level of Service.

The northbound High Street approach experiences the longest vehicle queues, with median queue lengths of 200 feet during the AM peak hour and 130 feet during the PM peak hour.

Synchro input and output files for the Existing Conditions scenario are included in Appendix A.

[2] Transportation Research Board, *Highway Capacity Manual 2000.* This is the only version of the HCM that can analyze a five-legged intersection.

4.3 Alternatives: Intersection Safety

Evaluation of the three alternatives was conducted considering long-term implementation of the Fernside Project concept on the north side of the High/Fernside/Gibbons intersection. All three alternatives include the same long-term safety improvements on the north side: closure of the westbound Fernside right-turn slip lane to remove multi-modal conflicts; a two-way separated bikeway with a dedicated traffic signal phase; and traffic calming elements on Fernside Boulevard including narrowed vehicle travel lanes. In addition to improvements on the north side of High/Fernside/Gibbons, the three alternatives focus on safety improvements at the southwest corner of the intersection.

Alternative A would simplify intersection geometry and realign the Gibbons approach to intersect High Street south of Fernside Boulevard. This alternative would improve safety by installing a concrete curb extension at the southwest intersection corner and by prohibiting left turns from the realigned Gibbons Drive. Alternative A would include the following safety enhancements:

- Increases the southwest corner pedestrian waiting area
- Reduces crosswalk length across the eastern leg of Fernside Boulevard (result of the Fernside Project improvements on the north side of the intersection) from 75 feet to 40 feet, and reduces crosswalk length across the southern leg of High Street from 80 feet to 45 feet.
- Reduces the number of vehicle lanes across the Gibbons Drive intersection leg traversed by pedestrians from three to two, shortens these crossing distances, and moves this crosswalk away from the signal at Fernside Boulevard.
- Clarifies northbound Gibbons vehicle movements with road realignment, striping, and signage
- Reduces southbound vehicle speeds turning onto Gibbons Drive
- Removes conflicting vehicle movements associated with left turns from Gibbons Drive

Alternative B would implement similar intersection simplification and include most of the same safety improvements as Alternative A, with the exception of removing conflicting vehicle movements from Gibbons Drive left turns. Alternative B would integrate a traffic signal at the realigned Gibbons approach to High Street and would provide a dedicated signal phase for vehicles to turn from Gibbons Drive onto High Street and Fernside Boulevard.

Alternative B also would provide pedestrian signal heads across the Gibbons leg as a result of keeping this approach signalized. This arrangement presents a challenge for the time sequence of the pedestrian walk phase. For example, southbound drivers on High Street after passing Fernside would be required to yield to pedestrians when turning right on Gibbons as the second cross-street of the intersection, while pedestrian signal heads simultaneously indicate pedestrian right-of-way to cross Gibbons. This is a non-typical arrangement due to the close spacing of signalized cross-streets and would require further detailed design treatments to avoid conflicts resulting from right-of-way confusion.

Alternative C would be the least effective concept in terms of safety improvement and would not make substantive changes to existing intersection design. Alternative C would result in the following safety enhancements:

- Reduces crosswalk length across the eastern leg of Fernside Boulevard (result of the Fernside Project improvements on the north side of the intersection) from 75 feet to 45 feet. Does not change crosswalk length across the southern leg of High Street or Gibbons Drive.
- Clarifies northbound Gibbons vehicle movements with striping and signage
- Reduces southbound vehicle speeds turning onto Gibbons Drive (to lesser degree compared to Alternatives A and B)

Alternative C would not extend the southwest corner pedestrian waiting area with a raised curb and would not reduce the number of Gibbons driving lanes crossed by pedestrians. Alternative C would also incorporate pedestrian signal heads across the Gibbons leg, but this presents similar challenges for the timing of the pedestrian walk phase as described for Alternative B.

In summary, Alternative A would provide the most substantial safety enhancements by reconfiguring the intersection geometry through realignment of Gibbons Drive, installation of concrete curb extensions, reduction of intersection crosswalk lengths, simplification of the Gibbons crossing, and removing intersection conflicts associated with left turns from Gibbons. Alternative B would result in similar intersection safety improvements, but would not restrict left turns from Gibbons into the intersection, and would also result in a non-standard traffic signal arrangement that would require comprehensive design evaluation to address pedestrian and vehicle interaction at the Gibbons leg. Alternative C would provide the lowest level of safety improvements through striping, signage, and flexible bollards without substantial geometric changes, resulting in limited crosswalk reduction and no enhancement of the pedestrian waiting area.

4.4 Alternatives: Operations

The traffic model used to evaluate existing conditions was modified to analyze traffic operations for each of the alternatives at the High/Fernside/Gibbons intersection. The models reflect the long-term conditions after the Fernside Project would be implemented and in place, accounting for future signal timing and operational performance of the two-way bikeway and closure of the westbound right-turn slip lane. Traffic volumes in the Alternative A model were adjusted to account for the re-distribution of cut-through traffic due to the turning movement restriction, as discussed in section 5.1.

Table 2 – Intersection Operations Analysis Results for Long-Term Alternatives

	AM Peak		PM Peak	
Intersection	Vehicle Delay (seconds)	LOS	Vehicle Delay (seconds)	LOS
Existing Conditions	31	C	21	C
Long-Term Baseline Conditions*	50	D	37	D
Alternative A	37	D	28	C
Alternative B	72	E	63	E
Alternative C	51	D	41	D

Source: Parametrix, 2025.

*Note: Long-Term Baseline Conditions reflect intersection operation conditions after installation of Fernside Project improvements on the north side of the intersection, without improvements on the south side of the intersection.

Intersection operations analysis results (Table 2) indicate that average vehicle delay at the High/Fernside/Gibbons intersection would increase for each alternative compared to existing conditions. The intersection would operate less efficiently for vehicles in the long-term for all alternatives because of safety improvements on the north side of the intersection. However, the alternatives differ in how much delay would result with the long-term project.

Alternative A would remove the signalized Gibbons approach to the intersection and reallocate the existing Gibbons green phase duration to other movements. This intersection simplification would enable operation of the additional two-way bikeway without substantial degradation of service. Average vehicle delay would increase by six to seven seconds during peak periods compared to existing conditions, and the intersection would operate similarly compared to existing conditions, at LOS D in the AM peak and LOS C in the PM peak period. Simplification of the intersection to four legs would also allow for greater flexibility to adjust signal timing and improve operations based on evolving traffic patterns in the future. Of the three alternatives, Alternative A would operate most efficiently under future conditions.

Under Alternative B, average vehicle delay would increase more than 40 seconds compared to existing conditions, with the intersection operating at LOS E during AM and PM peak periods The HCM characterizes LOS E as unstable operation where minor disturbances in traffic flow can cause breakdown conditions, where freedom to maneuver is difficult with users experiencing frustration and poor comfort and convenience. It is particularly challenging to accommodate the existing lengthy vehicle queues on the northbound High Street approach, which would lead to average vehicle delay more than doubling and tripling compared to existing conditions.

For Alternative C, integration of the two-way bikeway would result in average vehicle delay increasing by 20 seconds, with the intersection operating at LOS D in both AM and PM peak periods.

4.5 Conclusions: Intersection Safety and Operations

This analysis evaluated the different impacts of the proposed alternatives on intersection safety and operations. Alternative A would result in substantial safety improvements while largely maintaining the existing intersection service level. Alternative B would provide similar safety benefits but would result in unstable intersection traffic conditions. Alternative C would present the least safety benefit and would result in greater increase of average vehicle delay compared to Alternative A. Given these results, Alternative A would offer the most advantageous combination of intersection safety and intersection traffic operations improvements compared to existing conditions.

A summary of each alternative’s effectiveness against these considerations is presented in Table 3.

Table 3 – Intersection Alternative Summary

Alternative	Intersection Safety	Intersection Traffic Operations
Existing	Existing	AM delay: 31 sec PM delay: 21 sec LOS C
Long-Term Baseline	Same as existing	AM delay: 50 sec PM delay: 37 sec LOS D
A	Shorter pedestrian crossings, slower vehicle turns, simplified geometry	AM delay: 37 sec PM delay: 28 sec LOS C/D
B	Shorter pedestrian crossings, slower vehicle turns, simplified geometry	AM delay: 72 sec PM delay: 63 sec LOS E
C	Minor improvements; ped signal crossing Gibbons	AM delay: 51 sec PM delay: 41 sec LOS D

Source: Parametrix, 2025.

*Note: Long-Term Baseline reflect intersection operation conditions after installation of Fernside Project improvements on the north side of the intersection, without improvements on the south side of the intersection.

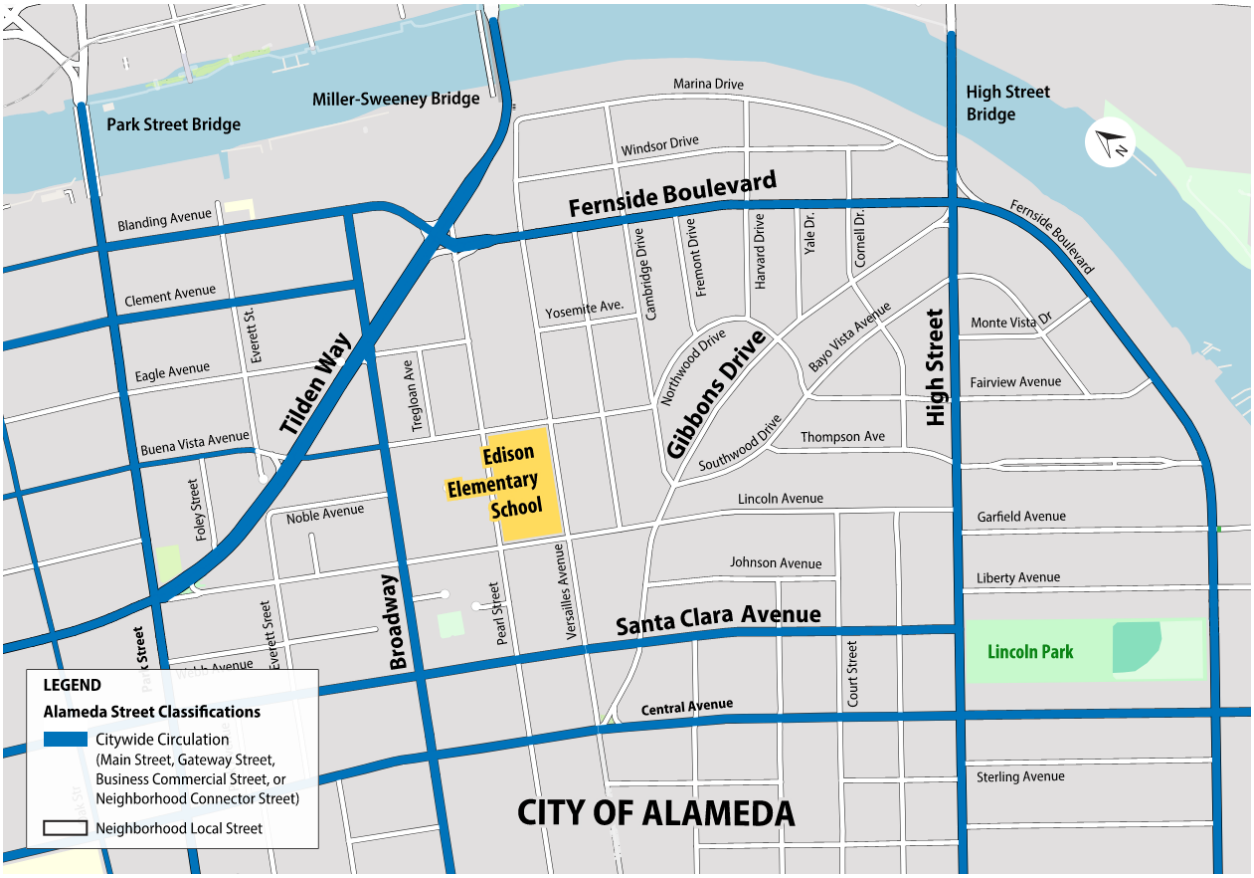
5. Analysis 2. Neighborhood Traffic Circulation

This section addresses the second study question by analyzing the effects of each alternative on cut-through traffic on Gibbons Drive and the resulting traffic redistribution on parallel neighborhood streets.

5.1 Existing Conditions: Neighborhood Traffic Circulation

The roadway network near the High/Fernside/Gibbons intersection is shown in Figure 7 with Street Classifications from the 2040 Alameda General Plan and planned Neighborhood Greenways from the Alameda Active Transportation Plan. Street classifications that are for citywide vehicle circulation are shown in blue. Of streets intersecting High/Fernside/Gibbons, Fernside Boulevard and High Street are Neighborhood Connector streets, while Gibbons Drive is a Neighborhood Local Street.

Figure 7 - Roadway Network in the Vicinity of the High/Fernside/Gibbons Intersection



Source: Parametrix, 2025.

The neighborhood bordered by Fernside Boulevard, High Street, Santa Clara Avenue, and Broadway consists primarily of Neighborhood Local Streets with speed limits of 25 mph and parallel parking on both sides of the street. Neighborhood Local Streets in Alameda have a target design speed of 20 mph and typical daily volumes of less than 1,000 vehicles per day up to 4,000 vehicles per day. Of the Neighborhood Local Streets in the study area, Gibbons Drive measures 40 feet in width, Northwood Drive, Southwood Drive, Lincoln Avenue, Versailles Avenue, and Pearl Street are 35 feet

wide, and other neighborhood streets are generally 30 feet wide. Sidewalks are present on both sides of the streets, and no official bicycle facilities currently exist within the neighborhood.

The City's Active Transportation Plan identifies several Neighborhood Local Streets including Gibbons Drive as future Neighborhood Greenways. Neighborhood Greenways target average daily traffic of 1,500 vehicles or less, with less than 50 cars in the peak direction at peak hour, and a vehicular travel speed of 20 miles per hour (mph). While this project will not implement any of the Neighborhood Greenways in the neighborhood, the target vehicle speeds and volumes are a helpful measure of what the City and national design guidance consider low traffic volumes suitable for walking and bicycling.

Current volumes and speeds were measured on May 21, 2025 on Gibbons Drive. Approximately 2,200 daily vehicles travel on Gibbons Drive, with an average speed of 27 mph in both directions. 85th percentile speed, which is the speed at which 85% of vehicles travel at or below, was recorded at 31 mph in both directions. Traffic volumes were also recorded on Cornell Drive and Bayo Vista Avenue, as these streets are alternative routes for traffic to cut through the neighborhood.

Table 4 displays AM and PM peak hour traffic volumes on Gibbons Drive north of Cornell Drive, Cornell Drive south of Fernside Boulevard, and Bayo Vista Avenue west of High Street. Approximately 220 vehicles traveled on Gibbons Drive in the peak AM and PM hour. Peak hour volumes on Cornell Drive and Bayo Vista Avenue are less than one-tenth the volumes of Gibbons Drive.

Table 4 – Existing Traffic Volumes on Neighborhood Streets

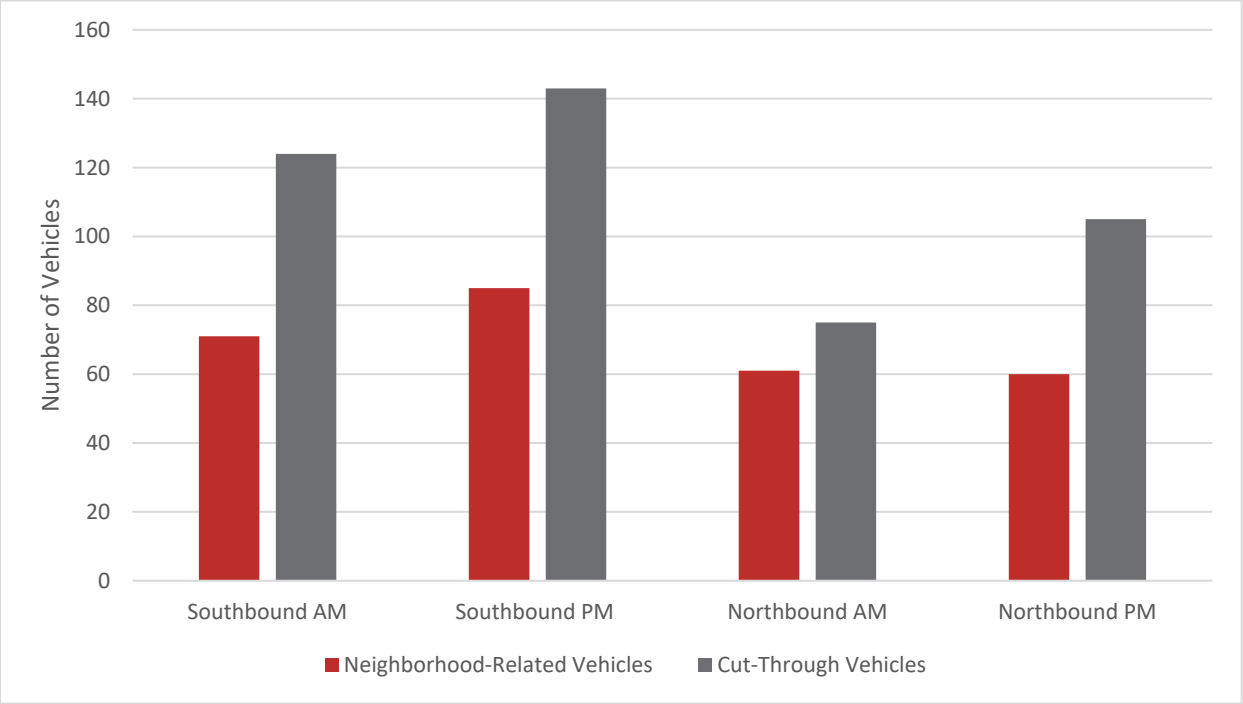
	AM Peak Hour Traffic		PM Peak Hour Traffic		Estimated Daily Traffic
Roadway	Northbound / Eastbound	Southbound / Westbound	Northbound / Eastbound	Southbound / Westbound	
Gibbons Drive, north of Cornell Drive	98	122	76	144	2,200
Cornell Drive, south of Fernside Boulevard	13	5	4	8	160
Bayo Vista Avenue, west of High Street	3	10	6	10	150

Source: Parametrix, 2025.

Surveys were conducted on Gibbons Drive during the AM and PM peak periods on May 20, 2025. Observers recorded vehicles that traveled northbound and southbound at two neighborhood gateway locations: south of the High/Fernside/Gibbons intersection, and north of the Gibbons/Santa Clara intersection. Vehicles that were recorded traveling through both gateways in sequence in the same direction were identified as cut-through traffic.

Between 55%–65% of the observed vehicles over the AM and PM two-hour period traveling in both directions on Gibbons Drive passed through the neighborhood from Santa Clara Avenue to High/Fernside/Gibbons (Figure 8). This pattern suggests that, in both directions, Gibbons Drive is currently used by cut-through traffic more frequently than by local residents who travel to or from a destination within the neighborhood.

Figure 8 - Number of Vehicles Observed on Gibbons Drive Traveling to and Cutting-Through the Neighborhood During Peak Two-Hour Period



Source: Parametrix, 2025.

5.2 Alternatives: Neighborhood Traffic Circulation

For Alternative A, northbound Gibbons would be restricted to right turns only onto High Street. This would result in all northbound vehicles seeking to turn left onto High Street or Fernside Boulevard to take alternate routes. Alternative B and Alternative C would not include turn restrictions. For these alternatives, it was assumed that no vehicle trips would be re-routed and vehicles would follow existing travel routes. This section provides an analysis of re-routed trips in the Alternative A scenario and resulting effects for peak hour traffic volumes, in comparison with existing conditions and Alternatives B and C, which would not alter existing travel patterns.

For the neighborhood traffic circulation analysis of Alternative A, peak hour vehicle trips traveling northbound on Gibbons Drive to the High/Fernside/Gibbons intersection were redirected onto one of the following potential alternative routes:

i. Gibbons Drive to Cornell Drive to Fernside Boulevard

ii. Gibbons Drive to Southwood Drive to Bayo Vista Avenue to High Street

iii. Broadway to Tilden Way to Fernside Boulevard

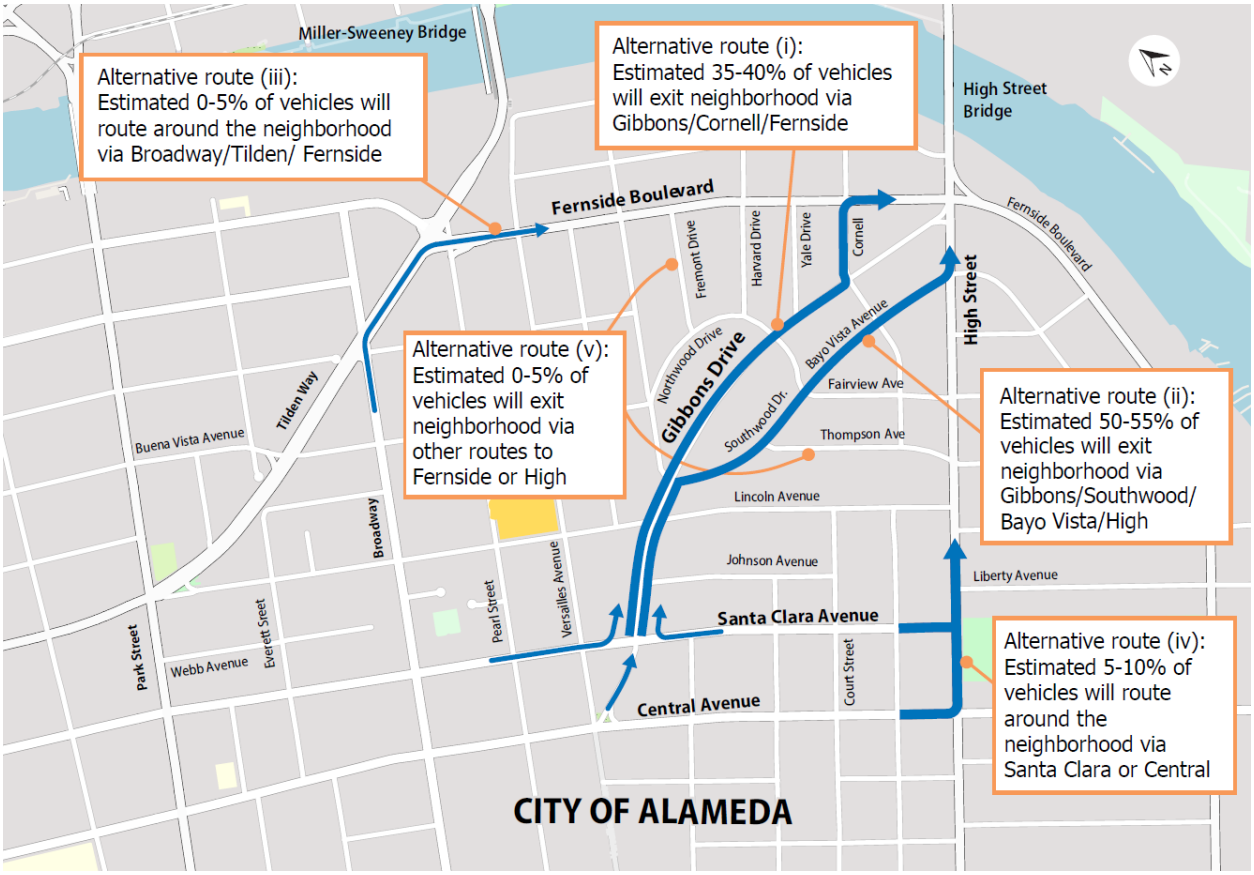
iv. Santa Clara Avenue or Central Avenue to High Street

v. Other neighborhood streets exiting directly onto Fernside Boulevard or High Street

Trip redistribution analysis was conducted assuming various factors, including vehicle origin/destination, alternate route availability and access points, and traveled trip distance. This

analysis applied trip redistribution assumptions for Alternative A that reflect characteristics specific to northbound Gibbons alternative routes such as street width, stop-controlled intersections, on-street parking occupancy, number and difficulty of turns, overall driver perception of travel time and speed-influencing factors, and sense of arrival onto the primary roadway network. Considering these factors, a small proportion of vehicles were conservatively assumed to be redirected around the neighborhood on alternative routes (iii) and (iv). It was also assumed that slightly more redistributed traffic would travel on alternative (i) compared to alternative route (ii).

Figure 9 - Estimated Redistributed Northbound Gibbons Traffic for Alternative A, Reflecting Turn Restriction at High/Fernside/Gibbons



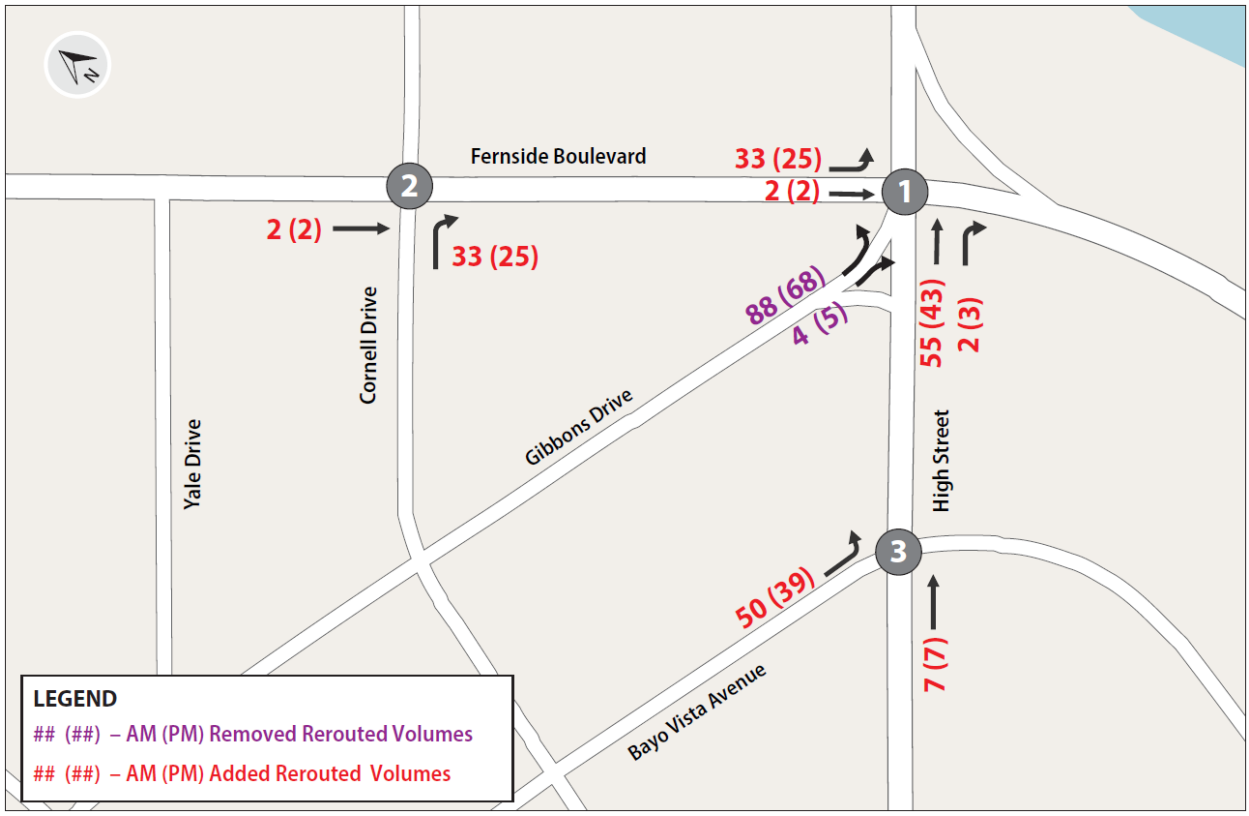
Source: Parametrix, 2025.

