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Peachtree Reimagined




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Executive Summary

Every great city has a great street.

New York has Broadway, Chicago has Michigan Avenue, and Paris has the Champs Elysee. **Atlanta has Peachtree Street.**

Running along the spine of the city, Peachtree connects Downtown, Midtown, and Buckhead—Atlanta's most dynamic and dense districts. In Midtown, Peachtree is home to some of the city's most iconic institutions: major arts organizations, historic landmarks, thriving businesses, and a growing population of residents and workers. It is where Atlanta gathers: for the Peachtree Road Race, Atlanta Streets Alive, parades, marches, and countless daily moments of connection. **But for all its historic and cultural significance, Peachtree Street today falls short of its potential**.

Originally a walking trail, Peachtree has been shaped over the decades into a corridor focused on moving vehicles, not people. As Midtown has evolved into Atlanta's most walkable neighborhood, the street has not kept pace with the needs of those who live, work, and visit here. Today, Peachtree feels more like a thoroughfare than a place to linger, celebrate, or thrive.

The opportunity in front of us is clear: To transform Peachtree Street into a world-class, people-first destination—a street that is safe, vibrant, and alive every day of the week. But this transformation requires confronting some urgent challenges:

- **Safety:** Midtown's Peachtree Street experiences nearly 250 crashes per year. From 2020 to 2024, 64 crashes involved pedestrians, cyclists, or scooter riders—resulting in injury and death. These are not accidents—they are the predictable result of excessive speeds and a vehicle-prioritized design.

- **Comfort**: Despite its trees, lighting, and sidewalks, Peachtree often feels noisy, narrow, and dominated by traffic. It lacks the space and calm needed for walking, socializing, or sidewalk dining.

- **Activity**: Outside of scheduled events, Peachtree struggles to captivate. Many storefronts are uninviting, and the public realm lacks the vibrancy and charm expected of a signature street. People pass through but they rarely stop, explore, or engage.

We now have a generational opportunity to transform Peachtree Street from a traffic corridor into a true people-first destination—a street that reflects the energy, diversity, and creativity of Midtown and Atlanta as a whole.

This is more than a beautification project. It's a strategic reinvestment in one of Atlanta's most visible and symbolic streets—a catalyst for change that can:

- **Reclaim Peachtree for people** by creating a safer, more comfortable, and engaging public realm where walking, gathering, and lingering are natural and rewarding experiences.

- **Spark new life and local investment** by encouraging the kinds of storefronts, cafés, and cultural activities that residents and visitors want to see—and that make Peachtree an everyday destination, not just a route.

- **Reinforce civic identity and pride** by transforming Peachtree into a place that represents Atlanta's values: connected, green, inclusive, and distinctly local.

By reimagining Peachtree as a street that invites people to stay—not just pass through—we can jumpstart its transition into a place that draws community, culture, and investment shaped by the people who love it most.

Now is the time to unlock Peachtree's full potential. With bold vision and committed support, we can reimagine Peachtree Street as the vibrant, inclusive, and magnetic heart of Atlanta—a street that lives up to its name and legacy.

Tell us:

"I ♥ Peachtree ST NE because

.....



Part 1
Analysis

Project background and goals

Peachtree Street is the heart of Midtown — a place where people come to live, work, shop, dine, and celebrate Atlanta's culture. But in recent years, studies and community input have made clear that Peachtree is not living up to its full potential.

The **Midtown Comprehensive Transportation Plan (CTP)** underscored a critical finding: Peachtree has more roadway space than it needs for cars, and improving pedestrian safety must be a top priority. The **Midtown Public Life Action Plan** also highlighted challenges at the street level, from inactive storefronts to limited opportunities for businesses to truly engage the sidewalk. Together, these efforts point to a clear opportunity: Peachtree can become a safer, more vibrant, and more welcoming main street for everyone.

Community voices are shaping this vision as well. The 2025 Midtown Community Survey found overwhelming support for creating a more balanced transportation network — one that gives pedestrians, cyclists, transit riders, and drivers safer and more comfortable ways to share the street.