Figure 9 displays assumed analysis percentages of redistributed traffic. These figures include all traffic that exits northbound Gibbons at High/Fernside/Gibbons, including trips that originate within and outside of the neighborhood. The analysis results represent modeled scenarios; actual trip redistribution patterns may vary due to daily fluctuations in network congestion, travel demand, and other operational factors.

Alternative A would result in approximately 10% of all northbound trips re-routing on alternative routes (iii) and (iv). Since more than half of existing trips are cut-through trips originating outside of the neighborhood, more than 20% of existing northbound cut-through trips would be routed fully around the neighborhood.

For Alternative A, applying redistributed trip assumptions would result in an additional 40-50 vehicles during the AM and PM peak hours traveling on Bayo Vista Avenue approaching High Street compared to existing conditions, or an additional vehicle traveling on Bayo Vista every 1.2 to 1.5 minutes during peak hours. An additional 25-35 vehicles during the AM and PM peak hours would travel on Cornell Drive approaching Fernside Boulevard, or an additional vehicle every 1.8 to 2.4 minutes.

Figure 10 - Estimate of Redistributed Vehicle Trips for Alternative A



Source: Parametrix, 2025.

The number of AM and PM peak hour redistributed trips for Alternative A are displayed on Figure 10. Table 5 includes resulting bi-directional peak hour and estimated daily traffic volumes for Alternative A, which would fall within the target range for Neighborhood Local Streets of less than 1,000 to 4,000 vehicles per day.

Table 5 – Estimated Vehicle Volumes for Alternative A

	Existing			Alternative A		
Roadway	AM Peak Hour	PM Peak Hour	Estimated Daily Traffic	AM Peak Hour	PM Peak Hour	Estimated Daily Traffic
Gibbons Drive, north of Cornell Drive	220	220	2,200	161	172	1,300 – 1,400
Cornell Drive, south of Fernside Boulevard	18	12	160	51	37	400 – 500
Bayo Vista Avenue, west of High Street	13	16	150	63	55	550 – 650

Source: Parametrix, 2025.

Note: volumes for Alternative B and Alternative C are the same as those listed under Existing conditions.

Table 6 indicates that redistributed vehicles on eastbound Bayo Vista Avenue approaching High Street would increase the average vehicle delay of this stop-controlled left turn by an additional five to six seconds in the AM and PM peak hour, from 13-14 seconds to 18-20 seconds. Additional vehicles on northbound Cornell Drive approaching Fernside Boulevard would not noticeably increase vehicle delay at this intersection, as gaps in Fernside Boulevard traffic would be able to accommodate additional right-turns.

Table 6 – Average Side Street Approach Vehicle Delay for Alternative A

		Average Vehicle Delay (Seconds)			
		Existing		Alternative A	
Intersection Approach	Direction	AM	PM	AM	PM
Cornell Drive approaching Fernside Boulevard	Northbound	12	12	12	12
Bayo Vista Avenue approaching High Street	Eastbound	13	14	18	20

Source: Parametrix, 2025.
Note: values for Alternative B and Alternative C are the same as those listed under Existing conditions.

Traffic analysis for Alternative A shows that 95th percentile vehicle queues—representing queue lengths with a five percent probability of being exceeded during peak hours—would remain under 30 feet on both eastbound Bayo Vista Avenue approaching High Street and northbound Cornell Drive approaching Fernside Boulevard. These results indicate that the additional redistributed traffic would not block driveway access along these residential streets.

On Gibbons Drive, which has a 25 mph speed limit, 15% of vehicles were recorded traveling faster than 31 mph. Traffic redirected to Cornell Drive and Bayo Vista Avenue by Alternative A would likely travel at similar speeds. Nearly half of redirected northbound vehicles would be cut-through traffic originating from outside the neighborhood. In the absence of additional traffic calming focused on reducing vehicle speeds, the added vehicles traveling on Cornell Drive and Bayo Vista Avenue may continue to travel above the speed limit.

Installation of traffic calming elements such as speed humps, gateway treatments, intersection and traveled way narrowing, and other installations that reduce vehicle speeds on local streets such as Southwood, Bayo Vista, Cornell, and Gibbons is not in the scope of the Fernside Project but would help manage speeds of redistributed traffic. Neighborhood traffic calming would not only reduce average speeds of cut-through drivers on local streets, but would also increase the perceived difficulty of the neighborhood streets as suitable alternative routes for cut-through traffic, leading more drivers to travel on designated citywide circulation streets and reducing cut-through volumes in both northbound and southbound directions.

5.3 Conclusions: Neighborhood Traffic Circulation

Gibbons Drive currently functions as a cut-through route rather than serving primarily local neighborhood traffic, with over half of observed vehicles traveling through the entire neighborhood corridor during peak periods.

Alternative A would redirect approximately 20% of existing northbound cut-through traffic around the neighborhood, while also resulting in increased traffic on alternative neighborhood routes along Cornell Drive, Southwood Drive and Bayo Vista Avenue. Though resulting volumes on these streets would be manageable, re-routed drivers may cut-through the alternative routes at high speed,

particularly on Southwood Drive and Bayo Vista Avenue, offsetting the benefit of traffic reduction on Gibbons Drive. Prior to implementation of Alternative A, traffic calming strategies should be applied to parallel neighborhood streets.

In contrast, Alternatives B and C would maintain existing travel routes. These alternatives would not reduce cut-through traffic on Gibbons Drive and would also not result in redirected trips on Bayo Vista and Cornell.

6. Conclusion and Recommendation

Analysis 1, which investigates intersection safety and operations, demonstrates that Alternative A would result in improved intersection safety and would provide the best intersection operations in both near- and long-term implementation. Analysis 2, the neighborhood traffic circulation analysis, identifies that substantial cut-through traffic traveling at high speeds would be somewhat reduced by the turn restriction of Alternative A, but redirected traffic onto other local streets such as Southwood Drive, Bayo Vista Avenue, and Cornell Drive pose trade-offs that would contrast with the reduced volumes on Gibbons Drive. Therefore, Alternative A is still the recommended design alternative.

The third study question considers how phasing options for Alternative A can balance the Gibbons/High/Fernside intersection needs with broader traffic calming needs in the neighborhood. This study question also addresses City Council direction to evaluate potential intersection safety upgrades with the near-term Fernside Project in 2026 instead of with the long-term concept after 2030.

As discussed in Section 5, comprehensive neighborhood traffic calming on local streets including Gibbons Drive, Southwood Drive, Bayo Vista Avenue, and Cornell Drive should be in place before or along with implementation of Alternative A. As traffic calming is not in the scope of the 2026 near-term Fernside Project, it is not recommended to implement Alternative A in 2026.

Still, the 2026 near-term Fernside Project does provide an opportunity to incorporate safety improvements to the High/Fernside/Gibbons intersection to the extent possible without impacting neighborhood traffic circulation. It is recommended to install striping, bollards, and signage to slow vehicle turns and clarify vehicle approaches on the Gibbons intersection leg. These “quick-build” installations are within the scope parameters of a typical City paving project. This concept would be similar to Alternative C, but without installation of pedestrian signal heads on the Gibbons leg or other signal upgrades, which are usually outside the scope of paving program implementation.

Design and installation of neighborhood traffic calming and Alternative A prior to implementation of the long-term Fernside Project after 2030 would accelerate the concept’s safety improvements to the High/Fernside/Gibbons intersection while addressing the effects of re-routed trips in the neighborhood. Due to the need for the long-term Fernside Project to secure external funding and the existing High/Fernside/Gibbons safety and operational challenges, it is recommended to seek opportunity to implement both neighborhood traffic calming and Alternative A prior to the long-term Fernside Project completion (after 2030).

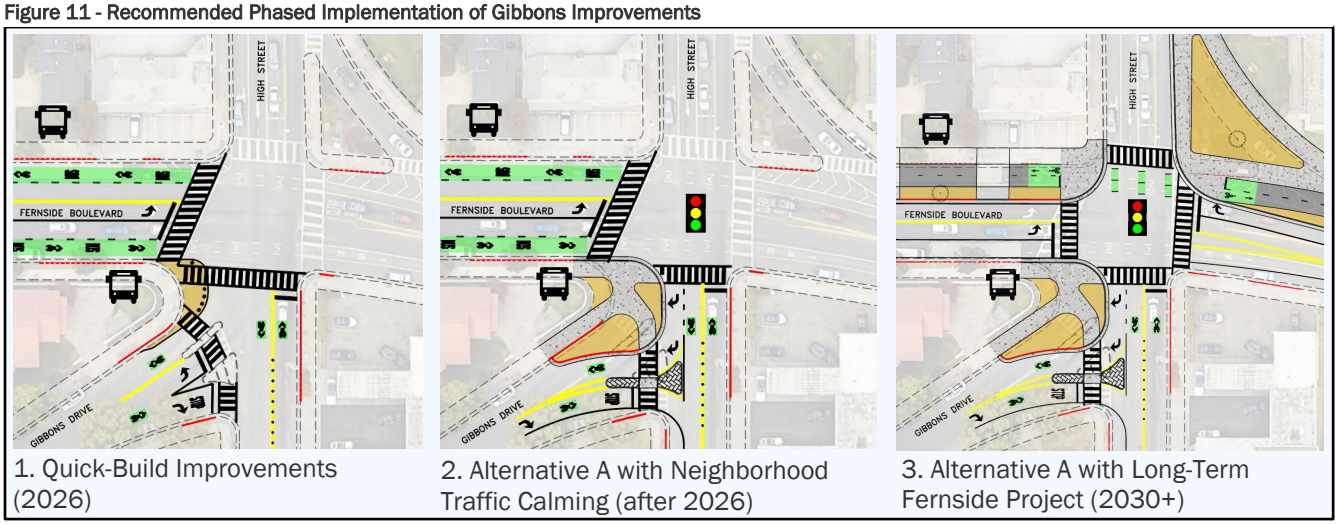
Implementation of Alternative A prior to the long-term Fernside Project completion would result in more efficient High/Fernside/Gibbons intersection operations due to the removal of the northbound Gibbons approach to the intersection, which would allocate additional green signal duration to other intersection movements before integration of the two-way bikeway signal phasing. Vehicle delay at

all approaches would decrease if Alternative A were implemented prior to the long-term Fernside Project completion.

Therefore, the resulting recommended implementation sequencing for intersection improvements is as follows, and depicted in Figure 11:

1. Install “quick-build” safety improvements on the southwest corner of the intersection as part of the near-term Fernside Project (currently planned for 2026)
2. Implement comprehensive neighborhood traffic calming on Gibbons Drive, Southwood Drive, Bayo Vista Avenue, and Cornell Drive (not currently included in an existing project), followed by implementation of Alternative A on the southwest corner of the intersection
3. Implement the long-term Fernside Project with two-way bikeway installation, removal of westbound right-turn slip lane, and remaining intersection improvements (currently planned for after 2030, pending external funding availability)

Figure 11 - Recommended Phased Implementation of Gibbons Improvements

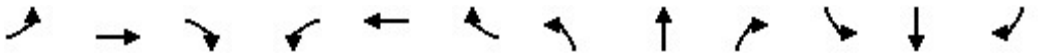


1. Quick-Build Improvements (2026)

2. Alternative A with Neighborhood Traffic Calming (after 2026)

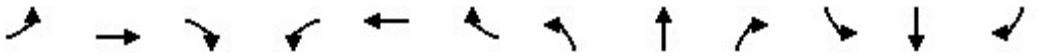
3. Alternative A with Long-Term Fernside Project (2030+)

Intersection Operations Analysis Synchro Worksheets



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1	1	1	0	0	8	288	1	2	220	2
Future Volume (vph)	1	1	1	1	0	0	8	288	1	2	220	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.955						0.998			0.998	
Flt Protected		0.984			0.950			0.998			0.999	
Satd. Flow (prot)	0	1750	0	0	1770	0	0	1855	0	0	1857	0
Flt Permitted		0.984			0.950			0.998			0.999	
Satd. Flow (perm)	0	1750	0	0	1770	0	0	1855	0	0	1857	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		330			400			1691			372	
Travel Time (s)		9.0			10.9			46.1			10.1	
Confl. Peds. (#/hr)	5		6	7		6	6		7	6		5
Peak Hour Factor	0.25	0.25	0.25	0.25	1.00	1.00	0.50	0.89	0.25	0.50	0.78	0.50
Adj. Flow (vph)	4	4	4	4	0	0	16	324	4	4	282	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	0	0	4	0	0	344	0	0	290	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	1	1	0	0	8	288	1	2	220	2
Future Volume (Veh/h)	1	1	1	1	0	0	8	288	1	2	220	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.25	0.25	0.25	1.00	1.00	0.50	0.89	0.25	0.50	0.78	0.50
Hourly flow rate (vph)	4	4	4	4	0	0	16	324	4	4	282	4
Pedestrians		6			7			7			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											372	
pX, platoon unblocked	0.93	0.93	0.93	0.93	0.93		0.93					
vC, conflicting volume	662	665	297	670	665	339	292			335		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	602	605	210	610	605	339	205			335		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	99	99	100	100	99			100		
cM capacity (veh/h)	373	374	766	362	374	696	1268			1217		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	12	4	344	290
Volume Left	4	4	16	4
Volume Right	4	0	4	4
cSH	450	362	1268	1217
Volume to Capacity	0.03	0.01	0.01	0.00
Queue Length 95th (ft)	2	1	1	0
Control Delay (s)	13.2	15.1	0.5	0.1
Lane LOS	B	C	A	A
Approach Delay (s)	13.2	15.1	0.5	0.1
Approach LOS	B	C		

Intersection Summary				
Average Delay	0.7			
Intersection Capacity Utilization	32.1%	ICU Level of Service	A	
Analysis Period (min)	15			

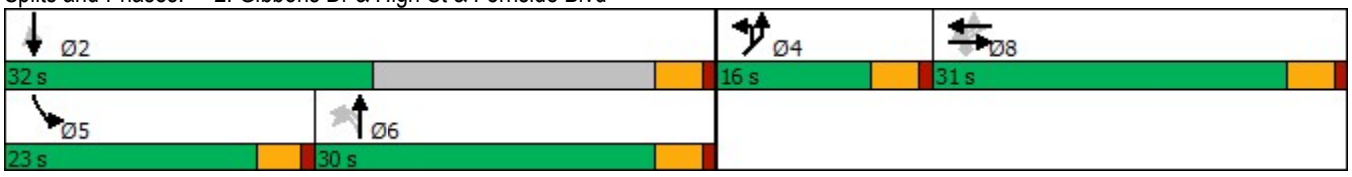
Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	85	131	24	2	5	278	181	1	65	218	1	172
Future Volume (vph)	85	131	24	2	5	278	181	1	65	218	1	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		100		0		350		0		0	120
Storage Lanes	1		1		0		1		0		0	1
Taper Length (ft)	25				25				25			25
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
Ped Bike Factor	1.00		0.97			1.00				1.00		
Frt			0.850				0.850			0.999		
Flt Protected	0.950					0.997				0.985		0.950
Satd. Flow (prot)	1770	1863	1583	0	0	1857	1583	0	0	1832	0	1770
Flt Permitted	0.290					0.980				0.804		0.950
Satd. Flow (perm)	538	1863	1531	0	0	1823	1583	0	0	1493	0	1770
Right Turn on Red							Yes				Yes	
Satd. Flow (RTOR)							193			1		
Link Speed (mph)		25				25				25		
Link Distance (ft)		509				699				372		
Travel Time (s)		13.9				19.1				10.1		
Confl. Peds. (#/hr)	4		7	7	9			2	3		9	
Peak Hour Factor	0.76	0.73	0.75	0.50	0.42	0.93	0.94	0.25	0.58	0.86	0.25	0.81
Adj. Flow (vph)	112	179	32	4	12	299	193	4	112	253	4	212
Shared Lane Traffic (%)												
Lane Group Flow (vph)	112	179	32	0	0	315	193	0	0	373	0	212
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Left	Right	Left
Median Width(ft)		12				12				12		
Link Offset(ft)		0				0				0		
Crosswalk Width(ft)		16				16				16		
Two way Left Turn Lane		Yes										
Headway 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
Turning Speed (mph)	15		9	15	15		9	15	15		9	15
Number of Detectors	1	2	1	1	1	2	1	1	1	2		1
Detector Template	Left	Thru	Right	Left	Left	Thru	Right	Left	Left	Thru		Left
Leading Detector (ft)	20	100	20	20	20	100	20	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	6	20	20	20	6	20	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	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	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	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	0.0		0.0
Detector 2 Position(ft)		94				94				94		
Detector 2 Size(ft)		6				6				6		
Detector 2 Type		Cl+Ex				Cl+Ex				Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0				0.0		
Turn Type	Perm	NA	Perm	Perm	Perm	NA	Free	Perm	Perm	NA		Prot

Lane Group	SBT	SBR	SBR2	NEL	NER	NER2
Lane Configurations						
Traffic Volume (vph)	190	116	74	88	4	6
Future Volume (vph)	190	116	74	88	4	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200		0	60	
Storage Lanes		1		1	1	
Taper Length (ft)				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97		1.00		0.98
Frt		0.850		0.989		0.850
Flt Protected				0.956		
Satd. Flow (prot)	1863	1583	0	1758	0	1583
Flt Permitted				0.956		
Satd. Flow (perm)	1863	1537	0	1753	0	1550
Right Turn on Red			No			Yes
Satd. Flow (RTOR)						164
Link Speed (mph)	25			25		
Link Distance (ft)	1329			596		
Travel Time (s)	36.2			16.3		
Confl. Peds. (#/hr)		2	3	2	2	2
Peak Hour Factor	0.73	0.81	0.88	0.85	0.50	0.75
Adj. Flow (vph)	260	143	84	104	8	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	260	227	0	112	0	8
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right	Right
Median Width(ft)	12			12		
Link Offset(ft)	0			0		
Crosswalk Width(ft)	16			16		
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15	9	9
Number of Detectors	2	1		1		1
Detector Template	Thru	Right		Left		Right
Leading Detector (ft)	100	20		20		20
Trailing Detector (ft)	0	0		0		0
Detector 1 Position(ft)	0	0		0		0
Detector 1 Size(ft)	6	20		20		20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0		0.0
Detector 2 Position(ft)	94					
Detector 2 Size(ft)	6					
Detector 2 Type	Cl+Ex					
Detector 2 Channel						
Detector 2 Extend (s)	0.0					
Turn Type	NA	Perm		Prot		Free

Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL
Protected Phases		8				8				6		5
Permitted Phases	8		8	8	8		Free	6	6			
Detector Phase	8	8	8	8	8	8		6	6	6		5
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0		12.0	12.0	12.0		8.0
Minimum Split (s)	30.6	30.6	30.6	30.6	30.6	30.6		29.6	29.6	29.6		12.2
Total Split (s)	31.0	31.0	31.0	31.0	31.0	31.0		30.0	30.0	30.0		23.0
Total Split (%)	31.0%	31.0%	31.0%	31.0%	31.0%	31.0%		30.0%	30.0%	30.0%		23.0%
Maximum Green (s)	26.4	26.4	26.4	26.4	26.4	26.4		25.4	25.4	25.4		18.8
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6		3.6	3.6	3.6		3.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0				0.0		0.0
Total Lost Time (s)	4.6	4.6	4.6			4.6				4.6		4.2
Lead/Lag								Lag	Lag	Lag		Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0		2.2	2.2	2.2		1.2
Recall Mode	None	None	None	None	None	None		None	None	None		None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0		
Flash Dont Walk (s)	19.0	19.0	19.0	19.0	19.0	19.0		18.0	18.0	18.0		
Pedestrian Calls (#/hr)	5	5	5	5	5	5		7	7	7		
Act Effct Green (s)	19.4	19.4	19.4			19.4	85.2			26.3		13.8
Actuated g/C Ratio	0.23	0.23	0.23			0.23	1.00			0.31		0.16
v/c Ratio	0.92	0.42	0.09			0.76	0.12			0.81		0.74
Control Delay	99.0	32.8	28.3			44.6	0.2			47.6		52.6
Queue Delay	0.0	0.0	0.0			0.0	0.0			0.0		0.0
Total Delay	99.0	32.8	28.3			44.6	0.2			47.6		52.6
LOS	F	C	C			D	A			D		D
Approach Delay		55.4				27.7				47.6		
Approach LOS		E				C				D		

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 85.2			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 36.3		Intersection LOS: D	
Intersection Capacity Utilization 83.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 2: Gibbons Dr & High St & Fernside Blvd



Lane Group	SBT	SBR	SBR2	NEL	NER	NER2
Protected Phases	2			4		
Permitted Phases		2				Free
Detector Phase	2	2		4		
Switch Phase						
Minimum Initial (s)	8.0	8.0		11.0		
Minimum Split (s)	31.6	31.6		15.6		
Total Split (s)	32.0	32.0		16.0		
Total Split (%)	32.0%	32.0%		16.0%		
Maximum Green (s)	27.4	27.4		11.4		
Yellow Time (s)	3.6	3.6		3.6		
All-Red Time (s)	1.0	1.0		1.0		
Lost Time Adjust (s)	0.0	0.0		0.0		
Total Lost Time (s)	4.6	4.6		4.6		
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.2	1.2		1.0		
Recall Mode	None	None		None		
Walk Time (s)	7.0	7.0				
Flash Dont Walk (s)	20.0	20.0				
Pedestrian Calls (#/hr)	4	4				
Act Effct Green (s)	44.5	44.5		11.6		85.2
Actuated g/C Ratio	0.52	0.52		0.14		1.00
v/c Ratio	0.27	0.28		0.47		0.01
Control Delay	14.7	15.2		46.5		0.0
Queue Delay	0.0	0.0		0.0		0.0
Total Delay	14.7	15.2		46.5		0.0
LOS	B	B		D		A
Approach Delay	26.4			43.4		
Approach LOS	C			D		

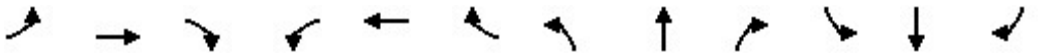
Intersection Summary

Movement	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	85	131	24	2	5	278	181	1	65	218	1	172
Future Volume (vph)	85	131	24	2	5	278	181	1	65	218	1	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6			4.6	4.0			4.6		4.2
Lane Util. Factor	1.00	1.00	1.00			1.00	1.00			1.00		1.00
Frpb, ped/bikes	1.00	1.00	0.97			1.00	1.00			1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00			1.00		1.00
Frt	1.00	1.00	0.85			1.00	0.85			1.00		1.00
Flt Protected	0.95	1.00	1.00			1.00	1.00			0.98		0.95
Satd. Flow (prot)	1763	1863	1534			1856	1583			1828		1770
Flt Permitted	0.29	1.00	1.00			0.98	1.00			0.80		0.95
Satd. Flow (perm)	539	1863	1534			1824	1583			1492		1770
Peak-hour factor, PHF	0.76	0.73	0.75	0.50	0.42	0.93	0.94	0.25	0.58	0.86	0.25	0.81
Adj. Flow (vph)	112	179	32	4	12	299	193	4	112	253	4	212
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	1	0	0
Lane Group Flow (vph)	112	179	32	0	0	315	193	0	0	372	0	212
Confl. Peds. (#/hr)	4		7	7	9			2	3		9	
Turn Type	Perm	NA	Perm	Perm	Perm	NA	Free	Perm	Perm	NA		Prot
Protected Phases		8				8				6		5
Permitted Phases	8		8	8	8		Free	6	6			
Actuated Green, G (s)	19.4	19.4	19.4			19.4	85.9			26.4		13.8
Effective Green, g (s)	19.4	19.4	19.4			19.4	85.9			26.4		13.8
Actuated g/C Ratio	0.23	0.23	0.23			0.23	1.00			0.31		0.16
Clearance Time (s)	4.6	4.6	4.6			4.6				4.6		4.2
Vehicle Extension (s)	1.0	1.0	1.0			1.0				2.2		1.2
Lane Grp Cap (vph)	121	420	346			411	1583			458		284
v/s Ratio Prot		0.10										c0.12
v/s Ratio Perm	c0.21		0.02			0.17	0.12			c0.25		
v/c Ratio	0.93	0.43	0.09			0.77	0.12			0.81		0.75
Uniform Delay, d1	32.5	28.5	26.3			31.1	0.0			27.5		34.4
Progression Factor	1.00	1.00	1.00			1.00	1.00			1.00		1.00
Incremental Delay, d2	58.0	0.3	0.0			7.5	0.2			10.1		9.0
Delay (s)	90.5	28.7	26.3			38.6	0.2			37.6		43.4
Level of Service	F	C	C			D	A			D		D
Approach Delay (s)		49.9				24.0				37.6		
Approach LOS		D				C				D		

Intersection Summary			
HCM 2000 Control Delay	30.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	85.9	Sum of lost time (s)	18.0
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

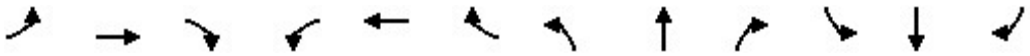
Movement	SBT	SBR	SBR2	NEL	NER	NER2
Lane Configurations						
Traffic Volume (vph)	190	116	74	88	4	6
Future Volume (vph)	190	116	74	88	4	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6		4.0
Lane Util. Factor	1.00	1.00		1.00		1.00
Frpb, ped/bikes	1.00	0.97		1.00		0.98
Flpb, ped/bikes	1.00	1.00		1.00		1.00
Frt	1.00	0.85		0.99		0.85
Flt Protected	1.00	1.00		0.96		1.00
Satd. Flow (prot)	1863	1539		1757		1550
Flt Permitted	1.00	1.00		0.96		1.00
Satd. Flow (perm)	1863	1539		1757		1550
Peak-hour factor, PHF	0.73	0.81	0.88	0.85	0.50	0.75
Adj. Flow (vph)	260	143	84	104	8	8
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	260	227	0	112	0	8
Confl. Peds. (#/hr)		2	3	2	2	2
Turn Type	NA	Perm		Prot		Free
Protected Phases	2			4		
Permitted Phases		2				Free
Actuated Green, G (s)	44.4	44.4		8.3		85.9
Effective Green, g (s)	44.4	44.4		8.3		85.9
Actuated g/C Ratio	0.52	0.52		0.10		1.00
Clearance Time (s)	4.6	4.6		4.6		
Vehicle Extension (s)	1.2	1.2		1.0		
Lane Grp Cap (vph)	962	795		169		1550
v/s Ratio Prot	0.14			c0.06		
v/s Ratio Perm		0.15				0.01
v/c Ratio	0.27	0.29		0.66		0.01
Uniform Delay, d1	11.7	11.8		37.4		0.0
Progression Factor	1.00	1.00		1.00		1.00
Incremental Delay, d2	0.1	0.1		7.3		0.0
Delay (s)	11.7	11.8		44.8		0.0
Level of Service	B	B		D		A
Approach Delay (s)	21.4			41.8		
Approach LOS	C			D		

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	245	4	1	458	3	11	0	2	4	0	8
Future Volume (vph)	2	245	4	1	458	3	11	0	2	4	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		100	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
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
Ped Bike Factor												
Frt		0.996			0.999			0.955			0.904	
Flt Protected	0.950			0.950				0.968			0.986	
Satd. Flow (prot)	1770	1855	0	1770	1861	0	0	1722	0	0	1660	0
Flt Permitted	0.950			0.950				0.968			0.986	
Satd. Flow (perm)	1770	1855	0	1770	1861	0	0	1722	0	0	1660	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		547			509			358			297	
Travel Time (s)		14.9			13.9			9.8			8.1	
Confl. Peds. (#/hr)	4			2		6			2	6		4
Peak Hour Factor	0.50	0.79	0.50	0.25	0.87	0.75	0.69	1.00	0.25	0.50	1.00	0.40
Adj. Flow (vph)	4	310	8	4	526	4	16	0	8	8	0	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	318	0	4	530	0	0	24	0	0	28	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

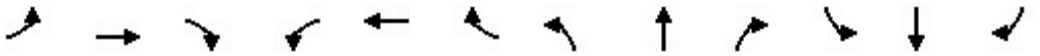
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	245	4	1	458	3	11	0	2	4	0	8
Future Volume (Veh/h)	2	245	4	1	458	3	11	0	2	4	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.79	0.50	0.25	0.87	0.75	0.69	1.00	0.25	0.50	1.00	0.40
Hourly flow rate (vph)	4	310	8	4	526	4	16	0	8	8	0	20
Pedestrians		4			6			2			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			1			0			1	
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					509							
pX, platoon unblocked	0.85						0.85	0.85		0.85	0.85	0.85
vC, conflicting volume	536			320			882	868	322	874	870	538
vC1, stage 1 conf vol							324	324		542	542	
vC2, stage 2 conf vol							558	544		332	328	
vCu, unblocked vol	368			320			774	758	322	765	760	370
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			96	100	99	98	100	96
cM capacity (veh/h)	1009			1238			454	458	714	471	459	570

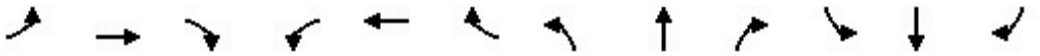
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	4	318	4	530	24	28
Volume Left	4	0	4	0	16	8
Volume Right	0	8	0	4	8	20
cSH	1009	1700	1238	1700	516	538
Volume to Capacity	0.00	0.19	0.00	0.31	0.05	0.05
Queue Length 95th (ft)	0	0	0	0	4	4
Control Delay (s)	8.6	0.0	7.9	0.0	12.3	12.1
Lane LOS	A		A		B	B
Approach Delay (s)	0.1		0.1		12.3	12.1
Approach LOS					B	B

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	35.5%	ICU Level of Service		A
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	2	2	0	0	5	6	243	2	5	363	4
Future Volume (vph)	2	2	2	0	0	5	6	243	2	5	363	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.955			0.865			0.998			0.997	
Flt Protected		0.984						0.996			0.999	
Satd. Flow (prot)	0	1750	0	0	1611	0	0	1852	0	0	1855	0
Flt Permitted		0.984						0.996			0.999	
Satd. Flow (perm)	0	1750	0	0	1611	0	0	1852	0	0	1855	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		330			400			1691			372	
Travel Time (s)		9.0			10.9			46.1			10.1	
Confl. Peds. (#/hr)	1		4	9		6	4		9	6		1
Peak Hour Factor	0.50	0.50	0.50	1.00	1.00	0.42	0.30	0.95	0.50	0.62	0.92	0.50
Adj. Flow (vph)	4	4	4	0	0	12	20	256	4	8	395	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	0	0	12	0	0	280	0	0	411	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	2	2	0	0	5	6	243	2	5	363	4
Future Volume (Veh/h)	2	2	2	0	0	5	6	243	2	5	363	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.50	0.50	1.00	1.00	0.42	0.30	0.95	0.50	0.62	0.92	0.50
Hourly flow rate (vph)	4	4	4	0	0	12	20	256	4	8	395	8
Pedestrians		4			9			9			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			1			1			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											372	
pX, platoon unblocked	0.88	0.88	0.88	0.88	0.88		0.88					
vC, conflicting volume	735	728	412	737	730	273	407			269		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	634	626	269	637	629	273	263			269		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	99	100	100	98	98			99		
cM capacity (veh/h)	329	342	673	326	341	756	1146			1285		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	12	12	280	411
Volume Left	4	0	20	8
Volume Right	4	12	4	8
cSH	403	756	1146	1285
Volume to Capacity	0.03	0.02	0.02	0.01
Queue Length 95th (ft)	2	1	1	0
Control Delay (s)	14.2	9.8	0.7	0.2
Lane LOS	B	A	A	A
Approach Delay (s)	14.2	9.8	0.7	0.2
Approach LOS	B	A		

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	33.5%	ICU Level of Service	A	
Analysis Period (min)	15			

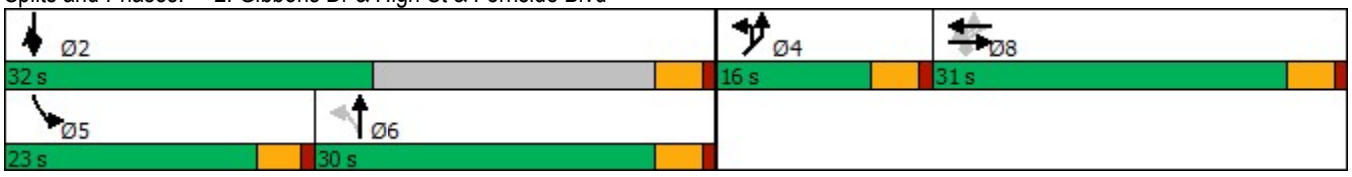
Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	98	169	32	1	1	207	282	35	225	3	212	305
Future Volume (vph)	98	169	32	1	1	207	282	35	225	3	212	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		100		0		350	0		0	120	
Storage Lanes	1		1		0		1	0		0	1	
Taper Length (ft)	25				25			25			25	
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
Ped Bike Factor	0.99		0.98			1.00			1.00			
Frt			0.850				0.850		0.996			
Flt Protected	0.950					0.998			0.992		0.950	
Satd. Flow (prot)	1770	1863	1583	0	0	1859	1583	0	1838	0	1770	1863
Flt Permitted	0.460					0.988			0.896		0.950	
Satd. Flow (perm)	846	1863	1546	0	0	1840	1583	0	1660	0	1770	1863
Right Turn on Red							Yes			Yes		
Satd. Flow (RTOR)							291		1			
Link Speed (mph)		25				25			25			25
Link Distance (ft)		509				699			372			1329
Travel Time (s)		13.9				19.1			10.1			36.2
Confl. Peds. (#/hr)	10		2	2	4					12		
Peak Hour Factor	0.82	0.92	0.61	0.25	0.25	0.94	0.97	0.80	0.94	0.38	0.83	0.86
Adj. Flow (vph)	120	184	52	4	4	220	291	44	239	8	255	355
Shared Lane Traffic (%)												
Lane Group Flow (vph)	120	184	52	0	0	228	291	0	291	0	255	355
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane		Yes										
Headway 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
Turning Speed (mph)	15		9	15	15		9	15		9	15	
Number of Detectors	1	2	1	1	1	2	1	1	2		1	2
Detector Template	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left	Thru
Leading Detector (ft)	20	100	20	20	20	100	20	20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0		0	0
Detector 1 Size(ft)	20	6	20	20	20	6	20	20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	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		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		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		0.0	0.0
Detector 2 Position(ft)		94				94			94			94
Detector 2 Size(ft)		6				6			6			6
Detector 2 Type		Cl+Ex				Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0			0.0			0.0
Turn Type	Perm	NA	Perm	Perm	Perm	NA	Free	Perm	NA		Prot	NA

Lane Group	SBR	SBR2	NEL	NER	NER2
Lane Configurations					
Traffic Volume (vph)	143	93	68	5	3
Future Volume (vph)	143	93	68	5	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	60	
Storage Lanes	1		1	1	
Taper Length (ft)			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.99		0.98
Frt	0.850		0.981		0.850
Flt Protected			0.958		
Satd. Flow (prot)	1583	0	1744	0	1583
Flt Permitted			0.958		
Satd. Flow (perm)	1583	0	1741	0	1550
Right Turn on Red		No			Yes
Satd. Flow (RTOR)					164
Link Speed (mph)			25		
Link Distance (ft)			596		
Travel Time (s)			16.3		
Confl. Peds. (#/hr)	2		2	2	2
Peak Hour Factor	0.81	0.65	0.81	0.42	0.75
Adj. Flow (vph)	177	143	84	12	4
Shared Lane Traffic (%)					
Lane Group Flow (vph)	320	0	96	0	4
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Right	Right	Left	Right	Right
Median Width(ft)			12		
Link Offset(ft)			0		
Crosswalk Width(ft)			16		
Two way Left Turn Lane					
Headway Factor	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	9	15	9	9
Number of Detectors	1		1		1
Detector Template	Right		Left		Right
Leading Detector (ft)	20		20		20
Trailing Detector (ft)	0		0		0
Detector 1 Position(ft)	0		0		0
Detector 1 Size(ft)	20		20		20
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel					
Detector 1 Extend (s)	0.0		0.0		0.0
Detector 1 Queue (s)	0.0		0.0		0.0
Detector 1 Delay (s)	0.0		0.0		0.0
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type	Prot		Prot		Free

Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Protected Phases		8				8			6		5	2
Permitted Phases	8		8	8	8		Free	6				
Detector Phase	8	8	8	8	8	8		6	6		5	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0		12.0	12.0		8.0	8.0
Minimum Split (s)	30.6	30.6	30.6	30.6	30.6	30.6		29.6	29.6		12.2	31.6
Total Split (s)	31.0	31.0	31.0	31.0	31.0	31.0		30.0	30.0		23.0	32.0
Total Split (%)	31.0%	31.0%	31.0%	31.0%	31.0%	31.0%		30.0%	30.0%		23.0%	32.0%
Maximum Green (s)	26.4	26.4	26.4	26.4	26.4	26.4		25.4	25.4		18.8	27.4
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6		3.6	3.6		3.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0			0.0		0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6			4.6			4.6		4.2	4.6
Lead/Lag								Lag	Lag		Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0		2.2	2.2		1.2	1.2
Recall Mode	None	None	None	None	None	None		None	None		None	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0			7.0
Flash Dont Walk (s)	19.0	19.0	19.0	19.0	19.0	19.0		18.0	18.0			20.0
Pedestrian Calls (#/hr)	10	10	10	10	10	10		2	2			10
Act Effct Green (s)	16.2	16.2	16.2			16.2	75.9		18.8		14.7	38.1
Actuated g/C Ratio	0.21	0.21	0.21			0.21	1.00		0.25		0.19	0.50
v/c Ratio	0.67	0.46	0.16			0.58	0.18		0.71		0.75	0.38
Control Delay	50.5	33.3	29.1			36.3	0.3		39.7		47.3	15.0
Queue Delay	0.0	0.0	0.0			0.0	0.0		0.0		0.0	0.0
Total Delay	50.5	33.3	29.1			36.3	0.3		39.7		47.3	15.0
LOS	D	C	C			D	A		D		D	B
Approach Delay		38.5				16.1			39.7			24.1
Approach LOS		D				B			D			C

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 75.9			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 27.2		Intersection LOS: C	
Intersection Capacity Utilization 82.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 2: Gibbons Dr & High St & Fernside Blvd



Lane Group	SBR	SBR2	NEL	NER	NER2
Protected Phases	2		4		
Permitted Phases					Free
Detector Phase	2		4		
Switch Phase					
Minimum Initial (s)	8.0		11.0		
Minimum Split (s)	31.6		15.6		
Total Split (s)	32.0		16.0		
Total Split (%)	32.0%		16.0%		
Maximum Green (s)	27.4		11.4		
Yellow Time (s)	3.6		3.6		
All-Red Time (s)	1.0		1.0		
Lost Time Adjust (s)	0.0		0.0		
Total Lost Time (s)	4.6		4.6		
Lead/Lag					
Lead-Lag Optimize?					
Vehicle Extension (s)	1.2		1.0		
Recall Mode	None		None		
Walk Time (s)	7.0				
Flash Dont Walk (s)	20.0				
Pedestrian Calls (#/hr)	10				
Act Effct Green (s)	38.1		12.1		75.9
Actuated g/C Ratio	0.50		0.16		1.00
v/c Ratio	0.40		0.35		0.00
Control Delay	15.7		40.2		0.0
Queue Delay	0.0		0.0		0.0
Total Delay	15.7		40.2		0.0
LOS	B		D		A
Approach Delay			38.6		
Approach LOS			D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	98	169	32	1	1	207	282	35	225	3	212	305
Future Volume (vph)	98	169	32	1	1	207	282	35	225	3	212	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6			4.6	4.0		4.6		4.2	4.6
Lane Util. Factor	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.98			1.00	1.00		1.00		1.00	1.00
Flpb, ped/bikes	0.99	1.00	1.00			1.00	1.00		1.00		1.00	1.00
Frt	1.00	1.00	0.85			1.00	0.85		1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00			1.00	1.00		0.99		0.95	1.00
Satd. Flow (prot)	1752	1863	1547			1859	1583		1840		1770	1863
Flt Permitted	0.46	1.00	1.00			0.99	1.00		0.90		0.95	1.00
Satd. Flow (perm)	848	1863	1547			1840	1583		1661		1770	1863
Peak-hour factor, PHF	0.82	0.92	0.61	0.25	0.25	0.94	0.97	0.80	0.94	0.38	0.83	0.86
Adj. Flow (vph)	120	184	52	4	4	220	291	44	239	8	255	355
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	1	0	0	0
Lane Group Flow (vph)	120	184	52	0	0	228	291	0	290	0	255	355
Confl. Peds. (#/hr)	10		2	2	4					12		
Turn Type	Perm	NA	Perm	Perm	Perm	NA	Free	Perm	NA		Prot	NA
Protected Phases		8				8			6		5	2
Permitted Phases	8		8	8	8		Free	6				
Actuated Green, G (s)	16.2	16.2	16.2			16.2	76.3		19.2		14.7	38.1
Effective Green, g (s)	16.2	16.2	16.2			16.2	76.3		19.2		14.7	38.1
Actuated g/C Ratio	0.21	0.21	0.21			0.21	1.00		0.25		0.19	0.50
Clearance Time (s)	4.6	4.6	4.6			4.6			4.6		4.2	4.6
Vehicle Extension (s)	1.0	1.0	1.0			1.0			2.2		1.2	1.2
Lane Grp Cap (vph)	180	395	328			390	1583		417		341	930
v/s Ratio Prot		0.10									c0.14	0.19
v/s Ratio Perm	c0.14		0.03			0.12	0.18		c0.17			
v/c Ratio	0.67	0.47	0.16			0.58	0.18		0.70		0.75	0.38
Uniform Delay, d1	27.6	26.3	24.5			27.0	0.0		25.9		29.1	11.8
Progression Factor	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00
Incremental Delay, d2	7.0	0.3	0.1			1.4	0.3		4.3		7.6	0.1
Delay (s)	34.6	26.6	24.6			28.5	0.3		30.2		36.7	11.9
Level of Service	C	C	C			C	A		C		D	B
Approach Delay (s)		29.0				12.6			30.2			18.8
Approach LOS		C				B			C			B

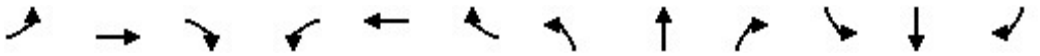
Intersection Summary			
HCM 2000 Control Delay	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	76.3	Sum of lost time (s)	18.0
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR	SBR2	NEL	NER	NER2
Lane Configurations					
Traffic Volume (vph)	143	93	68	5	3
Future Volume (vph)	143	93	68	5	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		4.6		4.0
Lane Util. Factor	1.00		1.00		1.00
Frpb, ped/bikes	1.00		1.00		0.98
Flpb, ped/bikes	1.00		1.00		1.00
Frt	0.85		0.98		0.85
Flt Protected	1.00		0.96		1.00
Satd. Flow (prot)	1583		1745		1550
Flt Permitted	1.00		0.96		1.00
Satd. Flow (perm)	1583		1745		1550
Peak-hour factor, PHF	0.81	0.65	0.81	0.42	0.75
Adj. Flow (vph)	177	143	84	12	4
RTOR Reduction (vph)	0	0	0	0	0
Lane Group Flow (vph)	320	0	96	0	4
Confl. Peds. (#/hr)	2		2	2	2
Turn Type	Prot		Prot		Free
Protected Phases	2		4		
Permitted Phases					Free
Actuated Green, G (s)	38.1		8.2		76.3
Effective Green, g (s)	38.1		8.2		76.3
Actuated g/C Ratio	0.50		0.11		1.00
Clearance Time (s)	4.6		4.6		
Vehicle Extension (s)	1.2		1.0		
Lane Grp Cap (vph)	790		187		1550
v/s Ratio Prot	0.20		c0.06		
v/s Ratio Perm					0.00
v/c Ratio	0.41		0.51		0.00
Uniform Delay, d1	12.0		32.2		0.0
Progression Factor	1.00		1.00		1.00
Incremental Delay, d2	0.1		1.0		0.0
Delay (s)	12.1		33.2		0.0
Level of Service	B		C		A
Approach Delay (s)			31.8		
Approach LOS			C		

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	286	6	2	340	4	3	1	0	3	1	6
Future Volume (vph)	6	286	6	2	340	4	3	1	0	3	1	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		100	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
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
Ped Bike Factor												
Frt		0.995			0.997						0.919	
Flt Protected	0.950			0.950				0.968			0.990	
Satd. Flow (prot)	1770	1853	0	1770	1857	0	0	1803	0	0	1695	0
Flt Permitted	0.950			0.950				0.968			0.990	
Satd. Flow (perm)	1770	1853	0	1770	1857	0	0	1803	0	0	1695	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		547			509			358			297	
Travel Time (s)		14.9			13.9			9.8			8.1	
Confl. Peds. (#/hr)	4		8	8		4	8		8	4		4
Peak Hour Factor	0.75	0.88	0.50	0.50	0.88	0.50	0.38	0.25	1.00	0.75	0.25	0.50
Adj. Flow (vph)	8	325	12	4	386	8	8	4	0	4	4	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	337	0	4	394	0	0	12	0	0	20	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

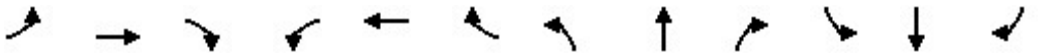
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	286	6	2	340	4	3	1	0	3	1	6
Future Volume (Veh/h)	6	286	6	2	340	4	3	1	0	3	1	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.75	0.88	0.50	0.50	0.88	0.50	0.38	0.25	1.00	0.75	0.25	0.50
Hourly flow rate (vph)	8	325	12	4	386	8	8	4	0	4	4	12
Pedestrians		8			8			8			4	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			0	
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					509							
pX, platoon unblocked	0.91						0.91	0.91		0.91	0.91	0.91
vC, conflicting volume	398			345			771	761	347	753	763	402
vC1, stage 1 conf vol							355	355		402	402	
vC2, stage 2 conf vol							416	406		351	361	
vCu, unblocked vol	292			345			701	690	347	681	692	297
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			98	99	100	99	99	98
cM capacity (veh/h)	1154			1206			508	502	687	526	503	671

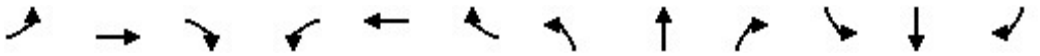
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	8	337	4	394	12	20
Volume Left	8	0	4	0	8	4
Volume Right	0	12	0	8	0	12
cSH	1154	1700	1206	1700	506	598
Volume to Capacity	0.01	0.20	0.00	0.23	0.02	0.03
Queue Length 95th (ft)	1	0	0	0	2	3
Control Delay (s)	8.1	0.0	8.0	0.0	12.3	11.2
Lane LOS	A		A		B	B
Approach Delay (s)	0.2		0.1		12.3	11.2
Approach LOS					B	B

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	30.5%	ICU Level of Service		A
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1	1	1	0	0	8	288	1	2	220	2
Future Volume (vph)	1	1	1	1	0	0	8	288	1	2	220	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.955						0.998			0.998	
Flt Protected		0.984			0.950			0.998			0.999	
Satd. Flow (prot)	0	1750	0	0	1770	0	0	1855	0	0	1857	0
Flt Permitted		0.984			0.950			0.998			0.999	
Satd. Flow (perm)	0	1750	0	0	1770	0	0	1855	0	0	1857	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		330			400			1691			372	
Travel Time (s)		9.0			10.9			46.1			10.1	
Confl. Peds. (#/hr)	5		6	7		6	6		7	6		5
Peak Hour Factor	0.25	0.25	0.25	0.25	1.00	1.00	0.50	0.89	0.25	0.50	0.78	0.50
Adj. Flow (vph)	4	4	4	4	0	0	16	324	4	4	282	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	0	0	4	0	0	344	0	0	290	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	1	1	0	0	8	288	1	2	220	2
Future Volume (Veh/h)	1	1	1	1	0	0	8	288	1	2	220	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.25	0.25	0.25	1.00	1.00	0.50	0.89	0.25	0.50	0.78	0.50
Hourly flow rate (vph)	4	4	4	4	0	0	16	324	4	4	282	4
Pedestrians		6			7			7			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											372	
pX, platoon unblocked	0.92	0.92	0.92	0.92	0.92		0.92					
vC, conflicting volume	662	665	297	670	665	339	292			335		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	589	592	192	598	592	339	187			335		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	99	99	100	100	99			100		
cM capacity (veh/h)	375	375	773	364	375	696	1270			1217		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	12	4	344	290
Volume Left	4	4	16	4
Volume Right	4	0	4	4
cSH	453	364	1270	1217
Volume to Capacity	0.03	0.01	0.01	0.00
Queue Length 95th (ft)	2	1	1	0
Control Delay (s)	13.2	15.0	0.5	0.1
Lane LOS	B	B	A	A
Approach Delay (s)	13.2	15.0	0.5	0.1
Approach LOS	B	B		

Intersection Summary				
Average Delay	0.7			
Intersection Capacity Utilization	32.1%	ICU Level of Service	A	
Analysis Period (min)	15			

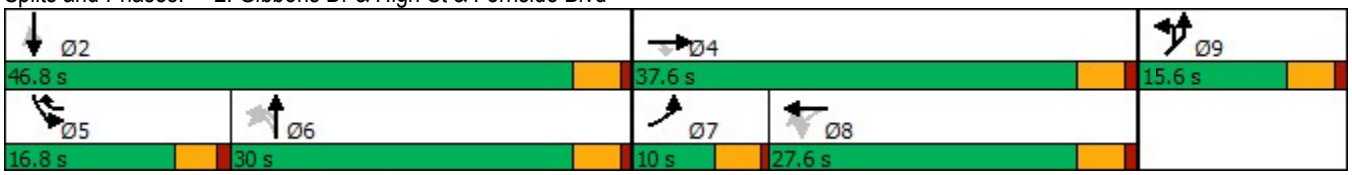
Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	87	131	24	2	5	278	181	1	65	228	2	172
Future Volume (vph)	87	131	24	2	5	278	181	1	65	228	2	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		100		0		140		0		0	120
Storage Lanes	1		1		0		1		0		0	1
Taper Length (ft)	25				25				25			25
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
Ped Bike Factor	0.99		0.97			1.00				1.00		
Frt			0.850				0.850			0.997		
Flt Protected	0.950					0.997				0.985		0.950
Satd. Flow (prot)	1770	1863	1583	0	0	1857	1583	0	0	1828	0	1770
Flt Permitted	0.950					0.979				0.806		0.950
Satd. Flow (perm)	1760	1863	1532	0	0	1821	1583	0	0	1493	0	1770
Right Turn on Red							No				Yes	
Satd. Flow (RTOR)										1		
Link Speed (mph)		25				25				25		
Link Distance (ft)		509				699				372		
Travel Time (s)		13.9				19.1				10.1		
Confl. Peds. (#/hr)	4		7	7	9			2	3		9	
Peak Hour Factor	0.76	0.73	0.75	0.50	0.42	0.93	0.94	0.25	0.58	0.86	0.25	0.81
Adj. Flow (vph)	114	179	32	4	12	299	193	4	112	265	8	212
Shared Lane Traffic (%)												
Lane Group Flow (vph)	114	179	32	0	0	315	193	0	0	389	0	212
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Left	Right	Left
Median Width(ft)		12				12				12		
Link Offset(ft)		0				0				0		
Crosswalk Width(ft)		16				16				16		
Two way Left Turn Lane		Yes										
Headway 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
Turning Speed (mph)	15		9	15	15		9	15	15		9	15
Number of Detectors	1	2	1	1	1	2	1	1	1	2		1
Detector Template	Left	Thru	Right	Left	Left	Thru	Right	Left	Left	Thru		Left
Leading Detector (ft)	20	100	20	20	20	100	20	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	6	20	20	20	6	20	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	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	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	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	0.0		0.0
Detector 2 Position(ft)		94				94				94		
Detector 2 Size(ft)		6				6				6		
Detector 2 Type		Cl+Ex				Cl+Ex				Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0				0.0		
Turn Type	Prot	NA	Perm	Perm	Perm	NA	Over	Perm	Perm	NA		Prot

Lane Group	SBT	SBR	SBR2	NEL	NER	NER2
Lane Configurations						
Traffic Volume (vph)	190	116	74	76	3	6
Future Volume (vph)	190	116	74	76	3	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200		0	60	
Storage Lanes		1		1	1	
Taper Length (ft)				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97		1.00		0.98
Frt		0.850		0.991		0.850
Flt Protected				0.955		
Satd. Flow (prot)	1863	1583	0	1760	0	1583
Flt Permitted				0.955		
Satd. Flow (perm)	1863	1537	0	1755	0	1550
Right Turn on Red			No			Yes
Satd. Flow (RTOR)						207
Link Speed (mph)	25			25		
Link Distance (ft)	1329			596		
Travel Time (s)	36.2			16.3		
Confl. Peds. (#/hr)		2	3	2	2	2
Peak Hour Factor	0.73	0.81	0.88	0.85	0.50	0.75
Adj. Flow (vph)	260	143	84	89	6	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	260	227	0	95	0	8
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right	Right
Median Width(ft)	12			12		
Link Offset(ft)	0			0		
Crosswalk Width(ft)	16			16		
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15	9	9
Number of Detectors	2	1		1		1
Detector Template	Thru	Right		Left		Right
Leading Detector (ft)	100	20		20		20
Trailing Detector (ft)	0	0		0		0
Detector 1 Position(ft)	0	0		0		0
Detector 1 Size(ft)	6	20		20		20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0		0.0
Detector 2 Position(ft)	94					
Detector 2 Size(ft)	6					
Detector 2 Type	Cl+Ex					
Detector 2 Channel						
Detector 2 Extend (s)	0.0					
Turn Type	NA	Perm		Prot		Free

Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL
Protected Phases	7	4				8	5			6		5
Permitted Phases			4	8	8			6	6			
Detector Phase	7	4	4	8	8	8	5	6	6	6		5
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	10.0	10.0	10.0	8.0	12.0	12.0	12.0		8.0
Minimum Split (s)	8.0	31.6	31.6	27.6	27.6	27.6	12.2	29.6	29.6	29.6		12.2
Total Split (s)	10.0	37.6	37.6	27.6	27.6	27.6	16.8	30.0	30.0	30.0		16.8
Total Split (%)	10.0%	37.6%	37.6%	27.6%	27.6%	27.6%	16.8%	30.0%	30.0%	30.0%		16.8%
Maximum Green (s)	6.0	33.0	33.0	23.0	23.0	23.0	12.6	25.4	25.4	25.4		12.6
Yellow Time (s)	3.5	3.6	3.6	3.6	3.6	3.6	3.2	3.6	3.6	3.6		3.2
All-Red Time (s)	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0	0.0			0.0		0.0
Total Lost Time (s)	4.0	4.6	4.6			4.6	4.2			4.6		4.2
Lead/Lag	Lead			Lag	Lag	Lag	Lead	Lag	Lag	Lag		Lead
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	1.0	1.0	1.0	1.0	1.0	1.2	2.2	2.2	2.2		1.2
Recall Mode	None	None	None	None	None	None	None	None	None	None		None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0		
Flash Dont Walk (s)		20.0	20.0	16.0	16.0	16.0		18.0	18.0	18.0		
Pedestrian Calls (#/hr)		5	5	5	5	5		7	7	7		
Act Effct Green (s)	6.1	28.8	28.8			18.6	12.8			25.8		12.8
Actuated g/C Ratio	0.07	0.31	0.31			0.20	0.14			0.28		0.14
v/c Ratio	0.98	0.31	0.07			0.86	0.89			0.94		0.87
Control Delay	129.0	26.8	23.8			59.8	81.1			67.6		75.2
Queue Delay	0.0	0.0	0.0			0.0	0.0			0.0		0.0
Total Delay	129.0	26.8	23.8			59.8	81.1			67.6		75.2
LOS	F	C	C			E	F			E		E
Approach Delay		62.3				67.9				67.6		
Approach LOS		E				E				E		

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 92.8			
Natural Cycle: 105			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 54.9		Intersection LOS: D	
Intersection Capacity Utilization 83.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 2: Gibbons Dr & High St & Fernside Blvd



Lane Group	SBT	SBR	SBR2	NEL	NER	NER2
Protected Phases	2			9		
Permitted Phases		2				Free
Detector Phase	2	2		9		
Switch Phase						
Minimum Initial (s)	8.0	8.0		11.0		
Minimum Split (s)	31.6	31.6		15.6		
Total Split (s)	46.8	46.8		15.6		
Total Split (%)	46.8%	46.8%		15.6%		
Maximum Green (s)	42.2	42.2		11.0		
Yellow Time (s)	3.6	3.6		3.6		
All-Red Time (s)	1.0	1.0		1.0		
Lost Time Adjust (s)	0.0	0.0		0.0		
Total Lost Time (s)	4.6	4.6		4.6		
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.2	1.2		1.0		
Recall Mode	None	None		None		
Walk Time (s)	7.0	7.0				
Flash Dont Walk (s)	20.0	20.0				
Pedestrian Calls (#/hr)	4	4				
Act Effct Green (s)	42.8	42.8		11.2		92.8
Actuated g/C Ratio	0.46	0.46		0.12		1.00
v/c Ratio	0.30	0.32		0.45		0.01
Control Delay	19.0	19.7		48.6		0.0
Queue Delay	0.0	0.0		0.0		0.0
Total Delay	19.0	19.7		48.6		0.0
LOS	B	B		D		A
Approach Delay	36.3			44.8		
Approach LOS	D			D		

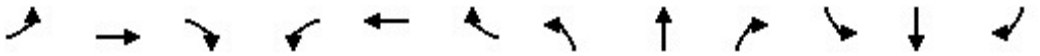
Intersection Summary

Movement	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	87	131	24	2	5	278	181	1	65	228	2	172
Future Volume (vph)	87	131	24	2	5	278	181	1	65	228	2	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.6	4.6			4.6	4.2			4.6		4.2
Lane Util. Factor	1.00	1.00	1.00			1.00	1.00			1.00		1.00
Frpb, ped/bikes	1.00	1.00	0.97			1.00	1.00			1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00			1.00		1.00
Frt	1.00	1.00	0.85			1.00	0.85			1.00		1.00
Flt Protected	0.95	1.00	1.00			1.00	1.00			0.99		0.95
Satd. Flow (prot)	1770	1863	1533			1856	1583			1826		1770
Flt Permitted	0.95	1.00	1.00			0.98	1.00			0.81		0.95
Satd. Flow (perm)	1770	1863	1533			1822	1583			1494		1770
Peak-hour factor, PHF	0.76	0.73	0.75	0.50	0.42	0.93	0.94	0.25	0.58	0.86	0.25	0.81
Adj. Flow (vph)	114	179	32	4	12	299	193	4	112	265	8	212
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	1	0	0
Lane Group Flow (vph)	114	179	32	0	0	315	193	0	0	388	0	212
Confl. Peds. (#/hr)	4		7	7	9			2	3		9	
Turn Type	Prot	NA	Perm	Perm	Perm	NA	Over	Perm	Perm	NA		Prot
Protected Phases	7	4				8	5			6		5
Permitted Phases			4	8	8			6	6			
Actuated Green, G (s)	6.1	28.8	28.8			18.7	12.8			25.8		12.8
Effective Green, g (s)	6.1	28.8	28.8			18.7	12.8			25.8		12.8
Actuated g/C Ratio	0.07	0.31	0.31			0.20	0.14			0.28		0.14
Clearance Time (s)	4.0	4.6	4.6			4.6	4.2			4.6		4.2
Vehicle Extension (s)	3.0	1.0	1.0			1.0	1.2			2.2		1.2
Lane Grp Cap (vph)	115	572	471			363	216			411		241
v/s Ratio Prot	c0.06	0.10					c0.12					0.12
v/s Ratio Perm			0.02			c0.17				c0.26		
v/c Ratio	0.99	0.31	0.07			0.87	0.89			0.94		0.88
Uniform Delay, d1	43.8	24.9	23.0			36.3	39.8			33.3		39.7
Progression Factor	1.00	1.00	1.00			1.00	1.00			1.00		1.00
Incremental Delay, d2	81.0	0.1	0.0			18.6	33.1			30.3		27.7
Delay (s)	124.7	25.0	23.0			54.9	72.9			63.5		67.4
Level of Service	F	C	C			D	E			E		E
Approach Delay (s)		59.8				61.7				63.5		
Approach LOS		E				E				E		

Intersection Summary			
HCM 2000 Control Delay	50.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	93.7	Sum of lost time (s)	22.0
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

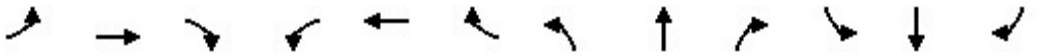
Movement	SBT	SBR	SBR2	NEL	NER	NER2
Lane Configurations						
Traffic Volume (vph)	190	116	74	76	3	6
Future Volume (vph)	190	116	74	76	3	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6		4.0
Lane Util. Factor	1.00	1.00		1.00		1.00
Frpb, ped/bikes	1.00	0.97		1.00		0.98
Flpb, ped/bikes	1.00	1.00		1.00		1.00
Frt	1.00	0.85		0.99		0.85
Flt Protected	1.00	1.00		0.96		1.00
Satd. Flow (prot)	1863	1538		1759		1550
Flt Permitted	1.00	1.00		0.96		1.00
Satd. Flow (perm)	1863	1538		1759		1550
Peak-hour factor, PHF	0.73	0.81	0.88	0.85	0.50	0.75
Adj. Flow (vph)	260	143	84	89	6	8
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	260	227	0	95	0	8
Confl. Peds. (#/hr)		2	3	2	2	2
Turn Type	NA	Perm		Prot		Free
Protected Phases	2			9		
Permitted Phases		2				Free
Actuated Green, G (s)	42.8	42.8		8.3		93.7
Effective Green, g (s)	42.8	42.8		8.3		93.7
Actuated g/C Ratio	0.46	0.46		0.09		1.00
Clearance Time (s)	4.6	4.6		4.6		
Vehicle Extension (s)	1.2	1.2		1.0		
Lane Grp Cap (vph)	850	702		155		1550
v/s Ratio Prot	0.14			c0.05		
v/s Ratio Perm		0.15				0.01
v/c Ratio	0.31	0.32		0.61		0.01
Uniform Delay, d1	16.1	16.2		41.2		0.0
Progression Factor	1.00	1.00		1.00		1.00
Incremental Delay, d2	0.1	0.1		5.0		0.0
Delay (s)	16.1	16.3		46.1		0.0
Level of Service	B	B		D		A
Approach Delay (s)	31.7			42.5		
Approach LOS	C			D		

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	245	4	1	458	3	11	0	2	4	0	8
Future Volume (vph)	2	245	4	1	458	3	11	0	2	4	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		100	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
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
Ped Bike Factor												
Frt		0.996			0.999			0.955			0.904	
Flt Protected	0.950			0.950				0.968			0.986	
Satd. Flow (prot)	1770	1855	0	1770	1861	0	0	1722	0	0	1660	0
Flt Permitted	0.950			0.950				0.968			0.986	
Satd. Flow (perm)	1770	1855	0	1770	1861	0	0	1722	0	0	1660	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		547			509			358			297	
Travel Time (s)		14.9			13.9			9.8			8.1	
Confl. Peds. (#/hr)	4			2		6			2	6		4
Peak Hour Factor	0.50	0.79	0.50	0.25	0.87	0.75	0.69	1.00	0.25	0.50	1.00	0.40
Adj. Flow (vph)	4	310	8	4	526	4	16	0	8	8	0	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	318	0	4	530	0	0	24	0	0	28	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

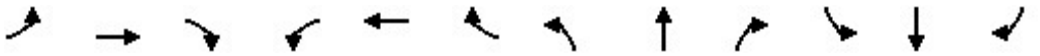
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	245	4	1	458	3	11	0	2	4	0	8
Future Volume (Veh/h)	2	245	4	1	458	3	11	0	2	4	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.79	0.50	0.25	0.87	0.75	0.69	1.00	0.25	0.50	1.00	0.40
Hourly flow rate (vph)	4	310	8	4	526	4	16	0	8	8	0	20
Pedestrians		4			6			2			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			1			0			1	
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					509							
pX, platoon unblocked	0.84						0.84	0.84		0.84	0.84	0.84
vC, conflicting volume	536			320			882	868	322	874	870	538
vC1, stage 1 conf vol							324	324		542	542	
vC2, stage 2 conf vol							558	544		332	328	
vCu, unblocked vol	358			320			768	751	322	758	754	360
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			96	100	99	98	100	97
cM capacity (veh/h)	1008			1238			455	458	714	472	460	573

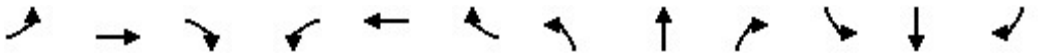
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	4	318	4	530	24	28
Volume Left	4	0	4	0	16	8
Volume Right	0	8	0	4	8	20
cSH	1008	1700	1238	1700	517	540
Volume to Capacity	0.00	0.19	0.00	0.31	0.05	0.05
Queue Length 95th (ft)	0	0	0	0	4	4
Control Delay (s)	8.6	0.0	7.9	0.0	12.3	12.0
Lane LOS	A		A		B	B
Approach Delay (s)	0.1		0.1		12.3	12.0
Approach LOS					B	B

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	35.5%	ICU Level of Service		A
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	2	2	0	0	5	6	243	2	5	363	4
Future Volume (vph)	2	2	2	0	0	5	6	243	2	5	363	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.955			0.865			0.998			0.997	
Flt Protected		0.984						0.996			0.999	
Satd. Flow (prot)	0	1750	0	0	1611	0	0	1852	0	0	1855	0
Flt Permitted		0.984						0.996			0.999	
Satd. Flow (perm)	0	1750	0	0	1611	0	0	1852	0	0	1855	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		330			400			1691			372	
Travel Time (s)		9.0			10.9			46.1			10.1	
Confl. Peds. (#/hr)	1		4	9		6	4		9	6		1
Peak Hour Factor	0.50	0.50	0.50	1.00	1.00	0.42	0.30	0.95	0.50	0.62	0.92	0.50
Adj. Flow (vph)	4	4	4	0	0	12	20	256	4	8	395	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	0	0	12	0	0	280	0	0	411	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	2	2	0	0	5	6	243	2	5	363	4
Future Volume (Veh/h)	2	2	2	0	0	5	6	243	2	5	363	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.50	0.50	1.00	1.00	0.42	0.30	0.95	0.50	0.62	0.92	0.50
Hourly flow rate (vph)	4	4	4	0	0	12	20	256	4	8	395	8
Pedestrians		4			9			9			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			1			1			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											372	
pX, platoon unblocked	0.88	0.88	0.88	0.88	0.88		0.88					
vC, conflicting volume	735	728	412	737	730	273	407			269		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	627	619	258	629	621	273	252			269		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	99	100	100	98	98			99		
cM capacity (veh/h)	330	342	676	327	341	756	1146			1285		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	12	12	280	411
Volume Left	4	0	20	8
Volume Right	4	12	4	8
cSH	404	756	1146	1285
Volume to Capacity	0.03	0.02	0.02	0.01
Queue Length 95th (ft)	2	1	1	0
Control Delay (s)	14.2	9.8	0.7	0.2
Lane LOS	B	A	A	A
Approach Delay (s)	14.2	9.8	0.7	0.2
Approach LOS	B	A		

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	33.5%	ICU Level of Service	A	
Analysis Period (min)	15			

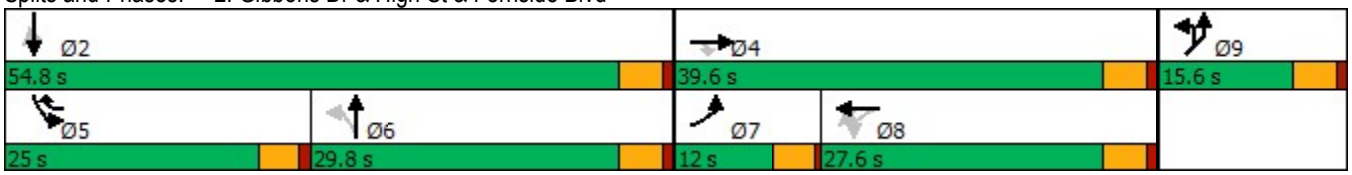
Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	99	169	32	1	1	207	282	35	233	4	212	305
Future Volume (vph)	99	169	32	1	1	207	282	35	233	4	212	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		100		0		140	0		0	120	
Storage Lanes	1		1		0		1	0		0	1	
Taper Length (ft)	25				25			25			25	
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
Ped Bike Factor	0.98		0.98			1.00			1.00			
Frt			0.850				0.850		0.995			
Flt Protected	0.950					0.998			0.993		0.950	
Satd. Flow (prot)	1770	1863	1583	0	0	1859	1583	0	1837	0	1770	1863
Flt Permitted	0.950					0.987			0.895		0.950	
Satd. Flow (perm)	1739	1863	1545	0	0	1838	1583	0	1656	0	1770	1863
Right Turn on Red							No			Yes		
Satd. Flow (RTOR)									2			
Link Speed (mph)		25				25			25			25
Link Distance (ft)		509				699			372			1329
Travel Time (s)		13.9				19.1			10.1			36.2
Confl. Peds. (#/hr)	10		2	2	4					12		
Peak Hour Factor	0.82	0.92	0.61	0.25	0.25	0.94	0.97	0.80	0.94	0.38	0.83	0.86
Adj. Flow (vph)	121	184	52	4	4	220	291	44	248	11	255	355
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	184	52	0	0	228	291	0	303	0	255	355
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane		Yes										
Headway 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
Turning Speed (mph)	15		9	15	15		9	15		9	15	
Number of Detectors	1	2	1	1	1	2	1	1	2		1	2
Detector Template	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left	Thru
Leading Detector (ft)	20	100	20	20	20	100	20	20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0		0	0
Detector 1 Size(ft)	20	6	20	20	20	6	20	20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	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		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		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		0.0	0.0
Detector 2 Position(ft)		94				94			94			94
Detector 2 Size(ft)		6				6			6			6
Detector 2 Type		Cl+Ex				Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0			0.0			0.0
Turn Type	Prot	NA	Perm	Perm	Perm	NA	Over	Perm	NA		Prot	NA

Lane Group	SBR	SBR2	NEL	NER	NER2
Lane Configurations					
Traffic Volume (vph)	143	93	59	4	3
Future Volume (vph)	143	93	59	4	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	60	
Storage Lanes	1		1	1	
Taper Length (ft)			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98		0.99		0.98
Frt	0.850		0.982		0.850
Flt Protected			0.958		
Satd. Flow (prot)	1583	0	1746	0	1583
Flt Permitted			0.958		
Satd. Flow (perm)	1545	0	1742	0	1550
Right Turn on Red		No			Yes
Satd. Flow (RTOR)					188
Link Speed (mph)			25		
Link Distance (ft)			596		
Travel Time (s)			16.3		
Confl. Peds. (#/hr)	2		2	2	2
Peak Hour Factor	0.81	0.65	0.81	0.42	0.75
Adj. Flow (vph)	177	143	73	10	4
Shared Lane Traffic (%)					
Lane Group Flow (vph)	320	0	83	0	4
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Right	Right	Left	Right	Right
Median Width(ft)			12		
Link Offset(ft)			0		
Crosswalk Width(ft)			16		
Two way Left Turn Lane					
Headway Factor	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	9	15	9	9
Number of Detectors	1		1		1
Detector Template	Right		Left		Right
Leading Detector (ft)	20		20		20
Trailing Detector (ft)	0		0		0
Detector 1 Position(ft)	0		0		0
Detector 1 Size(ft)	20		20		20
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel					
Detector 1 Extend (s)	0.0		0.0		0.0
Detector 1 Queue (s)	0.0		0.0		0.0
Detector 1 Delay (s)	0.0		0.0		0.0
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type	Perm		Prot		Free

Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Protected Phases	7	4				8	5		6		5	2
Permitted Phases			4	8	8			6				
Detector Phase	7	4	4	8	8	8	5	6	6		5	2
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	10.0	10.0	10.0	8.0	12.0	12.0		8.0	8.0
Minimum Split (s)	8.0	31.6	31.6	27.6	27.6	27.6	12.2	29.6	29.6		12.2	31.6
Total Split (s)	12.0	39.6	39.6	27.6	27.6	27.6	25.0	29.8	29.8		25.0	54.8
Total Split (%)	10.9%	36.0%	36.0%	25.1%	25.1%	25.1%	22.7%	27.1%	27.1%		22.7%	49.8%
Maximum Green (s)	8.0	35.0	35.0	23.0	23.0	23.0	20.8	25.2	25.2		20.8	50.2
Yellow Time (s)	3.5	3.6	3.6	3.6	3.6	3.6	3.2	3.6	3.6		3.2	3.6
All-Red Time (s)	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.0	4.6	4.6			4.6	4.2		4.6		4.2	4.6
Lead/Lag	Lead			Lag	Lag	Lag	Lead	Lag	Lag		Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	1.0	1.0	1.0	1.0	1.0	1.2	2.2	2.2		1.2	1.2
Recall Mode	None	None	None	None	None	None	None	None	None		None	None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0		7.0	7.0			7.0
Flash Dont Walk (s)		20.0	20.0	16.0	16.0	16.0		18.0	18.0			20.0
Pedestrian Calls (#/hr)		5	5	5	5	5		7	7			4
Act Effct Green (s)	8.3	28.4	28.4			16.0	20.5		20.9		20.5	45.7
Actuated g/C Ratio	0.09	0.30	0.30			0.17	0.22		0.22		0.22	0.48
v/c Ratio	0.79	0.33	0.11			0.74	0.86		0.83		0.67	0.40
Control Delay	81.5	30.2	27.9			54.9	63.7		57.3		47.6	19.1
Queue Delay	0.0	0.0	0.0			0.0	0.0		0.0		0.0	0.0
Total Delay	81.5	30.2	27.9			54.9	63.7		57.3		47.6	19.1
LOS	F	C	C			D	E		E		D	B
Approach Delay		47.3				59.8			57.3			27.3
Approach LOS		D				E			E			C

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 95.3			
Natural Cycle: 105			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 43.2		Intersection LOS: D	
Intersection Capacity Utilization 83.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 2: Gibbons Dr & High St & Fernside Blvd



Lane Group	SBR	SBR2	NEL	NER	NER2
Protected Phases			9		
Permitted Phases	2				Free
Detector Phase	2		9		
Switch Phase					
Minimum Initial (s)	8.0		11.0		
Minimum Split (s)	31.6		15.6		
Total Split (s)	54.8		15.6		
Total Split (%)	49.8%		14.2%		
Maximum Green (s)	50.2		11.0		
Yellow Time (s)	3.6		3.6		
All-Red Time (s)	1.0		1.0		
Lost Time Adjust (s)	0.0		0.0		
Total Lost Time (s)	4.6		4.6		
Lead/Lag					
Lead-Lag Optimize?					
Vehicle Extension (s)	1.2		1.0		
Recall Mode	None		None		
Walk Time (s)	7.0				
Flash Dont Walk (s)	20.0				
Pedestrian Calls (#/hr)	4				
Act Effct Green (s)	45.7		11.4		95.3
Actuated g/C Ratio	0.48		0.12		1.00
v/c Ratio	0.43		0.40		0.00
Control Delay	20.2		50.6		0.0
Queue Delay	0.0		0.0		0.0
Total Delay	20.2		50.6		0.0
LOS	C		D		A
Approach Delay			48.3		
Approach LOS			D		

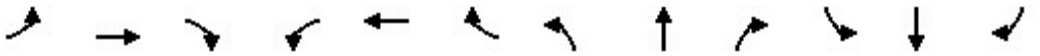
Intersection Summary

Movement	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	99	169	32	1	1	207	282	35	233	4	212	305
Future Volume (vph)	99	169	32	1	1	207	282	35	233	4	212	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.6	4.6			4.6	4.2		4.6		4.2	4.6
Lane Util. Factor	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.98			1.00	1.00		1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00
Frt	1.00	1.00	0.85			1.00	0.85		1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00			1.00	1.00		0.99		0.95	1.00
Satd. Flow (prot)	1770	1863	1546			1859	1583		1837		1770	1863
Flt Permitted	0.95	1.00	1.00			0.99	1.00		0.90		0.95	1.00
Satd. Flow (perm)	1770	1863	1546			1838	1583		1657		1770	1863
Peak-hour factor, PHF	0.82	0.92	0.61	0.25	0.25	0.94	0.97	0.80	0.94	0.38	0.83	0.86
Adj. Flow (vph)	121	184	52	4	4	220	291	44	248	11	255	355
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	2	0	0	0
Lane Group Flow (vph)	121	184	52	0	0	228	291	0	301	0	255	355
Confl. Peds. (#/hr)	10		2	2	4					12		
Turn Type	Prot	NA	Perm	Perm	Perm	NA	Over	Perm	NA		Prot	NA
Protected Phases	7	4				8	5		6		5	2
Permitted Phases			4	8	8			6				
Actuated Green, G (s)	8.3	28.4	28.4			16.1	20.5		21.0		20.5	45.7
Effective Green, g (s)	8.3	28.4	28.4			16.1	20.5		21.0		20.5	45.7
Actuated g/C Ratio	0.09	0.30	0.30			0.17	0.21		0.22		0.21	0.48
Clearance Time (s)	4.0	4.6	4.6			4.6	4.2		4.6		4.2	4.6
Vehicle Extension (s)	3.0	1.0	1.0			1.0	1.2		2.2		1.2	1.2
Lane Grp Cap (vph)	152	550	456			307	337		362		377	885
v/s Ratio Prot	c0.07	0.10					c0.18				0.14	0.19
v/s Ratio Perm			0.03			c0.12			c0.18			
v/c Ratio	0.80	0.33	0.11			0.74	0.86		0.83		0.68	0.40
Uniform Delay, d1	43.1	26.5	24.7			38.0	36.5		35.9		34.8	16.3
Progression Factor	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00
Incremental Delay, d2	24.3	0.1	0.0			8.2	19.2		14.6		3.8	0.1
Delay (s)	67.4	26.6	24.7			46.2	55.7		50.4		38.5	16.4
Level of Service	E	C	C			D	E		D		D	B
Approach Delay (s)		40.2				51.5			50.4			22.6
Approach LOS		D				D			D			C

Intersection Summary			
HCM 2000 Control Delay	37.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	96.1	Sum of lost time (s)	22.0
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

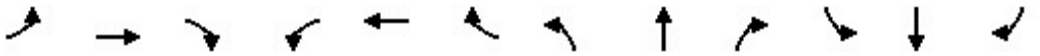
Movement	SBR	SBR2	NEL	NER	NER2
Lane Configurations					
Traffic Volume (vph)	143	93	59	4	3
Future Volume (vph)	143	93	59	4	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		4.6		4.0
Lane Util. Factor	1.00		1.00		1.00
Frpb, ped/bikes	0.98		1.00		0.98
Flpb, ped/bikes	1.00		1.00		1.00
Frt	0.85		0.98		0.85
Flt Protected	1.00		0.96		1.00
Satd. Flow (prot)	1546		1745		1550
Flt Permitted	1.00		0.96		1.00
Satd. Flow (perm)	1546		1745		1550
Peak-hour factor, PHF	0.81	0.65	0.81	0.42	0.75
Adj. Flow (vph)	177	143	73	10	4
RTOR Reduction (vph)	0	0	0	0	0
Lane Group Flow (vph)	320	0	83	0	4
Confl. Peds. (#/hr)	2		2	2	2
Turn Type	Perm		Prot		Free
Protected Phases			9		
Permitted Phases	2				Free
Actuated Green, G (s)	45.7		8.2		96.1
Effective Green, g (s)	45.7		8.2		96.1
Actuated g/C Ratio	0.48		0.09		1.00
Clearance Time (s)	4.6		4.6		
Vehicle Extension (s)	1.2		1.0		
Lane Grp Cap (vph)	735		148		1550
v/s Ratio Prot			c0.05		
v/s Ratio Perm	0.21				0.00
v/c Ratio	0.44		0.56		0.00
Uniform Delay, d1	16.7		42.2		0.0
Progression Factor	1.00		1.00		1.00
Incremental Delay, d2	0.2		2.9		0.0
Delay (s)	16.8		45.1		0.0
Level of Service	B		D		A
Approach Delay (s)			43.0		
Approach LOS			D		

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	286	6	2	340	4	3	1	0	3	1	6
Future Volume (vph)	6	286	6	2	340	4	3	1	0	3	1	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		100	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
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
Ped Bike Factor												
Frt		0.995			0.997						0.919	
Flt Protected	0.950			0.950				0.968			0.990	
Satd. Flow (prot)	1770	1853	0	1770	1857	0	0	1803	0	0	1695	0
Flt Permitted	0.950			0.950				0.968			0.990	
Satd. Flow (perm)	1770	1853	0	1770	1857	0	0	1803	0	0	1695	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		547			509			358			297	
Travel Time (s)		14.9			13.9			9.8			8.1	
Confl. Peds. (#/hr)	4		8	8		4	8		8	4		4
Peak Hour Factor	0.75	0.88	0.50	0.50	0.88	0.50	0.38	0.25	1.00	0.75	0.25	0.50
Adj. Flow (vph)	8	325	12	4	386	8	8	4	0	4	4	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	337	0	4	394	0	0	12	0	0	20	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

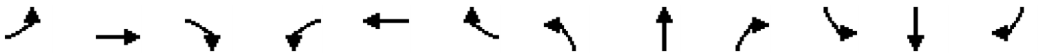
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	286	6	2	340	4	3	1	0	3	1	6
Future Volume (Veh/h)	6	286	6	2	340	4	3	1	0	3	1	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.75	0.88	0.50	0.50	0.88	0.50	0.38	0.25	1.00	0.75	0.25	0.50
Hourly flow rate (vph)	8	325	12	4	386	8	8	4	0	4	4	12
Pedestrians		8			8			8			4	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			0	
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					509							
pX, platoon unblocked	0.90						0.90	0.90		0.90	0.90	0.90
vC, conflicting volume	398			345			771	761	347	753	763	402
vC1, stage 1 conf vol							355	355		402	402	
vC2, stage 2 conf vol							416	406		351	361	
vCu, unblocked vol	272			345			688	676	347	667	679	276
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			98	99	100	99	99	98
cM capacity (veh/h)	1155			1206			511	503	687	528	504	677

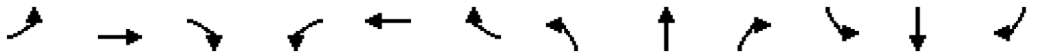
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	8	337	4	394	12	20
Volume Left	8	0	4	0	8	4
Volume Right	0	12	0	8	0	12
cSH	1155	1700	1206	1700	508	602
Volume to Capacity	0.01	0.20	0.00	0.23	0.02	0.03
Queue Length 95th (ft)	1	0	0	0	2	3
Control Delay (s)	8.1	0.0	8.0	0.0	12.3	11.2
Lane LOS	A		A		B	B
Approach Delay (s)	0.2		0.1		12.3	11.2
Approach LOS					B	B

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	30.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	1	1	1	0	0	8	288	1	2	220	2
Future Volume (vph)	51	1	1	1	0	0	8	288	1	2	220	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.997						0.998			0.998	
Flt Protected		0.954			0.950			0.998			0.999	
Satd. Flow (prot)	0	1772	0	0	1770	0	0	1855	0	0	1857	0
Flt Permitted		0.954			0.950			0.998			0.999	
Satd. Flow (perm)	0	1772	0	0	1770	0	0	1855	0	0	1857	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		330			400			1691			372	
Travel Time (s)		9.0			10.9			46.1			10.1	
Confl. Peds. (#/hr)	5		6	7		6	6		7	6		5
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60	0.50	0.89	0.25	0.50	0.78	0.50
Adj. Flow (vph)	85	2	2	2	0	0	16	324	4	4	282	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	89	0	0	2	0	0	344	0	0	290	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	1	1	1	0	0	8	288	1	2	220	2
Future Volume (Veh/h)	51	1	1	1	0	0	8	288	1	2	220	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60	0.50	0.89	0.25	0.50	0.78	0.50
Hourly flow rate (vph)	85	2	2	2	0	0	16	324	4	4	282	4
Pedestrians		6			7			7			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											372	
pX, platoon unblocked	0.93	0.93	0.93	0.93	0.93		0.93					
vC, conflicting volume	662	665	297	667	665	339	292			335		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	603	606	213	608	606	339	207			335		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	77	99	100	99	100	100	99			100		
cM capacity (veh/h)	372	374	765	366	374	696	1268			1217		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	89	2	344	290
Volume Left	85	2	16	4
Volume Right	2	0	4	4
cSH	377	366	1268	1217
Volume to Capacity	0.24	0.00*	0.01	0.00*
Queue Length 95th (ft)	23	0	1	0
Control Delay (s/veh)	17.5	14.9	0.5	0.1
Lane LOS	C	B	A	A
Approach Delay (s/veh)	17.5	14.9	0.5	0.1
Approach LOS	C	B		

Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	32.1%	ICU Level of Service	A	
Analysis Period (min)	15			

* Value less than 0.01.