From these studies and community insights, the following goals have been set for the Peachtree Street redesign:

- **Prioritize safety and accessibility**. Reduce vehicle speeds, manage curbside activity, and design solutions that protect the most vulnerable users — pedestrians, cyclists, and scooter riders.
- **Re-establish Peachtree as Midtown's "main street."** A welcoming destination where neighbors meet, businesses thrive, and major community events bring people together.
- **Strengthen the business environment.** Expand opportunities for dining, shopping, and street-level activities that add life to the district and improve quality of life for residents.
- **Celebrate history and culture**. Honor Peachtree's rich legacy while showcasing the arts and cultural institutions that make Midtown unique.
- **Preserve and enhance what makes Peachtree special.** Protect the maturing tree canopy, highlight the variety of street spaces, and embrace the corridor's one-of-a-kind setting along Atlanta's ridgeline.

Project extents

For this project, we are focusing on the City-owned segment of Peachtree that stretches from North Avenue (SR 8) to West Peachtree Street (SR 9) – approximately 1.7 miles.

This section of Peachtree not only is the most intensely developed portion of the corridor in Midtown but also exists outside of the state highway system with the most connectivity to transit, bicycle facilities, and a dense network of streets. These factors contribute to opportunities to think about Peachtree more seamlessly with the neighborhood and open more possibilities to envision a new public realm. Through a deep dive into the history of Peachtree in Midtown and multiple observations along the corridor during different points in time, specific qualities, challenges, and opportunities emerged.



This vision for Peachtree creates a true main street, a place that is bustling with people and life. An economic and civic engine for the district.

Planning Context

The evolution of Peachtree

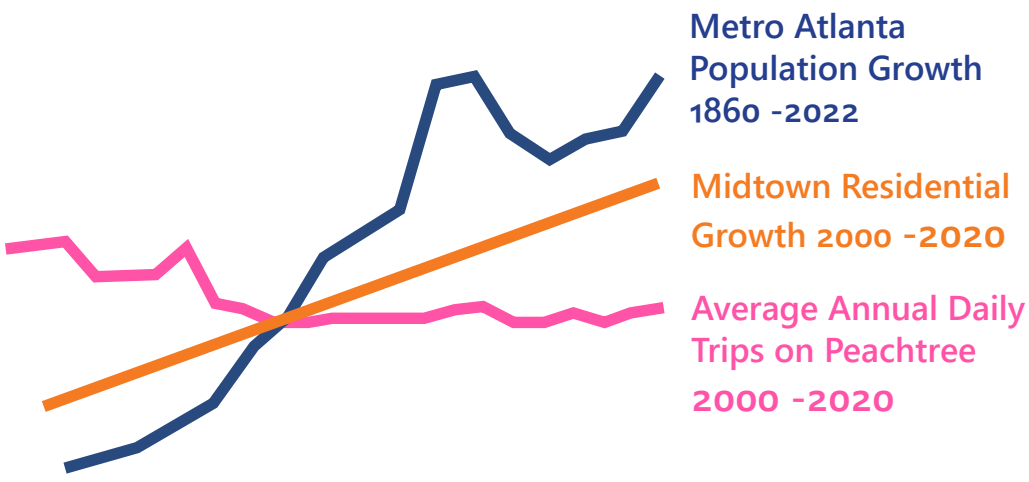
For more than a century, Peachtree Street has been Midtown's "main street" — a central gathering place that has reflected the district's growth, aspirations, and identity. But the character of Peachtree has shifted dramatically over time, shaped by changing development patterns and priorities.

In the mid-to-late 20th century, much of Midtown was dominated by surface parking lots and office buildings designed for commuters. During this era, Peachtree was configured to move cars quickly in and out of the district, prioritizing vehicle flow over neighborhood life.

Over the past three decades, however, Midtown has transformed into one of Atlanta's most vibrant urban neighborhoods. New residential towers, cultural institutions, and mixed-use developments have brought tens of thousands more people to live, work, and spend time along Peachtree. The street has become denser, more active, and more important than ever as a place where people connect.

Yet, with this growth has come tradeoffs. While Peachtree has gained vitality, it has also lost some of the charm and human scale that once defined it. Peachtree has retained its auto-oriented design, even as community preferences have shifted toward walkability, safety, and a stronger sense of place.