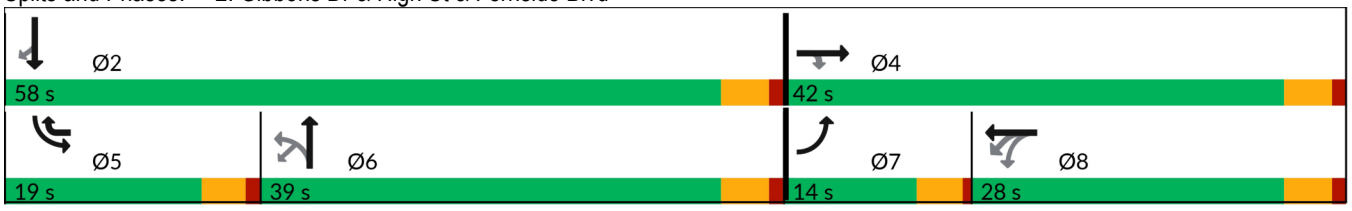
Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	116	132	24	2	5	278	181	1	65	275	4	172
Future Volume (vph)	116	132	24	2	5	278	181	1	65	275	4	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		100		0		140		0		0	120
Storage Lanes	1		1		0		1		0		0	1
Taper Length (ft)	25				25				25			25
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
Ped Bike Factor	0.99		0.97			1.00				1.00		
Frt			0.850				0.850			0.995		
Flt Protected	0.950					0.997				0.987		0.950
Satd. Flow (prot)	1770	1863	1583	0	0	1857	1583	0	0	1827	0	1770
Flt Permitted	0.950					0.979				0.834		0.950
Satd. Flow (perm)	1760	1863	1532	0	0	1821	1583	0	0	1541	0	1770
Right Turn on Red							No				Yes	
Satd. Flow (RTOR)										2		
Link Speed (mph)		25				25				25		
Link Distance (ft)		509				699				372		
Travel Time (s)		13.9				19.1				10.1		
Confl. Peds. (#/hr)	4		7	7	9			2	3		9	
Peak Hour Factor	0.76	0.73	0.75	0.50	0.42	0.93	0.94	0.25	0.58	0.86	0.25	0.81
Adj. Flow (vph)	153	181	32	4	12	299	193	4	112	320	16	212
Shared Lane Traffic (%)												
Lane Group Flow (vph)	153	181	32	0	0	315	193	0	0	452	0	212
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Left	Right	Left
Median Width(ft)		12				12				12		
Link Offset(ft)		0				0				0		
Crosswalk Width(ft)		16				16				16		
Two way Left Turn Lane		Yes										
Headway 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
Turning Speed (mph)	15		9	15	15		9	15	15		9	15
Number of Detectors	1	2	1			2	1			2		1
Detector Template	Left	Thru	Right			Thru	Right			Thru		Left
Leading Detector (ft)	20	100	20			100	20			100		20
Trailing Detector (ft)	0	0	0			0	0			0		0
Detector 1 Position(ft)	0	0	0			0	0			0		0
Detector 1 Size(ft)	20	6	20			6	20			6		20
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(ft)		94				94				94		
Detector 2 Size(ft)		6				6				6		
Detector 2 Type		Cl+Ex				Cl+Ex				Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0				0.0		
Turn Type	Prot	NA	Perm	Perm	Perm	NA	Over	Perm	Perm	NA		Prot

Lane Group	SBT	SBR	SBR2	NER2
Lane Configurations				
Traffic Volume (vph)	190	116	74	6
Future Volume (vph)	190	116	74	6
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)		200		
Storage Lanes		1		
Taper Length (ft)				
Lane Util. Factor	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97		0.98
Frt		0.850		0.865
Flt Protected				
Satd. Flow (prot)	1863	1583	0	1611
Flt Permitted				
Satd. Flow (perm)	1863	1537	0	1577
Right Turn on Red			No	Yes
Satd. Flow (RTOR)				688
Link Speed (mph)	25			
Link Distance (ft)	1329			
Travel Time (s)	36.2			
Confl. Peds. (#/hr)		2	3	2
Peak Hour Factor	0.73	0.81	0.88	0.75
Adj. Flow (vph)	260	143	84	8
Shared Lane Traffic (%)				
Lane Group Flow (vph)	260	227	0	8
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Left	Right	Right	Right
Median Width(ft)	12			
Link Offset(ft)	0			
Crosswalk Width(ft)	16			
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	9
Number of Detectors	2	1		1
Detector Template	Thru	Right		Right
Leading Detector (ft)	100	20		20
Trailing Detector (ft)	0	0		0
Detector 1 Position(ft)	0	0		0
Detector 1 Size(ft)	6	20		20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0
Detector 2 Position(ft)	94			
Detector 2 Size(ft)	6			
Detector 2 Type	Cl+Ex			
Detector 2 Channel				
Detector 2 Extend (s)	0.0			
Turn Type	NA	Perm		Free

Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL
Protected Phases	7	4				8	5			6		5
Permitted Phases			4	8	8			6	6			
Detector Phase	7	4	4	8	8	8	5	6	6	6		5
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	10.0	10.0	10.0	8.0	12.0	12.0	12.0		8.0
Minimum Split (s)	8.0	31.6	31.6	27.6	27.6	27.6	12.2	29.6	29.6	29.6		12.2
Total Split (s)	14.0	42.0	42.0	28.0	28.0	28.0	19.0	39.0	39.0	39.0		19.0
Total Split (%)	14.0%	42.0%	42.0%	28.0%	28.0%	28.0%	19.0%	39.0%	39.0%	39.0%		19.0%
Maximum Green (s)	10.0	37.4	37.4	23.4	23.4	23.4	14.8	34.4	34.4	34.4		14.8
Yellow Time (s)	3.5	3.6	3.6	3.6	3.6	3.6	3.2	3.6	3.6	3.6		3.2
All-Red Time (s)	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0	0.0			0.0		0.0
Total Lost Time (s)	4.0	4.6	4.6			4.6	4.2			4.6		4.2
Lead/Lag	Lead			Lag	Lag	Lag	Lead	Lag	Lag	Lag		Lead
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	1.0	1.0	1.0	1.0	1.0	1.2	2.2	2.2	2.2		1.2
Recall Mode	None	None	None	None	None	None	None	None	None	None		None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0		
Flash Don't Walk (s)		20.0	20.0	16.0	16.0	16.0		18.0	18.0	18.0		
Pedestrian Calls (#/hr)		5	5	5	5	5		7	7	7		
Act Effct Green (s)	10.1	32.6	32.6			18.4	13.2			29.3		13.2
Actuated g/C Ratio	0.11	0.37	0.37			0.21	0.15			0.33		0.15
v/c Ratio	0.76	0.27	0.06			0.84	0.82			0.89		0.81
Control Delay (s/veh)	67.2	22.3	20.4			54.8	66.8			50.1		62.9
Queue Delay	0.0	0.0	0.0			0.0	0.0			0.0		0.0
Total Delay (s/veh)	67.2	22.3	20.4			54.8	66.8			50.1		62.9
LOS	E	C	C			D	E			D		E
Approach Delay (s/veh)		40.9				59.4				50.1		
Approach LOS		D				E				D		

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 89			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay (s/veh): 43.0		Intersection LOS: D	
Intersection Capacity Utilization 79.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: Gibbons Dr & High St & Fernside Blvd



Lane Group	SBT	SBR	SBR2	NER2
Protected Phases	2			
Permitted Phases		2		Free
Detector Phase	2	2		
Switch Phase				
Minimum Initial (s)	8.0	8.0		
Minimum Split (s)	31.6	31.6		
Total Split (s)	58.0	58.0		
Total Split (%)	58.0%	58.0%		
Maximum Green (s)	53.4	53.4		
Yellow Time (s)	3.6	3.6		
All-Red Time (s)	1.0	1.0		
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	4.6	4.6		
Lead/Lag				
Lead-Lag Optimize?				
Vehicle Extension (s)	1.2	1.2		
Recall Mode	None	None		
Walk Time (s)	7.0	7.0		
Flash Don't Walk (s)	20.0	20.0		
Pedestrian Calls (#/hr)	4	4		
Act Effct Green (s)	46.9	46.9		89.0
Actuated g/C Ratio	0.53	0.53		1.00
v/c Ratio	0.27	0.28		0.01
Control Delay (s/veh)	12.8	13.2		0.0
Queue Delay	0.0	0.0		0.0
Total Delay (s/veh)	12.8	13.2		0.0
LOS	B	B		A
Approach Delay (s/veh)	28.1			
Approach LOS	C			

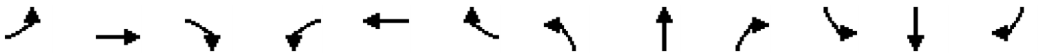
Intersection Summary

Movement	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	116	132	24	2	5	278	181	1	65	275	4	172
Future Volume (vph)	116	132	24	2	5	278	181	1	65	275	4	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.6	4.6			4.6	4.2			4.6		4.2
Lane Util. Factor	1.00	1.00	1.00			1.00	1.00			1.00		1.00
Frpb, ped/bikes	1.00	1.00	0.97			1.00	1.00			1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00			1.00		1.00
Frt	1.00	1.00	0.85			1.00	0.85			1.00		1.00
Flt Protected	0.95	1.00	1.00			1.00	1.00			0.99		0.95
Satd. Flow (prot)	1770	1863	1534			1856	1583			1825		1770
Flt Permitted	0.95	1.00	1.00			0.98	1.00			0.83		0.95
Satd. Flow (perm)	1770	1863	1534			1823	1583			1542		1770
Peak-hour factor, PHF	0.76	0.73	0.75	0.50	0.42	0.93	0.94	0.25	0.58	0.86	0.25	0.81
Adj. Flow (vph)	153	181	32	4	12	299	193	4	112	320	16	212
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	1	0	0
Lane Group Flow (vph)	153	181	32	0	0	315	193	0	0	451	0	212
Confl. Peds. (#/hr)	4		7	7	9			2	3		9	
Turn Type	Prot	NA	Perm	Perm	Perm	NA	Over	Perm	Perm	NA		Prot
Protected Phases	7	4				8	5			6		5
Permitted Phases			4	8	8			6	6			
Actuated Green, G (s)	10.1	32.6	32.6			18.5	13.2			29.5		13.2
Effective Green, g (s)	10.1	32.6	32.6			18.5	13.2			29.5		13.2
Actuated g/C Ratio	0.11	0.37	0.37			0.21	0.15			0.33		0.15
Clearance Time (s)	4.0	4.6	4.6			4.6	4.2			4.6		4.2
Vehicle Extension (s)	3.0	1.0	1.0			1.0	1.2			2.2		1.2
Lane Grp Cap (vph)	201	684	563			380	235			512		263
v/s Ratio Prot	c0.09	0.10					c0.12					0.12
v/s Ratio Perm			0.02			c0.17				c0.29		
v/c Ratio	0.76	0.26	0.06			0.83	0.82			0.88		0.81
Uniform Delay, d1	38.1	19.7	18.1			33.6	36.6			27.9		36.5
Progression Factor	1.00	1.00	1.00			1.00	1.00			1.00		1.00
Incremental Delay, d2	15.6	0.1	0.0			13.2	19.2			15.8		15.5
Delay (s)	53.7	19.7	18.1			46.8	55.8			43.7		52.0
Level of Service	D	B	B			D	E			D		D
Approach Delay (s/veh)		33.8				50.2				43.7		
Approach LOS		C				D				D		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	36.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	88.7	Sum of lost time (s)	17.4
Intersection Capacity Utilization	79.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR	SBR2	NER2
Lane Configurations				
Traffic Volume (vph)	190	116	74	6
Future Volume (vph)	190	116	74	6
Ideal Flow (vphpl)	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.0
Lane Util. Factor	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.97		0.98
Flpb, ped/bikes	1.00	1.00		1.00
Frt	1.00	0.85		0.87
Flt Protected	1.00	1.00		1.00
Satd. Flow (prot)	1863	1539		1577
Flt Permitted	1.00	1.00		1.00
Satd. Flow (perm)	1863	1539		1577
Peak-hour factor, PHF	0.73	0.81	0.88	0.75
Adj. Flow (vph)	260	143	84	8
RTOR Reduction (vph)	0	0	0	0
Lane Group Flow (vph)	260	227	0	8
Confl. Peds. (#/hr)		2	3	2
Turn Type	NA	Perm		Free
Protected Phases	2			
Permitted Phases		2		Free
Actuated Green, G (s)	46.9	46.9		88.7
Effective Green, g (s)	46.9	46.9		88.7
Actuated g/C Ratio	0.53	0.53		1.00
Clearance Time (s)	4.6	4.6		
Vehicle Extension (s)	1.2	1.2		
Lane Grp Cap (vph)	985	813		1577
v/s Ratio Prot	0.14			
v/s Ratio Perm		0.15		0.01
v/c Ratio	0.26	0.28		0.01
Uniform Delay, d1	11.4	11.6		0.0
Progression Factor	1.00	1.00		1.00
Incremental Delay, d2	0.1	0.1		0.0
Delay (s)	11.5	11.6		0.0
Level of Service	B	B		A
Approach Delay (s/veh)	23.8			
Approach LOS	C			

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	245	4	1	458	3	11	0	35	4	0	8
Future Volume (vph)	2	245	4	1	458	3	11	0	35	4	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		100	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
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
Ped Bike Factor												
Frt		0.996			0.999			0.879			0.904	
Flt Protected	0.950			0.950				0.995			0.986	
Satd. Flow (prot)	1770	1855	0	1770	1861	0	0	1629	0	0	1660	0
Flt Permitted	0.950			0.950				0.995			0.986	
Satd. Flow (perm)	1770	1855	0	1770	1861	0	0	1629	0	0	1660	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		547			509			358			297	
Travel Time (s)		14.9			13.9			9.8			8.1	
Confl. Peds. (#/hr)	4			2		6			2	6		4
Peak Hour Factor	0.50	0.79	0.50	0.25	0.87	0.75	0.69	1.00	0.25	0.50	1.00	0.40
Adj. Flow (vph)	4	310	8	4	526	4	16	0	140	8	0	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	318	0	4	530	0	0	156	0	0	28	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

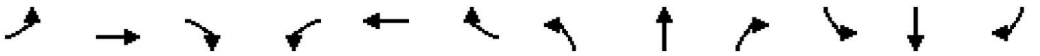
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.5%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	245	4	1	458	3	11	0	35	4	0	8
Future Volume (Veh/h)	2	245	4	1	458	3	11	0	35	4	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.79	0.50	0.25	0.87	0.75	0.69	1.00	0.25	0.50	1.00	0.40
Hourly flow rate (vph)	4	310	8	4	526	4	16	0	140	8	0	20
Pedestrians		4			6			2			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			1			0			1	
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					509							
pX, platoon unblocked	0.85						0.85	0.85		0.85	0.85	0.85
vC, conflicting volume	536			320			882	868	322	1006	870	538
vC1, stage 1 conf vol							324	324		542	542	
vC2, stage 2 conf vol							558	544		464	328	
vCu, unblocked vol	362			320			770	754	322	917	756	364
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			96	100	80	98	100	97
cM capacity (veh/h)	1009			1238			454	458	714	376	459	572

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	4	318	4	530	156	28
Volume Left	4	0	4	0	16	8
Volume Right	0	8	0	4	140	20
cSH	1009	1700	1238	1700	675	498
Volume to Capacity	0.00*	0.19	0.00*	0.31	0.23	0.06
Queue Length 95th (ft)	0	0	0	0	22	4
Control Delay (s/veh)	8.6	0.0	7.9	0.0	11.9	12.7
Lane LOS	A		A		B	B
Approach Delay (s/veh)	0.1		0.1		11.9	12.7
Approach LOS					B	B

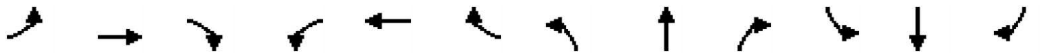
Intersection Summary				
Average Delay	2.2			
Intersection Capacity Utilization	35.5%	ICU Level of Service		A
Analysis Period (min)	15			

* Value less than 0.01.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	2	2	0	0	5	6	243	2	5	363	4
Future Volume (vph)	41	2	2	0	0	5	6	243	2	5	363	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.994			0.865			0.998			0.997	
Flt Protected		0.956						0.996			0.999	
Satd. Flow (prot)	0	1770	0	0	1611	0	0	1852	0	0	1855	0
Flt Permitted		0.956						0.996			0.999	
Satd. Flow (perm)	0	1770	0	0	1611	0	0	1852	0	0	1855	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		330			400			1691			372	
Travel Time (s)		9.0			10.9			46.1			10.1	
Confl. Peds. (#/hr)	1		4	9		6	4		9	6		1
Peak Hour Factor	0.50	0.50	0.50	1.00	1.00	0.42	0.30	0.95	0.50	0.62	0.92	0.50
Adj. Flow (vph)	82	4	4	0	0	12	20	256	4	8	395	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	90	0	0	12	0	0	280	0	0	411	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	2	2	0	0	5	6	243	2	5	363	4
Future Volume (Veh/h)	41	2	2	0	0	5	6	243	2	5	363	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.50	0.50	1.00	1.00	0.42	0.30	0.95	0.50	0.62	0.92	0.50
Hourly flow rate (vph)	82	4	4	0	0	12	20	256	4	8	395	8
Pedestrians		4			9			9			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			1			1			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											372	
pX, platoon unblocked	0.89	0.89	0.89	0.89	0.89		0.89					
vC, conflicting volume	735	728	412	737	730	273	407			269		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	642	634	280	644	636	273	274			269		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	75	99	99	100	100	98	98			99		
cM capacity (veh/h)	328	341	669	325	340	756	1145			1285		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	90	12	280	411
Volume Left	82	0	20	8
Volume Right	4	12	4	8
cSH	336	756	1145	1285
Volume to Capacity	0.27	0.02	0.02	0.00*
Queue Length 95th (ft)	27	1	1	0
Control Delay (s/veh)	19.6	9.8	0.7	0.2
Lane LOS	C	A	A	A
Approach Delay (s/veh)	19.6	9.8	0.7	0.2
Approach LOS	C	A		

Intersection Summary				
Average Delay	2.7			
Intersection Capacity Utilization	38.1%	ICU Level of Service	A	
Analysis Period (min)	15			

* Value less than 0.01.

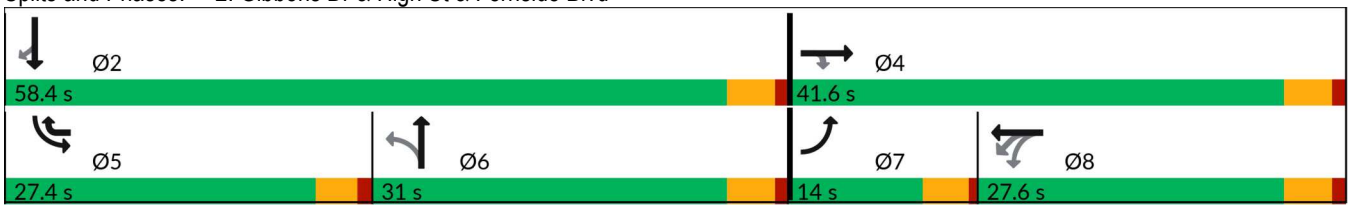
Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	120	171	32	1	1	207	282	35	271	6	212	305
Future Volume (vph)	120	171	32	1	1	207	282	35	271	6	212	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		100		0		140	0		0	120	
Storage Lanes	1		1		0		1	0		0	1	
Taper Length (ft)	25				25			25			25	
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
Ped Bike Factor	0.98		0.98			1.00			1.00			
Frt			0.850				0.850		0.994			
Flt Protected	0.950					0.998			0.994		0.950	
Satd. Flow (prot)	1770	1863	1583	0	0	1859	1583	0	1837	0	1770	1863
Flt Permitted	0.950					0.987			0.912		0.950	
Satd. Flow (perm)	1742	1863	1546	0	0	1838	1583	0	1685	0	1770	1863
Right Turn on Red							No			Yes		
Satd. Flow (RTOR)									2			
Link Speed (mph)		25				25			25			25
Link Distance (ft)		509				699			372			1329
Travel Time (s)		13.9				19.1			10.1			36.2
Confl. Peds. (#/hr)	10		2	2	4					12		
Peak Hour Factor	0.82	0.92	0.61	0.25	0.25	0.94	0.97	0.80	0.94	0.38	0.83	0.86
Adj. Flow (vph)	146	186	52	4	4	220	291	44	288	16	255	355
Shared Lane Traffic (%)												
Lane Group Flow (vph)	146	186	52	0	0	228	291	0	348	0	255	355
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane		Yes										
Headway 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
Turning Speed (mph)	15		9	15	15		9	15		9	15	
Number of Detectors	1	2	1			2	1		2		1	2
Detector Template	Left	Thru	Right			Thru	Right		Thru		Left	Thru
Leading Detector (ft)	20	100	20			100	20		100		20	100
Trailing Detector (ft)	0	0	0			0	0		0		0	0
Detector 1 Position(ft)	0	0	0			0	0		0		0	0
Detector 1 Size(ft)	20	6	20			6	20		6		20	6
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
Detector 2 Position(ft)		94				94			94			94
Detector 2 Size(ft)		6				6			6			6
Detector 2 Type		Cl+Ex				Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0			0.0			0.0
Turn Type	Prot	NA	Perm	Perm	Perm	NA	Over	Perm	NA		Prot	NA

Lane Group	SBR	SBR2	NER2
Lane Configurations			
Traffic Volume (vph)	143	93	3
Future Volume (vph)	143	93	3
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	200		
Storage Lanes	1		
Taper Length (ft)			
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor	0.98		0.98
Frt	0.850		0.865
Flt Protected			
Satd. Flow (prot)	1583	0	1611
Flt Permitted			
Satd. Flow (perm)	1546	0	1577
Right Turn on Red		No	Yes
Satd. Flow (RTOR)			616
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Confl. Peds. (#/hr)	2		2
Peak Hour Factor	0.81	0.65	0.75
Adj. Flow (vph)	177	143	4
Shared Lane Traffic (%)			
Lane Group Flow (vph)	320	0	4
Enter Blocked Intersection	No	No	No
Lane Alignment	Right	Right	Right
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	9	9	9
Number of Detectors	1		1
Detector Template	Right		Right
Leading Detector (ft)	20		20
Trailing Detector (ft)	0		0
Detector 1 Position(ft)	0		0
Detector 1 Size(ft)	20		20
Detector 1 Type	Cl+Ex		Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0		0.0
Detector 1 Queue (s)	0.0		0.0
Detector 1 Delay (s)	0.0		0.0
Detector 2 Position(ft)			
Detector 2 Size(ft)			
Detector 2 Type			
Detector 2 Channel			
Detector 2 Extend (s)			
Turn Type	Perm		Free

Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Protected Phases	7	4				8	5		6		5	2
Permitted Phases			4	8	8			6				
Detector Phase	7	4	4	8	8	8	5	6	6		5	2
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	10.0	10.0	10.0	8.0	12.0	12.0		8.0	8.0
Minimum Split (s)	8.0	31.6	31.6	27.6	27.6	27.6	12.2	29.6	29.6		12.2	31.6
Total Split (s)	14.0	41.6	41.6	27.6	27.6	27.6	27.4	31.0	31.0		27.4	58.4
Total Split (%)	14.0%	41.6%	41.6%	27.6%	27.6%	27.6%	27.4%	31.0%	31.0%		27.4%	58.4%
Maximum Green (s)	10.0	37.0	37.0	23.0	23.0	23.0	23.2	26.4	26.4		23.2	53.8
Yellow Time (s)	3.5	3.6	3.6	3.6	3.6	3.6	3.2	3.6	3.6		3.2	3.6
All-Red Time (s)	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.0	4.6	4.6			4.6	4.2		4.6		4.2	4.6
Lead/Lag	Lead			Lag	Lag	Lag	Lead	Lag	Lag		Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	1.0	1.0	1.0	1.0	1.0	1.2	2.2	2.2		1.2	1.2
Recall Mode	None	None	None	None	None	None	None	None	None		None	None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0		7.0	7.0			7.0
Flash Don't Walk (s)		20.0	20.0	16.0	16.0	16.0		18.0	18.0			20.0
Pedestrian Calls (#/hr)		5	5	5	5	5		7	7			4
Act Effct Green (s)	10.0	29.0	29.0			14.9	18.4		21.0		18.4	43.7
Actuated g/C Ratio	0.12	0.35	0.35			0.18	0.22		0.26		0.22	0.53
v/c Ratio	0.68	0.28	0.10			0.69	0.82		0.81		0.65	0.36
Control Delay (s/veh)	56.6	22.5	21.0			44.7	52.2		45.8		39.0	12.6
Queue Delay	0.0	0.0	0.0			0.0	0.0		0.0		0.0	0.0
Total Delay (s/veh)	56.6	22.5	21.0			44.7	52.2		45.8		39.0	12.6
LOS	E	C	C			D	D		D		D	B
Approach Delay (s/veh)		35.2				48.9			45.8			20.1
Approach LOS		D				D			D			C

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 82.3			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 33.6		Intersection LOS: C	
Intersection Capacity Utilization 78.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: Gibbons Dr & High St & Fernside Blvd



Lane Group	SBR	SBR2	NER2
Protected Phases			
Permitted Phases	2		Free
Detector Phase	2		
Switch Phase			
Minimum Initial (s)	8.0		
Minimum Split (s)	31.6		
Total Split (s)	58.4		
Total Split (%)	58.4%		
Maximum Green (s)	53.8		
Yellow Time (s)	3.6		
All-Red Time (s)	1.0		
Lost Time Adjust (s)	0.0		
Total Lost Time (s)	4.6		
Lead/Lag			
Lead-Lag Optimize?			
Vehicle Extension (s)	1.2		
Recall Mode	None		
Walk Time (s)	7.0		
Flash Don't Walk (s)	20.0		
Pedestrian Calls (#/hr)	4		
Act Effct Green (s)	43.7		82.3
Actuated g/C Ratio	0.53		1.00
v/c Ratio	0.39		0.00
Control Delay (s/veh)	13.3		0.0
Queue Delay	0.0		0.0
Total Delay (s/veh)	13.3		0.0
LOS	B		A
Approach Delay (s/veh)			
Approach LOS			

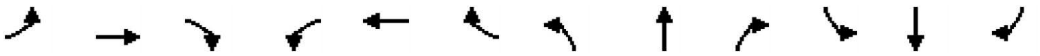
Intersection Summary

Movement	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	120	171	32	1	1	207	282	35	271	6	212	305
Future Volume (vph)	120	171	32	1	1	207	282	35	271	6	212	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.6	4.6			4.6	4.2		4.6		4.2	4.6
Lane Util. Factor	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.98			1.00	1.00		1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00
Frt	1.00	1.00	0.85			1.00	0.85		0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00			1.00	1.00		0.99		0.95	1.00
Satd. Flow (prot)	1770	1863	1547			1859	1583		1836		1770	1863
Flt Permitted	0.95	1.00	1.00			0.99	1.00		0.91		0.95	1.00
Satd. Flow (perm)	1770	1863	1547			1838	1583		1684		1770	1863
Peak-hour factor, PHF	0.82	0.92	0.61	0.25	0.25	0.94	0.97	0.80	0.94	0.38	0.83	0.86
Adj. Flow (vph)	146	186	52	4	4	220	291	44	288	16	255	355
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	1	0	0	0
Lane Group Flow (vph)	146	186	52	0	0	228	291	0	347	0	255	355
Confl. Peds. (#/hr)	10		2	2	4					12		
Turn Type	Prot	NA	Perm	Perm	Perm	NA	Over	Perm	NA		Prot	NA
Protected Phases	7	4				8	5		6		5	2
Permitted Phases			4	8	8			6				
Actuated Green, G (s)	10.0	29.0	29.0			15.0	18.4		21.1		18.4	43.7
Effective Green, g (s)	10.0	29.0	29.0			15.0	18.4		21.1		18.4	43.7
Actuated g/C Ratio	0.12	0.35	0.35			0.18	0.22		0.26		0.22	0.53
Clearance Time (s)	4.0	4.6	4.6			4.6	4.2		4.6		4.2	4.6
Vehicle Extension (s)	3.0	1.0	1.0			1.0	1.2		2.2		1.2	1.2
Lane Grp Cap (vph)	216	659	547			336	355		433		397	994
v/s Ratio Prot	c0.08	0.10					c0.18				0.14	0.19
v/s Ratio Perm			0.03			c0.12			c0.21			
v/c Ratio	0.68	0.28	0.10			0.68	0.82		0.80		0.64	0.36
Uniform Delay, d1	34.4	19.0	17.7			31.2	30.2		28.4		28.8	11.0
Progression Factor	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00
Incremental Delay, d2	8.1	0.1	0.0			4.2	13.1		9.7		2.7	0.1
Delay (s)	42.5	19.1	17.7			35.4	43.2		38.2		31.4	11.1
Level of Service	D	B	B			D	D		D		C	B
Approach Delay (s/veh)		27.8				39.8			38.2			16.8
Approach LOS		C				D			D			B

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	81.9	Sum of lost time (s)	17.4
Intersection Capacity Utilization	78.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

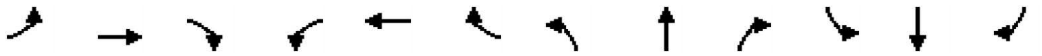
Movement	SBR	SBR2	NER2
Lane Configurations			
Traffic Volume (vph)	143	93	3
Future Volume (vph)	143	93	3
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	4.6		4.0
Lane Util. Factor	1.00		1.00
Frpb, ped/bikes	0.98		0.98
Flpb, ped/bikes	1.00		1.00
Frt	0.85		0.87
Flt Protected	1.00		1.00
Satd. Flow (prot)	1547		1577
Flt Permitted	1.00		1.00
Satd. Flow (perm)	1547		1577
Peak-hour factor, PHF	0.81	0.65	0.75
Adj. Flow (vph)	177	143	4
RTOR Reduction (vph)	0	0	0
Lane Group Flow (vph)	320	0	4
Confl. Peds. (#/hr)	2		2
Turn Type	Perm		Free
Protected Phases			
Permitted Phases	2		Free
Actuated Green, G (s)	43.7		81.9
Effective Green, g (s)	43.7		81.9
Actuated g/C Ratio	0.53		1.00
Clearance Time (s)	4.6		
Vehicle Extension (s)	1.2		
Lane Grp Cap (vph)	825		1577
v/s Ratio Prot			
v/s Ratio Perm	0.21		0.00
v/c Ratio	0.39		0.00
Uniform Delay, d1	11.2		0.0
Progression Factor	1.00		1.00
Incremental Delay, d2	0.1		0.0
Delay (s)	11.3		0.0
Level of Service	B		A
Approach Delay (s/veh)			
Approach LOS			

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	286	6	2	340	4	3	1	25	3	1	6
Future Volume (vph)	6	286	6	2	340	4	3	1	25	3	1	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		100	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
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
Ped Bike Factor												
Frt		0.995			0.997			0.909			0.919	
Flt Protected	0.950			0.950				0.989			0.990	
Satd. Flow (prot)	1770	1853	0	1770	1857	0	0	1675	0	0	1695	0
Flt Permitted	0.950			0.950				0.989			0.990	
Satd. Flow (perm)	1770	1853	0	1770	1857	0	0	1675	0	0	1695	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		547			509			358			297	
Travel Time (s)		14.9			13.9			9.8			8.1	
Confl. Peds. (#/hr)	4		8	8		4	8		8	4		4
Peak Hour Factor	0.75	0.88	0.50	0.50	0.88	0.50	0.38	0.25	1.00	0.75	0.25	0.50
Adj. Flow (vph)	8	325	12	4	386	8	8	4	25	4	4	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	337	0	4	394	0	0	37	0	0	20	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.5%		ICU Level of Service A	
Analysis Period (min) 15			

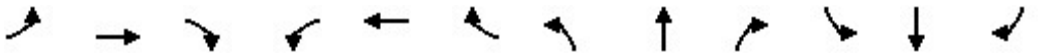


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	286	6	2	340	4	3	1	25	3	1	6
Future Volume (Veh/h)	6	286	6	2	340	4	3	1	25	3	1	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.75	0.88	0.50	0.50	0.88	0.50	0.38	0.25	1.00	0.75	0.25	0.50
Hourly flow rate (vph)	8	325	12	4	386	8	8	4	25	4	4	12
Pedestrians		8			8			8			4	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			0	
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					509							
pX, platoon unblocked	0.90						0.90	0.90		0.90	0.90	0.90
vC, conflicting volume	398			345			771	761	347	778	763	402
vC1, stage 1 conf vol							355	355		402	402	
vC2, stage 2 conf vol							416	406		376	361	
vCu, unblocked vol	282			345			694	683	347	702	685	286
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			98	99	96	99	99	98
cM capacity (veh/h)	1155			1206			510	503	687	504	504	674

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	8	337	4	394	37	20
Volume Left	8	0	4	0	8	4
Volume Right	0	12	0	8	25	12
cSH	1155	1700	1206	1700	616	594
Volume to Capacity	0.00*	0.20	0.00*	0.23	0.06	0.03
Queue Length 95th (ft)	1	0	0	0	5	3
Control Delay (s/veh)	8.1	0.0	8.0	0.0	11.2	11.3
Lane LOS	A		A		B	B
Approach Delay (s/veh)	0.2		0.1		11.2	11.3
Approach LOS					B	B

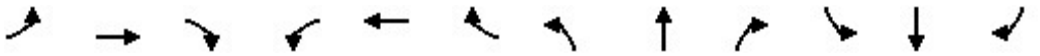
Intersection Summary				
Average Delay	0.9			
Intersection Capacity Utilization	30.5%	ICU Level of Service		A
Analysis Period (min)	15			

* Value less than 0.01.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1	1	1	0	0	8	288	1	2	220	2
Future Volume (vph)	1	1	1	1	0	0	8	288	1	2	220	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.955						0.998			0.998	
Flt Protected		0.984			0.950			0.998			0.999	
Satd. Flow (prot)	0	1750	0	0	1770	0	0	1855	0	0	1857	0
Flt Permitted		0.984			0.950			0.998			0.999	
Satd. Flow (perm)	0	1750	0	0	1770	0	0	1855	0	0	1857	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		330			400			1691			372	
Travel Time (s)		9.0			10.9			46.1			10.1	
Confl. Peds. (#/hr)	5		6	7		6	6		7	6		5
Peak Hour Factor	0.25	0.25	0.25	0.25	1.00	1.00	0.50	0.89	0.25	0.50	0.78	0.50
Adj. Flow (vph)	4	4	4	4	0	0	16	324	4	4	282	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	0	0	4	0	0	344	0	0	290	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	1	1	0	0	8	288	1	2	220	2
Future Volume (Veh/h)	1	1	1	1	0	0	8	288	1	2	220	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.25	0.25	0.25	1.00	1.00	0.50	0.89	0.25	0.50	0.78	0.50
Hourly flow rate (vph)	4	4	4	4	0	0	16	324	4	4	282	4
Pedestrians		6			7			7			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											372	
pX, platoon unblocked	0.91	0.91	0.91	0.91	0.91		0.91					
vC, conflicting volume	662	665	297	670	665	339	292			335		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	580	583	179	589	583	339	174			335		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	99	99	100	100	99			100		
cM capacity (veh/h)	376	376	778	366	376	696	1271			1217		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	12	4	344	290
Volume Left	4	4	16	4
Volume Right	4	0	4	4
cSH	454	366	1271	1217
Volume to Capacity	0.03	0.01	0.01	0.00
Queue Length 95th (ft)	2	1	1	0
Control Delay (s)	13.1	15.0	0.5	0.1
Lane LOS	B	B	A	A
Approach Delay (s)	13.1	15.0	0.5	0.1
Approach LOS	B	B		

Intersection Summary				
Average Delay	0.7			
Intersection Capacity Utilization	32.1%	ICU Level of Service	A	
Analysis Period (min)	15			

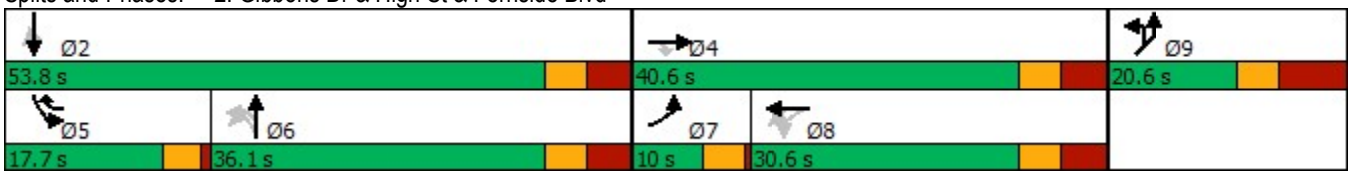
Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	87	131	24	2	5	278	181	1	65	228	2	172
Future Volume (vph)	87	131	24	2	5	278	181	1	65	228	2	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		100		0		140		0		0	120
Storage Lanes	1		1		0		1		0		0	1
Taper Length (ft)	25				25				25			25
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
Ped Bike Factor	0.99		0.97			1.00				1.00		
Frt			0.850				0.850			0.997		
Flt Protected	0.950					0.997				0.985		0.950
Satd. Flow (prot)	1770	1863	1583	0	0	1857	1583	0	0	1828	0	1770
Flt Permitted	0.950					0.975				0.806		0.950
Satd. Flow (perm)	1758	1863	1529	0	0	1814	1583	0	0	1492	0	1770
Right Turn on Red							No				Yes	
Satd. Flow (RTOR)										1		
Link Speed (mph)		25				25				25		
Link Distance (ft)		509				699				372		
Travel Time (s)		13.9				19.1				10.1		
Confl. Peds. (#/hr)	4		7	7	9			2	3		9	
Peak Hour Factor	0.76	0.73	0.75	0.50	0.42	0.93	0.94	0.25	0.58	0.86	0.25	0.81
Adj. Flow (vph)	114	179	32	4	12	299	193	4	112	265	8	212
Shared Lane Traffic (%)												
Lane Group Flow (vph)	114	179	32	0	0	315	193	0	0	389	0	212
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Left	Right	Left
Median Width(ft)		12				12				12		
Link Offset(ft)		0				0				0		
Crosswalk Width(ft)		16				16				16		
Two way Left Turn Lane		Yes										
Headway 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
Turning Speed (mph)	15		9	15	15		9	15	15		9	15
Number of Detectors	1	2	1	1	1	2	1	1	1	2		1
Detector Template	Left	Thru	Right	Left	Left	Thru	Right	Left	Left	Thru		Left
Leading Detector (ft)	20	100	20	20	20	100	20	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	6	20	20	20	6	20	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	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	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	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	0.0		0.0
Detector 2 Position(ft)		94				94				94		
Detector 2 Size(ft)		6				6				6		
Detector 2 Type		Cl+Ex				Cl+Ex				Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0				0.0		
Turn Type	Prot	NA	Perm	Perm	Perm	NA	Over	Perm	Perm	NA		Prot

Lane Group	SBT	SBR	SBR2	NEL	NER	NER2
Lane Configurations						
Traffic Volume (vph)	190	116	74	76	3	6
Future Volume (vph)	190	116	74	76	3	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200		0	60	
Storage Lanes		1		1	1	
Taper Length (ft)				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97		1.00		0.98
Frt		0.850		0.991		0.850
Flt Protected				0.955		
Satd. Flow (prot)	1863	1583	0	1760	0	1583
Flt Permitted				0.955		
Satd. Flow (perm)	1863	1535	0	1754	0	1550
Right Turn on Red			No			Yes
Satd. Flow (RTOR)						285
Link Speed (mph)	25			25		
Link Distance (ft)	1329			596		
Travel Time (s)	36.2			16.3		
Confl. Peds. (#/hr)		2	3	2	2	2
Peak Hour Factor	0.73	0.81	0.88	0.85	0.50	0.75
Adj. Flow (vph)	260	143	84	89	6	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	260	227	0	95	0	8
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right	Right
Median Width(ft)	12			12		
Link Offset(ft)	0			0		
Crosswalk Width(ft)	16			16		
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15	9	9
Number of Detectors	2	1		1		1
Detector Template	Thru	Right		Left		Right
Leading Detector (ft)	100	20		20		20
Trailing Detector (ft)	0	0		0		0
Detector 1 Position(ft)	0	0		0		0
Detector 1 Size(ft)	6	20		20		20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0		0.0
Detector 2 Position(ft)	94					
Detector 2 Size(ft)	6					
Detector 2 Type	Cl+Ex					
Detector 2 Channel						
Detector 2 Extend (s)	0.0					
Turn Type	NA	Perm		Prot		Free

Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL
Protected Phases	7	4				8	5			6		5
Permitted Phases			4	8	8			6	6			
Detector Phase	7	4	4	8	8	8	5	6	6	6		5
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	10.0	10.0	10.0	8.0	12.0	12.0	12.0		8.0
Minimum Split (s)	8.0	34.6	34.6	30.6	30.6	30.6	12.2	32.6	32.6	32.6		12.2
Total Split (s)	10.0	40.6	40.6	30.6	30.6	30.6	17.7	36.1	36.1	36.1		17.7
Total Split (%)	8.7%	35.3%	35.3%	26.6%	26.6%	26.6%	15.4%	31.4%	31.4%	31.4%		15.4%
Maximum Green (s)	6.0	33.0	33.0	23.0	23.0	23.0	13.5	28.5	28.5	28.5		13.5
Yellow Time (s)	3.5	3.6	3.6	3.6	3.6	3.6	3.2	3.6	3.6	3.6		3.2
All-Red Time (s)	0.5	4.0	4.0	4.0	4.0	4.0	1.0	4.0	4.0	4.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0	0.0			0.0		0.0
Total Lost Time (s)	4.0	7.6	7.6			7.6	4.2			7.6		4.2
Lead/Lag	Lead			Lag	Lag	Lag	Lead	Lag	Lag	Lag		Lead
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	1.0	1.0	1.0	1.0	1.0	1.2	2.2	2.2	2.2		1.2
Recall Mode	None	None	None	None	None	None	None	None	None	None		None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0		
Flash Dont Walk (s)		20.0	20.0	16.0	16.0	16.0		18.0	18.0	18.0		
Pedestrian Calls (#/hr)		5	5	5	5	5		7	7	7		
Act Effct Green (s)	6.1	31.5	31.5			21.4	13.7			28.8		13.7
Actuated g/C Ratio	0.06	0.29	0.29			0.20	0.13			0.26		0.13
v/c Ratio	1.16	0.33	0.07			0.89	0.98			0.99		0.96
Control Delay	189.8	34.0	30.6			71.4	109.3			85.0		101.6
Queue Delay	0.0	0.0	0.0			0.0	0.0			0.0		0.0
Total Delay	189.8	34.0	30.6			71.4	109.3			85.0		101.6
LOS	F	C	C			E	F			F		F
Approach Delay		88.3				85.8				85.0		
Approach LOS		F				F				F		

Intersection Summary			
Area Type:	Other		
Cycle Length: 115			
Actuated Cycle Length: 109.3			
Natural Cycle: 115			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.16			
Intersection Signal Delay: 71.4		Intersection LOS: E	
Intersection Capacity Utilization 97.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 2: Gibbons Dr & High St & Fernside Blvd



Lane Group	SBT	SBR	SBR2	NEL	NER	NER2
Protected Phases	2			9		
Permitted Phases		2				Free
Detector Phase	2	2		9		
Switch Phase						
Minimum Initial (s)	8.0	8.0		11.0		
Minimum Split (s)	34.6	34.6		20.6		
Total Split (s)	53.8	53.8		20.6		
Total Split (%)	46.8%	46.8%		17.9%		
Maximum Green (s)	46.2	46.2		11.0		
Yellow Time (s)	3.6	3.6		3.6		
All-Red Time (s)	4.0	4.0		6.0		
Lost Time Adjust (s)	0.0	0.0		0.0		
Total Lost Time (s)	7.6	7.6		9.6		
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.2	1.2		1.0		
Recall Mode	None	None		None		
Walk Time (s)	7.0	7.0				
Flash Dont Walk (s)	20.0	20.0				
Pedestrian Calls (#/hr)	4	4				
Act Effct Green (s)	46.7	46.7		11.1		109.3
Actuated g/C Ratio	0.43	0.43		0.10		1.00
v/c Ratio	0.33	0.35		0.53		0.01
Control Delay	24.2	25.0		60.8		0.0
Queue Delay	0.0	0.0		0.0		0.0
Total Delay	24.2	25.0		60.8		0.0
LOS	C	C		E		A
Approach Delay	47.9			56.1		
Approach LOS	D			E		

Intersection Summary

Movement	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	87	131	24	2	5	278	181	1	65	228	2	172
Future Volume (vph)	87	131	24	2	5	278	181	1	65	228	2	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	7.6	7.6			7.6	4.2			7.6		4.2
Lane Util. Factor	1.00	1.00	1.00			1.00	1.00			1.00		1.00
Frpb, ped/bikes	1.00	1.00	0.97			1.00	1.00			1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00			1.00		1.00
Frt	1.00	1.00	0.85			1.00	0.85			1.00		1.00
Flt Protected	0.95	1.00	1.00			1.00	1.00			0.99		0.95
Satd. Flow (prot)	1770	1863	1529			1856	1583			1825		1770
Flt Permitted	0.95	1.00	1.00			0.97	1.00			0.81		0.95
Satd. Flow (perm)	1770	1863	1529			1813	1583			1493		1770
Peak-hour factor, PHF	0.76	0.73	0.75	0.50	0.42	0.93	0.94	0.25	0.58	0.86	0.25	0.81
Adj. Flow (vph)	114	179	32	4	12	299	193	4	112	265	8	212
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	1	0	0
Lane Group Flow (vph)	114	179	32	0	0	315	193	0	0	388	0	212
Confl. Peds. (#/hr)	4		7	7	9			2	3		9	
Turn Type	Prot	NA	Perm	Perm	Perm	NA	Over	Perm	Perm	NA		Prot
Protected Phases	7	4				8	5			6		5
Permitted Phases			4	8	8			6	6			
Actuated Green, G (s)	6.1	31.5	31.5			21.4	13.7			28.8		13.7
Effective Green, g (s)	6.1	31.5	31.5			21.4	13.7			28.8		13.7
Actuated g/C Ratio	0.05	0.28	0.28			0.19	0.12			0.26		0.12
Clearance Time (s)	4.0	7.6	7.6			7.6	4.2			7.6		4.2
Vehicle Extension (s)	3.0	1.0	1.0			1.0	1.2			2.2		1.2
Lane Grp Cap (vph)	96	526	432			348	194			385		217
v/s Ratio Prot	c0.06	0.10					c0.12					0.12
v/s Ratio Perm			0.02			c0.17				c0.26		
v/c Ratio	1.19	0.34	0.07			0.91	0.99			1.01		0.98
Uniform Delay, d1	52.7	31.7	29.3			44.0	48.8			41.3		48.7
Progression Factor	1.00	1.00	1.00			1.00	1.00			1.00		1.00
Incremental Delay, d2	150.8	0.1	0.0			25.4	62.7			48.0		53.8
Delay (s)	203.5	31.8	29.3			69.4	111.5			89.3		102.5
Level of Service	F	C	C			E	F			F		F
Approach Delay (s)		91.8				85.4				89.3		
Approach LOS		F				F				F		

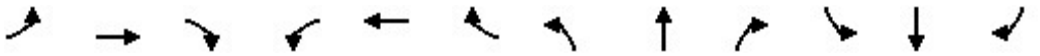
Intersection Summary			
HCM 2000 Control Delay	72.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	111.4	Sum of lost time (s)	33.0
Intersection Capacity Utilization	97.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR	SBR2	NEL	NER	NER2
Lane Configurations						
Traffic Volume (vph)	190	116	74	76	3	6
Future Volume (vph)	190	116	74	76	3	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.6	7.6		9.6		4.0
Lane Util. Factor	1.00	1.00		1.00		1.00
Frpb, ped/bikes	1.00	0.97		1.00		0.98
Flpb, ped/bikes	1.00	1.00		1.00		1.00
Frt	1.00	0.85		0.99		0.85
Flt Protected	1.00	1.00		0.96		1.00
Satd. Flow (prot)	1863	1536		1759		1550
Flt Permitted	1.00	1.00		0.96		1.00
Satd. Flow (perm)	1863	1536		1759		1550
Peak-hour factor, PHF	0.73	0.81	0.88	0.85	0.50	0.75
Adj. Flow (vph)	260	143	84	89	6	8
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	260	227	0	95	0	8
Confl. Peds. (#/hr)		2	3	2	2	2
Turn Type	NA	Perm		Prot		Free
Protected Phases	2			9		
Permitted Phases		2				Free
Actuated Green, G (s)	46.7	46.7		8.4		111.4
Effective Green, g (s)	46.7	46.7		8.4		111.4
Actuated g/C Ratio	0.42	0.42		0.08		1.00
Clearance Time (s)	7.6	7.6		9.6		
Vehicle Extension (s)	1.2	1.2		1.0		
Lane Grp Cap (vph)	780	643		132		1550
v/s Ratio Prot	0.14			c0.05		
v/s Ratio Perm		0.15				0.01
v/c Ratio	0.33	0.35		0.72		0.01
Uniform Delay, d1	21.8	22.1		50.3		0.0
Progression Factor	1.00	1.00		1.00		1.00
Incremental Delay, d2	0.1	0.1		14.5		0.0
Delay (s)	21.9	22.2		64.8		0.0
Level of Service	C	C		E		A
Approach Delay (s)	46.4			59.8		
Approach LOS	D			E		

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	245	4	1	458	3	11	0	2	4	0	8
Future Volume (vph)	2	245	4	1	458	3	11	0	2	4	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		100	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
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
Ped Bike Factor												
Frt		0.996			0.999			0.955			0.904	
Flt Protected	0.950			0.950				0.968			0.986	
Satd. Flow (prot)	1770	1855	0	1770	1861	0	0	1722	0	0	1660	0
Flt Permitted	0.950			0.950				0.968			0.986	
Satd. Flow (perm)	1770	1855	0	1770	1861	0	0	1722	0	0	1660	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		547			509			358			297	
Travel Time (s)		14.9			13.9			9.8			8.1	
Confl. Peds. (#/hr)	4			2		6			2	6		4
Peak Hour Factor	0.50	0.79	0.50	0.25	0.87	0.75	0.69	1.00	0.25	0.50	1.00	0.40
Adj. Flow (vph)	4	310	8	4	526	4	16	0	8	8	0	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	318	0	4	530	0	0	24	0	0	28	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

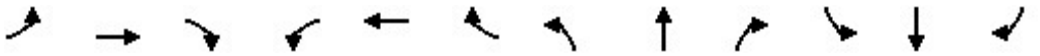
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	245	4	1	458	3	11	0	2	4	0	8
Future Volume (Veh/h)	2	245	4	1	458	3	11	0	2	4	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.79	0.50	0.25	0.87	0.75	0.69	1.00	0.25	0.50	1.00	0.40
Hourly flow rate (vph)	4	310	8	4	526	4	16	0	8	8	0	20
Pedestrians		4			6			2			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			1			0			1	
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					509							
pX, platoon unblocked	0.84						0.84	0.84		0.84	0.84	0.84
vC, conflicting volume	536			320			882	868	322	874	870	538
vC1, stage 1 conf vol							324	324		542	542	
vC2, stage 2 conf vol							558	544		332	328	
vCu, unblocked vol	354			320			765	748	322	756	751	356
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			96	100	99	98	100	97
cM capacity (veh/h)	1008			1238			455	458	714	472	460	574

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	4	318	4	530	24	28
Volume Left	4	0	4	0	16	8
Volume Right	0	8	0	4	8	20
cSH	1008	1700	1238	1700	518	541
Volume to Capacity	0.00	0.19	0.00	0.31	0.05	0.05
Queue Length 95th (ft)	0	0	0	0	4	4
Control Delay (s)	8.6	0.0	7.9	0.0	12.3	12.0
Lane LOS	A		A		B	B
Approach Delay (s)	0.1		0.1		12.3	12.0
Approach LOS					B	B

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	35.5%	ICU Level of Service		A
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	2	2	0	0	5	6	243	2	5	363	4
Future Volume (vph)	2	2	2	0	0	5	6	243	2	5	363	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.955			0.865			0.998			0.997	
Flt Protected		0.984						0.996			0.999	
Satd. Flow (prot)	0	1750	0	0	1611	0	0	1852	0	0	1855	0
Flt Permitted		0.984						0.996			0.999	
Satd. Flow (perm)	0	1750	0	0	1611	0	0	1852	0	0	1855	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		330			400			1691			372	
Travel Time (s)		9.0			10.9			46.1			10.1	
Confl. Peds. (#/hr)	1		4	9		6	4		9	6		1
Peak Hour Factor	0.50	0.50	0.50	1.00	1.00	0.42	0.30	0.95	0.50	0.62	0.92	0.50
Adj. Flow (vph)	4	4	4	0	0	12	20	256	4	8	395	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	0	0	12	0	0	280	0	0	411	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.5%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	2	2	0	0	5	6	243	2	5	363	4
Future Volume (Veh/h)	2	2	2	0	0	5	6	243	2	5	363	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.50	0.50	1.00	1.00	0.42	0.30	0.95	0.50	0.62	0.92	0.50
Hourly flow rate (vph)	4	4	4	0	0	12	20	256	4	8	395	8
Pedestrians		4			9			9			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			1			1			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											372	
pX, platoon unblocked	0.86	0.86	0.86	0.86	0.86		0.86					
vC, conflicting volume	735	728	412	737	730	273	407			269		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	612	604	237	614	606	273	231			269		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	99	100	100	98	98			99		
cM capacity (veh/h)	332	343	683	329	342	756	1148			1285		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	12	12	280	411
Volume Left	4	0	20	8
Volume Right	4	12	4	8
cSH	406	756	1148	1285
Volume to Capacity	0.03	0.02	0.02	0.01
Queue Length 95th (ft)	2	1	1	0
Control Delay (s)	14.1	9.8	0.7	0.2
Lane LOS	B	A	A	A
Approach Delay (s)	14.1	9.8	0.7	0.2
Approach LOS	B	A		

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	33.5%	ICU Level of Service	A	
Analysis Period (min)	15			

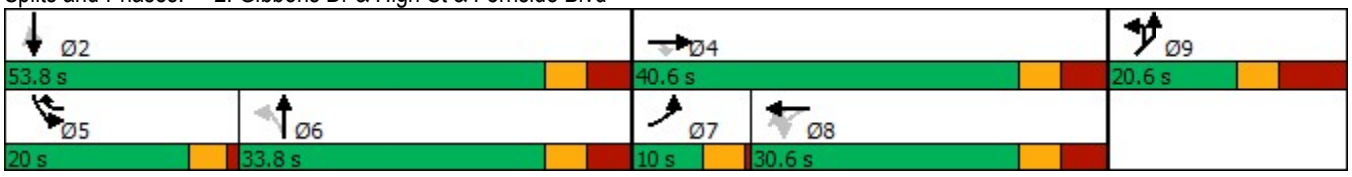
Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	99	169	32	1	1	207	282	35	233	4	212	305
Future Volume (vph)	99	169	32	1	1	207	282	35	233	4	212	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		100		0		140	0		0	120	
Storage Lanes	1		1		0		1	0		0	1	
Taper Length (ft)	25				25			25			25	
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
Ped Bike Factor	0.98		0.98			1.00			1.00			
Frt			0.850				0.850		0.995			
Flt Protected	0.950					0.998			0.993		0.950	
Satd. Flow (prot)	1770	1863	1583	0	0	1859	1583	0	1837	0	1770	1863
Flt Permitted	0.950					0.983			0.878		0.950	
Satd. Flow (perm)	1737	1863	1545	0	0	1830	1583	0	1625	0	1770	1863
Right Turn on Red							No			Yes		
Satd. Flow (RTOR)									2			
Link Speed (mph)		25				25			25			25
Link Distance (ft)		509				699			372			1329
Travel Time (s)		13.9				19.1			10.1			36.2
Confl. Peds. (#/hr)	10		2	2	4					12		
Peak Hour Factor	0.82	0.92	0.61	0.25	0.25	0.94	0.97	0.80	0.94	0.38	0.83	0.86
Adj. Flow (vph)	121	184	52	4	4	220	291	44	248	11	255	355
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	184	52	0	0	228	291	0	303	0	255	355
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane		Yes										
Headway 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
Turning Speed (mph)	15		9	15	15		9	15		9	15	
Number of Detectors	1	2	1	1	1	2	1	1	2		1	2
Detector Template	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left	Thru
Leading Detector (ft)	20	100	20	20	20	100	20	20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0		0	0
Detector 1 Size(ft)	20	6	20	20	20	6	20	20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	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		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		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		0.0	0.0
Detector 2 Position(ft)		94				94			94			94
Detector 2 Size(ft)		6				6			6			6
Detector 2 Type		Cl+Ex				Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0			0.0			0.0
Turn Type	Prot	NA	Perm	Perm	Perm	NA	Over	Perm	NA		Prot	NA

Lane Group	SBR	SBR2	NEL	NER	NER2
Lane Configurations					
Traffic Volume (vph)	143	93	59	4	3
Future Volume (vph)	143	93	59	4	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	60	
Storage Lanes	1		1	1	
Taper Length (ft)			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98		0.99		0.98
Frt	0.850		0.982		0.850
Flt Protected			0.958		
Satd. Flow (prot)	1583	0	1746	0	1583
Flt Permitted			0.958		
Satd. Flow (perm)	1545	0	1742	0	1550
Right Turn on Red		No			Yes
Satd. Flow (RTOR)					285
Link Speed (mph)			25		
Link Distance (ft)			596		
Travel Time (s)			16.3		
Confl. Peds. (#/hr)	2		2	2	2
Peak Hour Factor	0.81	0.65	0.81	0.42	0.75
Adj. Flow (vph)	177	143	73	10	4
Shared Lane Traffic (%)					
Lane Group Flow (vph)	320	0	83	0	4
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Right	Right	Left	Right	Right
Median Width(ft)			12		
Link Offset(ft)			0		
Crosswalk Width(ft)			16		
Two way Left Turn Lane					
Headway Factor	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	9	15	9	9
Number of Detectors	1		1		1
Detector Template	Right		Left		Right
Leading Detector (ft)	20		20		20
Trailing Detector (ft)	0		0		0
Detector 1 Position(ft)	0		0		0
Detector 1 Size(ft)	20		20		20
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel					
Detector 1 Extend (s)	0.0		0.0		0.0
Detector 1 Queue (s)	0.0		0.0		0.0
Detector 1 Delay (s)	0.0		0.0		0.0
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type	Perm		Prot		Free

Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Protected Phases	7	4				8	5		6		5	2
Permitted Phases			4	8	8			6				
Detector Phase	7	4	4	8	8	8	5	6	6		5	2
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	10.0	10.0	10.0	8.0	12.0	12.0		8.0	8.0
Minimum Split (s)	8.0	34.6	34.6	30.6	30.6	30.6	12.2	32.6	32.6		12.2	34.6
Total Split (s)	10.0	40.6	40.6	30.6	30.6	30.6	20.0	33.8	33.8		20.0	53.8
Total Split (%)	8.7%	35.3%	35.3%	26.6%	26.6%	26.6%	17.4%	29.4%	29.4%		17.4%	46.8%
Maximum Green (s)	6.0	33.0	33.0	23.0	23.0	23.0	15.8	26.2	26.2		15.8	46.2
Yellow Time (s)	3.5	3.6	3.6	3.6	3.6	3.6	3.2	3.6	3.6		3.2	3.6
All-Red Time (s)	0.5	4.0	4.0	4.0	4.0	4.0	1.0	4.0	4.0		1.0	4.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.0	7.6	7.6			7.6	4.2		7.6		4.2	7.6
Lead/Lag	Lead			Lag	Lag	Lag	Lead	Lag	Lag		Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	1.0	1.0	1.0	1.0	1.0	1.2	2.2	2.2		1.2	1.2
Recall Mode	None	None	None	None	None	None	None	None	None		None	None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0		7.0	7.0			7.0
Flash Dont Walk (s)		20.0	20.0	16.0	16.0	16.0		18.0	18.0			20.0
Pedestrian Calls (#/hr)		5	5	5	5	5		7	7			4
Act Effct Green (s)	6.2	26.8	26.8			16.4	16.4		21.9		16.4	42.7
Actuated g/C Ratio	0.06	0.27	0.27			0.16	0.16		0.22		0.16	0.42
v/c Ratio	1.11	0.37	0.13			0.76	1.13		0.85		0.89	0.45
Control Delay	166.4	34.8	31.9			59.3	138.0		61.8		76.3	24.8
Queue Delay	0.0	0.0	0.0			0.0	0.0		0.0		0.0	0.0
Total Delay	166.4	34.8	31.9			59.3	138.0		61.8		76.3	24.8
LOS	F	C	C			E	F		E		E	C
Approach Delay		79.0				103.4			61.8			39.5
Approach LOS		E				F			E			D

Intersection Summary			
Area Type:	Other		
Cycle Length: 115			
Actuated Cycle Length: 100.6			
Natural Cycle: 115			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.13			
Intersection Signal Delay: 64.6		Intersection LOS: E	
Intersection Capacity Utilization 97.1%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 2: Gibbons Dr & High St & Fernside Blvd



Lane Group	SBR	SBR2	NEL	NER	NER2
Protected Phases			9		
Permitted Phases	2				Free
Detector Phase	2		9		
Switch Phase					
Minimum Initial (s)	8.0		11.0		
Minimum Split (s)	34.6		20.6		
Total Split (s)	53.8		20.6		
Total Split (%)	46.8%		17.9%		
Maximum Green (s)	46.2		11.0		
Yellow Time (s)	3.6		3.6		
All-Red Time (s)	4.0		6.0		
Lost Time Adjust (s)	0.0		0.0		
Total Lost Time (s)	7.6		9.6		
Lead/Lag					
Lead-Lag Optimize?					
Vehicle Extension (s)	1.2		1.0		
Recall Mode	None		None		
Walk Time (s)	7.0				
Flash Dont Walk (s)	20.0				
Pedestrian Calls (#/hr)	4				
Act Effct Green (s)	42.7		11.4		100.6
Actuated g/C Ratio	0.42		0.11		1.00
v/c Ratio	0.49		0.42		0.00
Control Delay	26.3		54.4		0.0
Queue Delay	0.0		0.0		0.0
Total Delay	26.3		54.4		0.0
LOS	C		D		A
Approach Delay			51.9		
Approach LOS			D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	99	169	32	1	1	207	282	35	233	4	212	305
Future Volume (vph)	99	169	32	1	1	207	282	35	233	4	212	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	7.6	7.6			7.6	4.2		7.6		4.2	7.6
Lane Util. Factor	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.98			1.00	1.00		1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00
Frt	1.00	1.00	0.85			1.00	0.85		1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00			1.00	1.00		0.99		0.95	1.00
Satd. Flow (prot)	1770	1863	1546			1859	1583		1837		1770	1863
Flt Permitted	0.95	1.00	1.00			0.98	1.00		0.88		0.95	1.00
Satd. Flow (perm)	1770	1863	1546			1830	1583		1625		1770	1863
Peak-hour factor, PHF	0.82	0.92	0.61	0.25	0.25	0.94	0.97	0.80	0.94	0.38	0.83	0.86
Adj. Flow (vph)	121	184	52	4	4	220	291	44	248	11	255	355
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	2	0	0	0
Lane Group Flow (vph)	121	184	52	0	0	228	291	0	301	0	255	355
Confl. Peds. (#/hr)	10		2	2	4					12		
Turn Type	Prot	NA	Perm	Perm	Perm	NA	Over	Perm	NA		Prot	NA
Protected Phases	7	4				8	5		6		5	2
Permitted Phases			4	8	8			6				
Actuated Green, G (s)	6.2	26.8	26.8			16.6	16.4		22.1		16.4	42.7
Effective Green, g (s)	6.2	26.8	26.8			16.6	16.4		22.1		16.4	42.7
Actuated g/C Ratio	0.06	0.26	0.26			0.16	0.16		0.22		0.16	0.42
Clearance Time (s)	4.0	7.6	7.6			7.6	4.2		7.6		4.2	7.6
Vehicle Extension (s)	3.0	1.0	1.0			1.0	1.2		2.2		1.2	1.2
Lane Grp Cap (vph)	107	487	404			296	253		350		283	776
v/s Ratio Prot	c0.07	0.10					c0.18				0.14	0.19
v/s Ratio Perm			0.03			c0.12			c0.19			
v/c Ratio	1.13	0.38	0.13			0.77	1.15		0.86		0.90	0.46
Uniform Delay, d1	48.1	31.0	28.9			41.1	43.0		38.7		42.3	21.6
Progression Factor	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00
Incremental Delay, d2	126.5	0.2	0.1			10.7	103.3		18.6		28.8	0.2
Delay (s)	174.7	31.2	29.0			51.8	146.3		57.3		71.1	21.7
Level of Service	F	C	C			D	F		E		E	C
Approach Delay (s)		79.5				104.8			57.3			35.4
Approach LOS		E				F			E			D

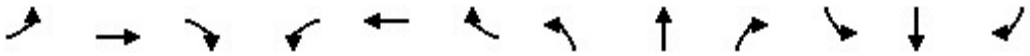
Intersection Summary			
HCM 2000 Control Delay	62.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	102.5	Sum of lost time (s)	33.0
Intersection Capacity Utilization	97.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR	SBR2	NEL	NER	NER2
Lane Configurations					
Traffic Volume (vph)	143	93	59	4	3
Future Volume (vph)	143	93	59	4	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Total Lost time (s)	7.6		9.6		4.0
Lane Util. Factor	1.00		1.00		1.00
Frpb, ped/bikes	0.98		1.00		0.98
Flpb, ped/bikes	1.00		1.00		1.00
Frt	0.85		0.98		0.85
Flt Protected	1.00		0.96		1.00
Satd. Flow (prot)	1546		1745		1550
Flt Permitted	1.00		0.96		1.00
Satd. Flow (perm)	1546		1745		1550
Peak-hour factor, PHF	0.81	0.65	0.81	0.42	0.75
Adj. Flow (vph)	177	143	73	10	4
RTOR Reduction (vph)	0	0	0	0	0
Lane Group Flow (vph)	320	0	83	0	4
Confl. Peds. (#/hr)	2		2	2	2
Turn Type	Perm		Prot		Free
Protected Phases			9		
Permitted Phases	2				Free
Actuated Green, G (s)	42.7		8.2		102.5
Effective Green, g (s)	42.7		8.2		102.5
Actuated g/C Ratio	0.42		0.08		1.00
Clearance Time (s)	7.6		9.6		
Vehicle Extension (s)	1.2		1.0		
Lane Grp Cap (vph)	644		139		1550
v/s Ratio Prot			c0.05		
v/s Ratio Perm	0.21				0.00
v/c Ratio	0.50		0.60		0.00
Uniform Delay, d1	22.0		45.6		0.0
Progression Factor	1.00		1.00		1.00
Incremental Delay, d2	0.2		4.5		0.0
Delay (s)	22.2		50.1		0.0
Level of Service	C		D		A
Approach Delay (s)			47.8		
Approach LOS			D		

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	286	6	2	340	4	3	1	0	3	1	6
Future Volume (vph)	6	286	6	2	340	4	3	1	0	3	1	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		100	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
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
Ped Bike Factor												
Frt		0.995			0.997						0.919	
Flt Protected	0.950			0.950				0.968			0.990	
Satd. Flow (prot)	1770	1853	0	1770	1857	0	0	1803	0	0	1695	0
Flt Permitted	0.950			0.950				0.968			0.990	
Satd. Flow (perm)	1770	1853	0	1770	1857	0	0	1803	0	0	1695	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		547			509			358			297	
Travel Time (s)		14.9			13.9			9.8			8.1	
Confl. Peds. (#/hr)	4		8	8		4	8		8	4		4
Peak Hour Factor	0.75	0.88	0.50	0.50	0.88	0.50	0.38	0.25	1.00	0.75	0.25	0.50
Adj. Flow (vph)	8	325	12	4	386	8	8	4	0	4	4	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	337	0	4	394	0	0	12	0	0	20	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

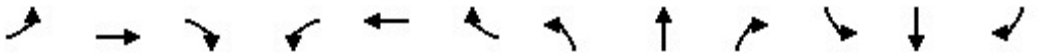
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	286	6	2	340	4	3	1	0	3	1	6
Future Volume (Veh/h)	6	286	6	2	340	4	3	1	0	3	1	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.75	0.88	0.50	0.50	0.88	0.50	0.38	0.25	1.00	0.75	0.25	0.50
Hourly flow rate (vph)	8	325	12	4	386	8	8	4	0	4	4	12
Pedestrians		8			8			8			4	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			0	
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					509							
pX, platoon unblocked	0.89						0.89	0.89		0.89	0.89	0.89
vC, conflicting volume	398			345			771	761	347	753	763	402
vC1, stage 1 conf vol							355	355		402	402	
vC2, stage 2 conf vol							416	406		351	361	
vCu, unblocked vol	269			345			685	674	347	665	676	273
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			98	99	100	99	99	98
cM capacity (veh/h)	1155			1206			511	503	687	528	504	678

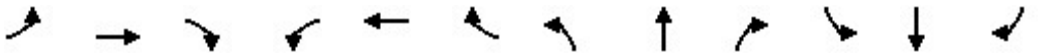
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	8	337	4	394	12	20
Volume Left	8	0	4	0	8	4
Volume Right	0	12	0	8	0	12
cSH	1155	1700	1206	1700	509	603
Volume to Capacity	0.01	0.20	0.00	0.23	0.02	0.03
Queue Length 95th (ft)	1	0	0	0	2	3
Control Delay (s)	8.1	0.0	8.0	0.0	12.2	11.2
Lane LOS	A		A		B	B
Approach Delay (s)	0.2		0.1		12.2	11.2
Approach LOS					B	B

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	30.5%	ICU Level of Service		A
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1	1	1	0	0	8	288	1	2	220	2
Future Volume (vph)	1	1	1	1	0	0	8	288	1	2	220	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.955						0.998			0.998	
Flt Protected		0.984			0.950			0.998			0.999	
Satd. Flow (prot)	0	1750	0	0	1770	0	0	1855	0	0	1857	0
Flt Permitted		0.984			0.950			0.998			0.999	
Satd. Flow (perm)	0	1750	0	0	1770	0	0	1855	0	0	1857	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		330			400			1691			372	
Travel Time (s)		9.0			10.9			46.1			10.1	
Confl. Peds. (#/hr)	5		6	7		6	6		7	6		5
Peak Hour Factor	0.25	0.25	0.25	0.25	1.00	1.00	0.50	0.89	0.25	0.50	0.78	0.50
Adj. Flow (vph)	4	4	4	4	0	0	16	324	4	4	282	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	0	0	4	0	0	344	0	0	290	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	1	1	0	0	8	288	1	2	220	2
Future Volume (Veh/h)	1	1	1	1	0	0	8	288	1	2	220	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.25	0.25	0.25	1.00	1.00	0.50	0.89	0.25	0.50	0.78	0.50
Hourly flow rate (vph)	4	4	4	4	0	0	16	324	4	4	282	4
Pedestrians		6			7			7			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											372	
pX, platoon unblocked	0.92	0.92	0.92	0.92	0.92		0.92					
vC, conflicting volume	662	665	297	670	665	339	292			335		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	589	593	193	598	593	339	187			335		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	99	99	100	100	99			100		
cM capacity (veh/h)	375	375	773	364	375	696	1270			1217		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	12	4	344	290
Volume Left	4	4	16	4
Volume Right	4	0	4	4
cSH	452	364	1270	1217
Volume to Capacity	0.03	0.01	0.01	0.00
Queue Length 95th (ft)	2	1	1	0
Control Delay (s)	13.2	15.0	0.5	0.1
Lane LOS	B	B	A	A
Approach Delay (s)	13.2	15.0	0.5	0.1
Approach LOS	B	B		

Intersection Summary				
Average Delay	0.7			
Intersection Capacity Utilization	32.1%	ICU Level of Service	A	
Analysis Period (min)	15			

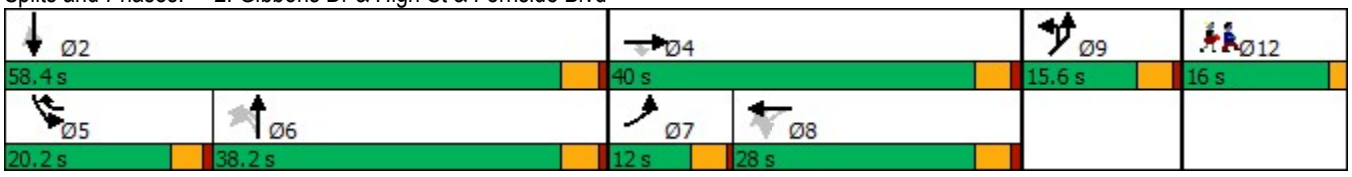
Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	87	131	24	2	5	278	181	1	65	228	2	172
Future Volume (vph)	87	131	24	2	5	278	181	1	65	228	2	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		100		0		140		0		0	120
Storage Lanes	1		1		0		1		0		0	1
Taper Length (ft)	25				25				25			25
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
Ped Bike Factor	0.99		0.96			1.00				1.00		
Frt			0.850				0.850			0.997		
Flt Protected	0.950					0.997				0.985		0.950
Satd. Flow (prot)	1770	1863	1583	0	0	1857	1583	0	0	1828	0	1770
Flt Permitted	0.950					0.980				0.807		0.950
Satd. Flow (perm)	1757	1863	1526	0	0	1823	1583	0	0	1494	0	1770
Right Turn on Red							No				Yes	
Satd. Flow (RTOR)										1		
Link Speed (mph)		25				25				25		
Link Distance (ft)		509				699				372		
Travel Time (s)		13.9				19.1				10.1		
Confl. Peds. (#/hr)	4		7	7	9			2	3		9	
Peak Hour Factor	0.76	0.73	0.75	0.50	0.42	0.93	0.94	0.25	0.58	0.86	0.25	0.81
Adj. Flow (vph)	114	179	32	4	12	299	193	4	112	265	8	212
Shared Lane Traffic (%)												
Lane Group Flow (vph)	114	179	32	0	0	315	193	0	0	389	0	212
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Left	Right	Left
Median Width(ft)		12				12				12		
Link Offset(ft)		0				0				0		
Crosswalk Width(ft)		16				16				16		
Two way Left Turn Lane		Yes										
Headway 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
Turning Speed (mph)	15		9	15	15		9	15	15		9	15
Number of Detectors	1	2	1	1	1	2	1	1	1	2		1
Detector Template	Left	Thru	Right	Left	Left	Thru	Right	Left	Left	Thru		Left
Leading Detector (ft)	20	100	20	20	20	100	20	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	6	20	20	20	6	20	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	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	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	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	0.0		0.0
Detector 2 Position(ft)		94				94				94		
Detector 2 Size(ft)		6				6				6		
Detector 2 Type		Cl+Ex				Cl+Ex				Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0				0.0		
Turn Type	Prot	NA	Perm	Perm	Perm	NA	Over	Perm	Perm	NA		Prot

Lane Group	SBT	SBR	SBR2	NEL	NER	NER2	Ø12
Lane Configurations							
Traffic Volume (vph)	190	116	74	76	3	6	
Future Volume (vph)	190	116	74	76	3	6	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		200		0	60		
Storage Lanes		1		1	1		
Taper Length (ft)				25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor		0.97		0.99		0.98	
Frt		0.850		0.991		0.850	
Flt Protected				0.955			
Satd. Flow (prot)	1863	1583	0	1759	0	1583	
Flt Permitted				0.955			
Satd. Flow (perm)	1863	1533	0	1754	0	1550	
Right Turn on Red			No			Yes	
Satd. Flow (RTOR)						176	
Link Speed (mph)	25			25			
Link Distance (ft)	1329			596			
Travel Time (s)	36.2			16.3			
Confl. Peds. (#/hr)		2	3	2	2	2	
Peak Hour Factor	0.73	0.81	0.88	0.85	0.50	0.75	
Adj. Flow (vph)	260	143	84	89	6	8	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	260	227	0	95	0	8	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Right	Left	Right	Right	
Median Width(ft)	12			12			
Link Offset(ft)	0			0			
Crosswalk Width(ft)	16			16			
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)		9	9	15	9	9	
Number of Detectors	2	1		1		1	
Detector Template	Thru	Right		Left		Right	
Leading Detector (ft)	100	20		20		20	
Trailing Detector (ft)	0	0		0		0	
Detector 1 Position(ft)	0	0		0		0	
Detector 1 Size(ft)	6	20		20		20	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0		0.0		0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0	
Detector 2 Position(ft)	94						
Detector 2 Size(ft)	6						
Detector 2 Type	Cl+Ex						
Detector 2 Channel							
Detector 2 Extend (s)	0.0						
Turn Type	NA	Perm		Prot		Free	

Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL
Protected Phases	7	4				8	5			6		5
Permitted Phases			4	8	8			6	6			
Detector Phase	7	4	4	8	8	8	5	6	6	6		5
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	10.0	10.0	10.0	8.0	12.0	12.0	12.0		8.0
Minimum Split (s)	8.0	31.6	31.6	27.6	27.6	27.6	12.2	29.6	29.6	29.6		12.2
Total Split (s)	12.0	40.0	40.0	28.0	28.0	28.0	20.2	38.2	38.2	38.2		20.2
Total Split (%)	9.2%	30.8%	30.8%	21.5%	21.5%	21.5%	15.5%	29.4%	29.4%	29.4%		15.5%
Maximum Green (s)	8.0	35.4	35.4	23.4	23.4	23.4	16.0	33.6	33.6	33.6		16.0
Yellow Time (s)	3.5	3.6	3.6	3.6	3.6	3.6	3.2	3.6	3.6	3.6		3.2
All-Red Time (s)	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0	0.0			0.0		0.0
Total Lost Time (s)	4.0	4.6	4.6			4.6	4.2			4.6		4.2
Lead/Lag	Lead			Lag	Lag	Lag	Lead	Lag	Lag	Lag		Lead
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	1.0	1.0	1.0	1.0	1.0	1.2	2.2	2.2	2.2		1.2
Recall Mode	None	None	None	None	None	None	None	None	None	None		None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0		
Flash Dont Walk (s)		20.0	20.0	16.0	16.0	16.0		18.0	18.0	18.0		
Pedestrian Calls (#/hr)		5	5	5	5	5		7	7	7		
Act Effct Green (s)	8.0	34.8	34.8			22.8	16.0			33.6		16.0
Actuated g/C Ratio	0.07	0.31	0.31			0.20	0.14			0.30		0.14
v/c Ratio	0.91	0.31	0.07			0.86	0.87			0.88		0.85
Control Delay	113.9	31.9	28.3			66.8	82.1			60.1		77.3
Queue Delay	0.0	0.0	0.0			0.0	0.0			0.0		0.0
Total Delay	113.9	31.9	28.3			66.8	82.1			60.1		77.3
LOS	F	C	C			E	F			E		E
Approach Delay		60.3				72.6				60.1		
Approach LOS		E				E				E		

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 113.4			
Natural Cycle: 130			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 55.2		Intersection LOS: E	
Intersection Capacity Utilization 83.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 2: Gibbons Dr & High St & Fernside Blvd



Lane Group	SBT	SBR	SBR2	NEL	NER	NER2	Ø12
Protected Phases	2			9			12
Permitted Phases		2				Free	
Detector Phase	2	2		9			
Switch Phase							
Minimum Initial (s)	8.0	8.0		11.0			1.0
Minimum Split (s)	31.6	31.6		15.6			16.0
Total Split (s)	58.4	58.4		15.6			16.0
Total Split (%)	44.9%	44.9%		12.0%			12%
Maximum Green (s)	53.8	53.8		11.0			14.0
Yellow Time (s)	3.6	3.6		3.6			2.0
All-Red Time (s)	1.0	1.0		1.0			0.0
Lost Time Adjust (s)	0.0	0.0		0.0			
Total Lost Time (s)	4.6	4.6		4.6			
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	1.2	1.2		1.0			3.0
Recall Mode	None	None		None			None
Walk Time (s)	7.0	7.0					3.0
Flash Dont Walk (s)	20.0	20.0					11.0
Pedestrian Calls (#/hr)	4	4					0
Act Effct Green (s)	53.8	53.8		11.0		113.4	
Actuated g/C Ratio	0.47	0.47		0.10		1.00	
v/c Ratio	0.29	0.31		0.56		0.01	
Control Delay	19.5	20.0		62.5		0.0	
Queue Delay	0.0	0.0		0.0		0.0	
Total Delay	19.5	20.0		62.5		0.0	
LOS	B	C		E		A	
Approach Delay	37.2			57.6			
Approach LOS	D			E			

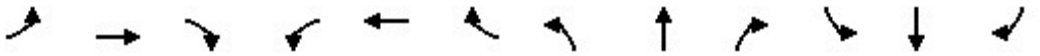
Intersection Summary

Movement	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	87	131	24	2	5	278	181	1	65	228	2	172
Future Volume (vph)	87	131	24	2	5	278	181	1	65	228	2	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.6	4.6			4.6	4.2			4.6		4.2
Lane Util. Factor	1.00	1.00	1.00			1.00	1.00			1.00		1.00
Frpb, ped/bikes	1.00	1.00	0.97			1.00	1.00			1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00			1.00		1.00
Frt	1.00	1.00	0.85			1.00	0.85			1.00		1.00
Flt Protected	0.95	1.00	1.00			1.00	1.00			0.99		0.95
Satd. Flow (prot)	1770	1863	1529			1856	1583			1825		1770
Flt Permitted	0.95	1.00	1.00			0.98	1.00			0.81		0.95
Satd. Flow (perm)	1770	1863	1529			1822	1583			1495		1770
Peak-hour factor, PHF	0.76	0.73	0.75	0.50	0.42	0.93	0.94	0.25	0.58	0.86	0.25	0.81
Adj. Flow (vph)	114	179	32	4	12	299	193	4	112	265	8	212
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	1	0	0
Lane Group Flow (vph)	114	179	32	0	0	315	193	0	0	388	0	212
Confl. Peds. (#/hr)	4		7	7	9			2	3		9	
Turn Type	Prot	NA	Perm	Perm	Perm	NA	Over	Perm	Perm	NA		Prot
Protected Phases	7	4				8	5			6		5
Permitted Phases			4	8	8			6	6			
Actuated Green, G (s)	8.0	34.8	34.8			22.8	16.0			33.6		16.0
Effective Green, g (s)	8.0	34.8	34.8			22.8	16.0			33.6		16.0
Actuated g/C Ratio	0.07	0.31	0.31			0.20	0.14			0.30		0.14
Clearance Time (s)	4.0	4.6	4.6			4.6	4.2			4.6		4.2
Vehicle Extension (s)	3.0	1.0	1.0			1.0	1.2			2.2		1.2
Lane Grp Cap (vph)	124	571	469			366	223			442		249
v/s Ratio Prot	c0.06	0.10					c0.12					0.12
v/s Ratio Perm			0.02			c0.17				c0.26		
v/c Ratio	0.92	0.31	0.07			0.86	0.87			0.88		0.85
Uniform Delay, d1	52.4	30.1	27.8			43.8	47.6			38.0		47.5
Progression Factor	1.00	1.00	1.00			1.00	1.00			1.00		1.00
Incremental Delay, d2	55.8	0.1	0.0			17.7	26.9			17.3		22.6
Delay (s)	108.2	30.3	27.8			61.5	74.5			55.3		70.1
Level of Service	F	C	C			E	E			E		E
Approach Delay (s)		57.4				66.4				55.3		
Approach LOS		E				E				E		

Intersection Summary			
HCM 2000 Control Delay	50.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	113.4	Sum of lost time (s)	24.0
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

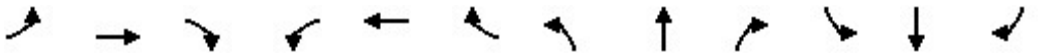
Movement	SBT	SBR	SBR2	NEL	NER	NER2
Lane Configurations						
Traffic Volume (vph)	190	116	74	76	3	6
Future Volume (vph)	190	116	74	76	3	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6		4.0
Lane Util. Factor	1.00	1.00		1.00		1.00
Frpb, ped/bikes	1.00	0.97		1.00		0.98
Flpb, ped/bikes	1.00	1.00		1.00		1.00
Frt	1.00	0.85		0.99		0.85
Flt Protected	1.00	1.00		0.96		1.00
Satd. Flow (prot)	1863	1535		1759		1550
Flt Permitted	1.00	1.00		0.96		1.00
Satd. Flow (perm)	1863	1535		1759		1550
Peak-hour factor, PHF	0.73	0.81	0.88	0.85	0.50	0.75
Adj. Flow (vph)	260	143	84	89	6	8
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	260	227	0	95	0	8
Confl. Peds. (#/hr)		2	3	2	2	2
Turn Type	NA	Perm		Prot		Free
Protected Phases	2			9		
Permitted Phases		2				Free
Actuated Green, G (s)	53.8	53.8		11.0		113.4
Effective Green, g (s)	53.8	53.8		11.0		113.4
Actuated g/C Ratio	0.47	0.47		0.10		1.00
Clearance Time (s)	4.6	4.6		4.6		
Vehicle Extension (s)	1.2	1.2		1.0		
Lane Grp Cap (vph)	883	728		170		1550
v/s Ratio Prot	0.14			c0.05		
v/s Ratio Perm		0.15				0.01
v/c Ratio	0.29	0.31		0.56		0.01
Uniform Delay, d1	18.2	18.4		48.9		0.0
Progression Factor	1.00	1.00		1.00		1.00
Incremental Delay, d2	0.1	0.1		2.3		0.0
Delay (s)	18.3	18.5		51.1		0.0
Level of Service	B	B		D		A
Approach Delay (s)	34.1			47.2		
Approach LOS	C			D		

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	245	4	1	458	3	11	0	2	4	0	8
Future Volume (vph)	2	245	4	1	458	3	11	0	2	4	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		100	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
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
Ped Bike Factor												
Frt		0.996			0.999			0.955			0.904	
Flt Protected	0.950			0.950				0.968			0.986	
Satd. Flow (prot)	1770	1855	0	1770	1861	0	0	1722	0	0	1660	0
Flt Permitted	0.950			0.950				0.968			0.986	
Satd. Flow (perm)	1770	1855	0	1770	1861	0	0	1722	0	0	1660	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		547			509			358			297	
Travel Time (s)		14.9			13.9			9.8			8.1	
Confl. Peds. (#/hr)	4			2		6			2	6		4
Peak Hour Factor	0.50	0.79	0.50	0.25	0.87	0.75	0.69	1.00	0.25	0.50	1.00	0.40
Adj. Flow (vph)	4	310	8	4	526	4	16	0	8	8	0	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	318	0	4	530	0	0	24	0	0	28	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

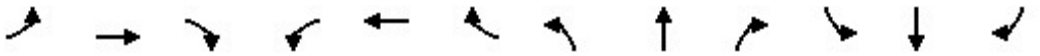
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	245	4	1	458	3	11	0	2	4	0	8
Future Volume (Veh/h)	2	245	4	1	458	3	11	0	2	4	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.79	0.50	0.25	0.87	0.75	0.69	1.00	0.25	0.50	1.00	0.40
Hourly flow rate (vph)	4	310	8	4	526	4	16	0	8	8	0	20
Pedestrians		4			6			2			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			1			0			1	
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					509							
pX, platoon unblocked	0.84						0.84	0.84		0.84	0.84	0.84
vC, conflicting volume	536			320			882	868	322	874	870	538
vC1, stage 1 conf vol							324	324		542	542	
vC2, stage 2 conf vol							558	544		332	328	
vCu, unblocked vol	356			320			766	750	322	757	752	358
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			96	100	99	98	100	97
cM capacity (veh/h)	1008			1238			455	458	714	472	460	573

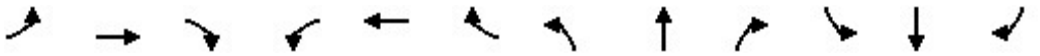
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	4	318	4	530	24	28
Volume Left	4	0	4	0	16	8
Volume Right	0	8	0	4	8	20
cSH	1008	1700	1238	1700	518	540
Volume to Capacity	0.00	0.19	0.00	0.31	0.05	0.05
Queue Length 95th (ft)	0	0	0	0	4	4
Control Delay (s)	8.6	0.0	7.9	0.0	12.3	12.0
Lane LOS	A		A		B	B
Approach Delay (s)	0.1		0.1		12.3	12.0
Approach LOS					B	B

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	35.5%	ICU Level of Service		A
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	2	2	0	0	5	6	243	2	5	363	4
Future Volume (vph)	2	2	2	0	0	5	6	243	2	5	363	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.955			0.865			0.998			0.997	
Flt Protected		0.984						0.996			0.999	
Satd. Flow (prot)	0	1750	0	0	1611	0	0	1852	0	0	1855	0
Flt Permitted		0.984						0.996			0.999	
Satd. Flow (perm)	0	1750	0	0	1611	0	0	1852	0	0	1855	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		330			400			1691			372	
Travel Time (s)		9.0			10.9			46.1			10.1	
Confl. Peds. (#/hr)	1		4	9		6	4		9	6		1
Peak Hour Factor	0.50	0.50	0.50	1.00	1.00	0.42	0.30	0.95	0.50	0.62	0.92	0.50
Adj. Flow (vph)	4	4	4	0	0	12	20	256	4	8	395	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	0	0	12	0	0	280	0	0	411	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	2	2	0	0	5	6	243	2	5	363	4
Future Volume (Veh/h)	2	2	2	0	0	5	6	243	2	5	363	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.50	0.50	1.00	1.00	0.42	0.30	0.95	0.50	0.62	0.92	0.50
Hourly flow rate (vph)	4	4	4	0	0	12	20	256	4	8	395	8
Pedestrians		4			9			9			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			1			1			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											372	
pX, platoon unblocked	0.88	0.88	0.88	0.88	0.88		0.88					
vC, conflicting volume	735	728	412	737	730	273	407			269		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	629	621	261	631	623	273	255			269		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	99	100	100	98	98			99		
cM capacity (veh/h)	330	342	676	327	341	756	1146			1285		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	12	12	280	411
Volume Left	4	0	20	8
Volume Right	4	12	4	8
cSH	403	756	1146	1285
Volume to Capacity	0.03	0.02	0.02	0.01
Queue Length 95th (ft)	2	1	1	0
Control Delay (s)	14.2	9.8	0.7	0.2
Lane LOS	B	A	A	A
Approach Delay (s)	14.2	9.8	0.7	0.2
Approach LOS	B	A		

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	33.5%	ICU Level of Service	A	
Analysis Period (min)	15			

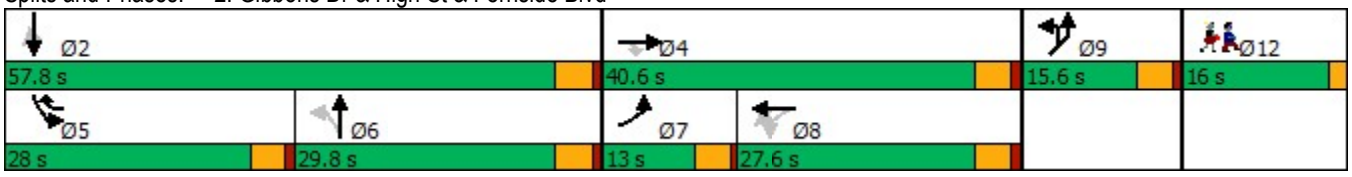
Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	99	169	32	1	1	207	282	35	233	4	212	305
Future Volume (vph)	99	169	32	1	1	207	282	35	233	4	212	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		100		0		140	0		0	120	
Storage Lanes	1		1		0		1	0		0	1	
Taper Length (ft)	25				25			25			25	
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
Ped Bike Factor	0.98		0.98			1.00			1.00			
Frt			0.850				0.850		0.995			
Flt Protected	0.950					0.998			0.993		0.950	
Satd. Flow (prot)	1770	1863	1583	0	0	1859	1583	0	1837	0	1770	1863
Flt Permitted	0.950					0.987			0.896		0.950	
Satd. Flow (perm)	1733	1863	1544	0	0	1838	1583	0	1658	0	1770	1863
Right Turn on Red							No			Yes		
Satd. Flow (RTOR)									1			
Link Speed (mph)		25				25			25			25
Link Distance (ft)		509				699			372			1329
Travel Time (s)		13.9				19.1			10.1			36.2
Confl. Peds. (#/hr)	10		2	2	4					12		
Peak Hour Factor	0.82	0.92	0.61	0.25	0.25	0.94	0.97	0.80	0.94	0.38	0.83	0.86
Adj. Flow (vph)	121	184	52	4	4	220	291	44	248	11	255	355
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	184	52	0	0	228	291	0	303	0	255	355
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane		Yes										
Headway 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
Turning Speed (mph)	15		9	15	15		9	15		9	15	
Number of Detectors	1	2	1	1	1	2	1	1	2		1	2
Detector Template	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left	Thru
Leading Detector (ft)	20	100	20	20	20	100	20	20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0		0	0
Detector 1 Size(ft)	20	6	20	20	20	6	20	20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	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		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		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		0.0	0.0
Detector 2 Position(ft)		94				94			94			94
Detector 2 Size(ft)		6				6			6			6
Detector 2 Type		Cl+Ex				Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0			0.0			0.0
Turn Type	Prot	NA	Perm	Perm	Perm	NA	Over	Perm	NA		Prot	NA

Lane Group	SBR	SBR2	NEL	NER	NER2	Ø12
Lane Configurations						
Traffic Volume (vph)	143	93	59	4	3	
Future Volume (vph)	143	93	59	4	3	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	
Storage Length (ft)	200		0	60		
Storage Lanes	1		1	1		
Taper Length (ft)			25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor	0.98		0.99		0.98	
Frt	0.850		0.982		0.850	
Flt Protected			0.958			
Satd. Flow (prot)	1583	0	1746	0	1583	
Flt Permitted			0.958			
Satd. Flow (perm)	1544	0	1741	0	1550	
Right Turn on Red		No			Yes	
Satd. Flow (RTOR)					176	
Link Speed (mph)			25			
Link Distance (ft)			596			
Travel Time (s)			16.3			
Confl. Peds. (#/hr)	2		2	2	2	
Peak Hour Factor	0.81	0.65	0.81	0.42	0.75	
Adj. Flow (vph)	177	143	73	10	4	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	320	0	83	0	4	
Enter Blocked Intersection	No	No	No	No	No	
Lane Alignment	Right	Right	Left	Right	Right	
Median Width(ft)			12			
Link Offset(ft)			0			
Crosswalk Width(ft)			16			
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	9	9	15	9	9	
Number of Detectors	1		1		1	
Detector Template	Right		Left		Right	
Leading Detector (ft)	20		20		20	
Trailing Detector (ft)	0		0		0	
Detector 1 Position(ft)	0		0		0	
Detector 1 Size(ft)	20		20		20	
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	
Detector 1 Queue (s)	0.0		0.0		0.0	
Detector 1 Delay (s)	0.0		0.0		0.0	
Detector 2 Position(ft)						
Detector 2 Size(ft)						
Detector 2 Type						
Detector 2 Channel						
Detector 2 Extend (s)						
Turn Type	Perm		Prot		Free	

Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Protected Phases	7	4				8	5		6		5	2
Permitted Phases			4	8	8			6				
Detector Phase	7	4	4	8	8	8	5	6	6		5	2
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	10.0	10.0	10.0	8.0	12.0	12.0		8.0	8.0
Minimum Split (s)	8.0	31.6	31.6	27.6	27.6	27.6	12.2	29.6	29.6		12.2	31.6
Total Split (s)	13.0	40.6	40.6	27.6	27.6	27.6	28.0	29.8	29.8		28.0	57.8
Total Split (%)	10.0%	31.2%	31.2%	21.2%	21.2%	21.2%	21.5%	22.9%	22.9%		21.5%	44.5%
Maximum Green (s)	9.0	36.0	36.0	23.0	23.0	23.0	23.8	25.2	25.2		23.8	53.2
Yellow Time (s)	3.5	3.6	3.6	3.6	3.6	3.6	3.2	3.6	3.6		3.2	3.6
All-Red Time (s)	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.0	4.6	4.6			4.6	4.2		4.6		4.2	4.6
Lead/Lag	Lead			Lag	Lag	Lag	Lead	Lag	Lag		Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	1.0	1.0	1.0	1.0	1.0	1.2	2.2	2.2		1.2	1.2
Recall Mode	None	None	None	None	None	None	None	None	None		None	None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0		7.0	7.0			7.0
Flash Dont Walk (s)		20.0	20.0	16.0	16.0	16.0		18.0	18.0			20.0
Pedestrian Calls (#/hr)		5	5	5	5	5		7	7			4
Act Effct Green (s)	9.2	29.8	29.8			16.5	24.4		24.4		24.4	53.1
Actuated g/C Ratio	0.09	0.28	0.28			0.15	0.23		0.23		0.23	0.50
v/c Ratio	0.80	0.35	0.12			0.81	0.81		0.80		0.63	0.38
Control Delay	85.5	35.0	32.5			66.8	60.1		57.9		48.8	21.1
Queue Delay	0.0	0.0	0.0			0.0	0.0		0.0		0.0	0.0
Total Delay	85.5	35.0	32.5			66.8	60.1		57.9		48.8	21.1
LOS	F	D	C			E	E		E		D	C
Approach Delay		51.8				63.0			57.9			29.1
Approach LOS		D				E			E			C

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 106.8			
Natural Cycle: 130			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 45.8		Intersection LOS: D	
Intersection Capacity Utilization 83.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 2: Gibbons Dr & High St & Fernside Blvd



Lane Group	SBR	SBR2	NEL	NER	NER2	Ø12
Protected Phases			9			12
Permitted Phases	2				Free	
Detector Phase	2		9			
Switch Phase						
Minimum Initial (s)	8.0		11.0			1.0
Minimum Split (s)	31.6		15.6			16.0
Total Split (s)	57.8		15.6			16.0
Total Split (%)	44.5%		12.0%			12%
Maximum Green (s)	53.2		11.0			14.0
Yellow Time (s)	3.6		3.6			2.0
All-Red Time (s)	1.0		1.0			0.0
Lost Time Adjust (s)	0.0		0.0			
Total Lost Time (s)	4.6		4.6			
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.2		1.0			3.0
Recall Mode	None		None			None
Walk Time (s)	7.0					3.0
Flash Dont Walk (s)	20.0					11.0
Pedestrian Calls (#/hr)	4					5
Act Effct Green (s)	53.1		11.3		106.8	
Actuated g/C Ratio	0.50		0.11		1.00	
v/c Ratio	0.42		0.45		0.00	
Control Delay	22.3		58.5		0.0	
Queue Delay	0.0		0.0		0.0	
Total Delay	22.3		58.5		0.0	
LOS	C		E		A	
Approach Delay			55.8			
Approach LOS			E			

Intersection Summary

Movement	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	99	169	32	1	1	207	282	35	233	4	212	305
Future Volume (vph)	99	169	32	1	1	207	282	35	233	4	212	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.6	4.6			4.6	4.2		4.6		4.2	4.6
Lane Util. Factor	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.98			1.00	1.00		1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00
Frt	1.00	1.00	0.85			1.00	0.85		1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00			1.00	1.00		0.99		0.95	1.00
Satd. Flow (prot)	1770	1863	1545			1859	1583		1837		1770	1863
Flt Permitted	0.95	1.00	1.00			0.99	1.00		0.90		0.95	1.00
Satd. Flow (perm)	1770	1863	1545			1838	1583		1657		1770	1863
Peak-hour factor, PHF	0.82	0.92	0.61	0.25	0.25	0.94	0.97	0.80	0.94	0.38	0.83	0.86
Adj. Flow (vph)	121	184	52	4	4	220	291	44	248	11	255	355
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	1	0	0	0
Lane Group Flow (vph)	121	184	52	0	0	228	291	0	302	0	255	355
Confl. Peds. (#/hr)	10		2	2	4					12		
Turn Type	Prot	NA	Perm	Perm	Perm	NA	Over	Perm	NA		Prot	NA
Protected Phases	7	4				8	5		6		5	2
Permitted Phases			4	8	8			6				
Actuated Green, G (s)	9.2	29.8	29.8			16.6	24.4		24.5		24.4	53.1
Effective Green, g (s)	9.2	29.8	29.8			16.6	24.4		24.5		24.4	53.1
Actuated g/C Ratio	0.08	0.27	0.27			0.15	0.22		0.22		0.22	0.49
Clearance Time (s)	4.0	4.6	4.6			4.6	4.2		4.6		4.2	4.6
Vehicle Extension (s)	3.0	1.0	1.0			1.0	1.2		2.2		1.2	1.2
Lane Grp Cap (vph)	148	507	421			279	353		371		395	905
v/s Ratio Prot	c0.07	0.10					c0.18				0.14	0.19
v/s Ratio Perm			0.03			c0.12			c0.18			
v/c Ratio	0.82	0.36	0.12			0.82	0.82		0.81		0.65	0.39
Uniform Delay, d1	49.2	32.1	29.9			44.9	40.4		40.2		38.5	17.9
Progression Factor	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00
Incremental Delay, d2	28.2	0.2	0.0			15.9	13.8		12.4		2.7	0.1
Delay (s)	77.5	32.2	30.0			60.8	54.2		52.6		41.2	18.0
Level of Service	E	C	C			E	D		D		D	B
Approach Delay (s)		47.2				57.1			52.6			24.5
Approach LOS		D				E			D			C

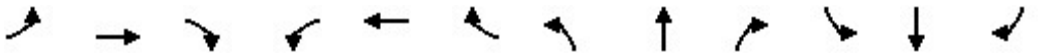
Intersection Summary			
HCM 2000 Control Delay	40.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	109.3	Sum of lost time (s)	24.0
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR	SBR2	NEL	NER	NER2
Lane Configurations					
Traffic Volume (vph)	143	93	59	4	3
Future Volume (vph)	143	93	59	4	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		4.6		4.0
Lane Util. Factor	1.00		1.00		1.00
Frpb, ped/bikes	0.98		1.00		0.98
Flpb, ped/bikes	1.00		1.00		1.00
Frt	0.85		0.98		0.85
Flt Protected	1.00		0.96		1.00
Satd. Flow (prot)	1545		1745		1550
Flt Permitted	1.00		0.96		1.00
Satd. Flow (perm)	1545		1745		1550
Peak-hour factor, PHF	0.81	0.65	0.81	0.42	0.75
Adj. Flow (vph)	177	143	73	10	4
RTOR Reduction (vph)	0	0	0	0	0
Lane Group Flow (vph)	320	0	83	0	4
Confl. Peds. (#/hr)	2		2	2	2
Turn Type	Perm		Prot		Free
Protected Phases			9		
Permitted Phases	2				Free
Actuated Green, G (s)	53.1		8.3		109.3
Effective Green, g (s)	53.1		8.3		109.3
Actuated g/C Ratio	0.49		0.08		1.00
Clearance Time (s)	4.6		4.6		
Vehicle Extension (s)	1.2		1.0		
Lane Grp Cap (vph)	750		132		1550
v/s Ratio Prot			c0.05		
v/s Ratio Perm	0.21				c0.00
v/c Ratio	0.43		0.63		0.00
Uniform Delay, d1	18.2		49.0		0.0
Progression Factor	1.00		1.00		1.00
Incremental Delay, d2	0.1		6.6		0.0
Delay (s)	18.4		55.6		0.0
Level of Service	B		E		A
Approach Delay (s)			53.0		
Approach LOS			D		

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	286	6	2	340	4	3	1	0	3	1	6
Future Volume (vph)	6	286	6	2	340	4	3	1	0	3	1	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	200		100	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
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
Ped Bike Factor												
Frt		0.995			0.997						0.919	
Flt Protected	0.950			0.950				0.968			0.990	
Satd. Flow (prot)	1770	1853	0	1770	1857	0	0	1803	0	0	1695	0
Flt Permitted	0.950			0.950				0.968			0.990	
Satd. Flow (perm)	1770	1853	0	1770	1857	0	0	1803	0	0	1695	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		547			509			358			297	
Travel Time (s)		14.9			13.9			9.8			8.1	
Confl. Peds. (#/hr)	4		8	8		4	8		8	4		4
Peak Hour Factor	0.75	0.88	0.50	0.50	0.88	0.50	0.38	0.25	1.00	0.75	0.25	0.50
Adj. Flow (vph)	8	325	12	4	386	8	8	4	0	4	4	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	337	0	4	394	0	0	12	0	0	20	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)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	286	6	2	340	4	3	1	0	3	1	6
Future Volume (Veh/h)	6	286	6	2	340	4	3	1	0	3	1	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.75	0.88	0.50	0.50	0.88	0.50	0.38	0.25	1.00	0.75	0.25	0.50
Hourly flow rate (vph)	8	325	12	4	386	8	8	4	0	4	4	12
Pedestrians		8			8			8			4	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			0	
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					509							
pX, platoon unblocked	0.89						0.89	0.89		0.89	0.89	0.89
vC, conflicting volume	398			345			771	761	347	753	763	402
vC1, stage 1 conf vol							355	355		402	402	
vC2, stage 2 conf vol							416	406		351	361	
vCu, unblocked vol	265			345			683	672	347	663	674	269
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			98	99	100	99	99	98
cM capacity (veh/h)	1155			1206			512	503	687	529	505	680

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	8	337	4	394	12	20
Volume Left	8	0	4	0	8	4
Volume Right	0	12	0	8	0	12
cSH	1155	1700	1206	1700	509	603
Volume to Capacity	0.01	0.20	0.00	0.23	0.02	0.03
Queue Length 95th (ft)	1	0	0	0	2	3
Control Delay (s)	8.1	0.0	8.0	0.0	12.2	11.2
Lane LOS	A		A		B	B
Approach Delay (s)	0.2		0.1		12.2	11.2
Approach LOS					B	B

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	30.5%	ICU Level of Service		A
Analysis Period (min)	15			