Perhaps most notably, despite this surge in development and population, traffic volumes on Peachtree have not measurably increased. This finding underscores an important truth: Peachtree no longer needs to function primarily as a commuter thoroughfare. Instead, it can evolve into a street that better reflects Midtown's identity today — a welcoming, people-focused main street for a growing urban community.



Charting the growth of Metro Atlanta and Midtown as compared to Average Annual Daily Trips (AADT) on Peachtree

Midtown's Unprecedented Growth

2000-2023: a period of substantial growth

Growth in number of units and square footage of:

⬆ 423% residential

⬆ 205% hotel

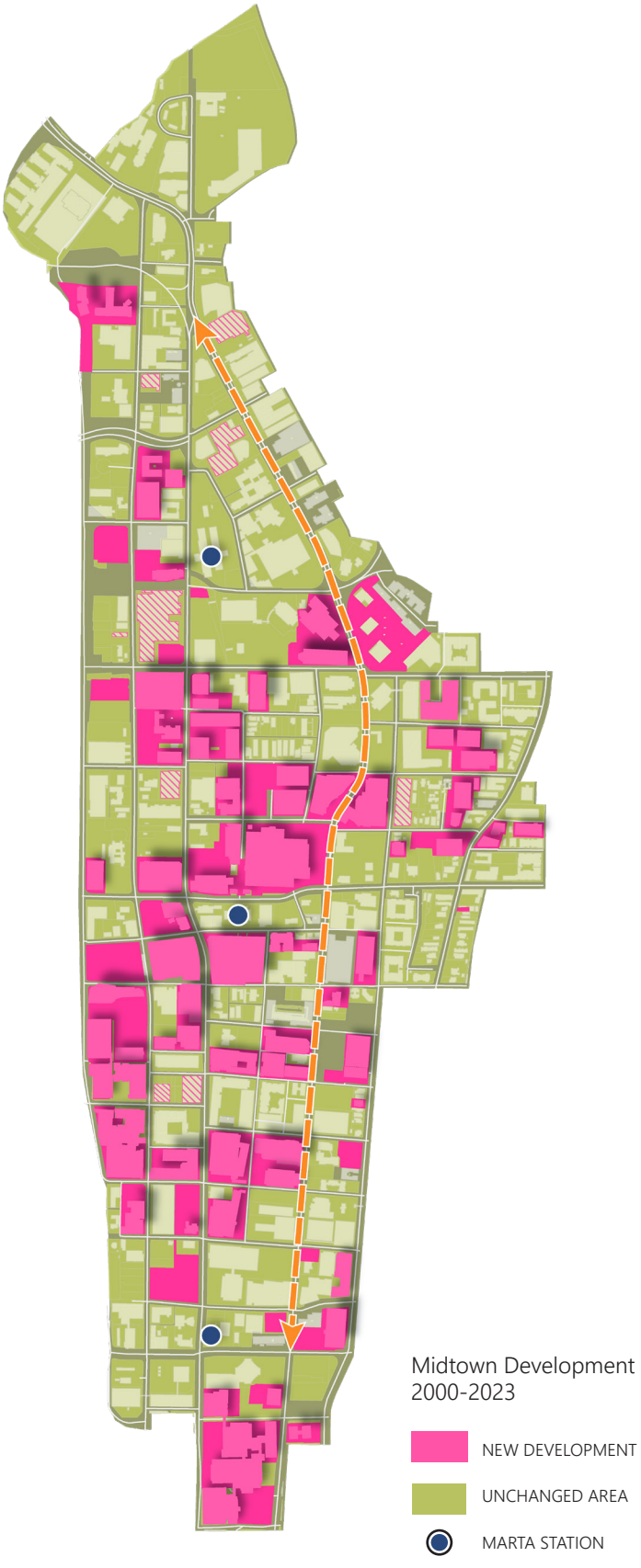
⬆ 182% office space

⬆ 223% institutional

⬆ 335% retail

This growth led to a **DECREASE** *in*

⬇ 26% traffic



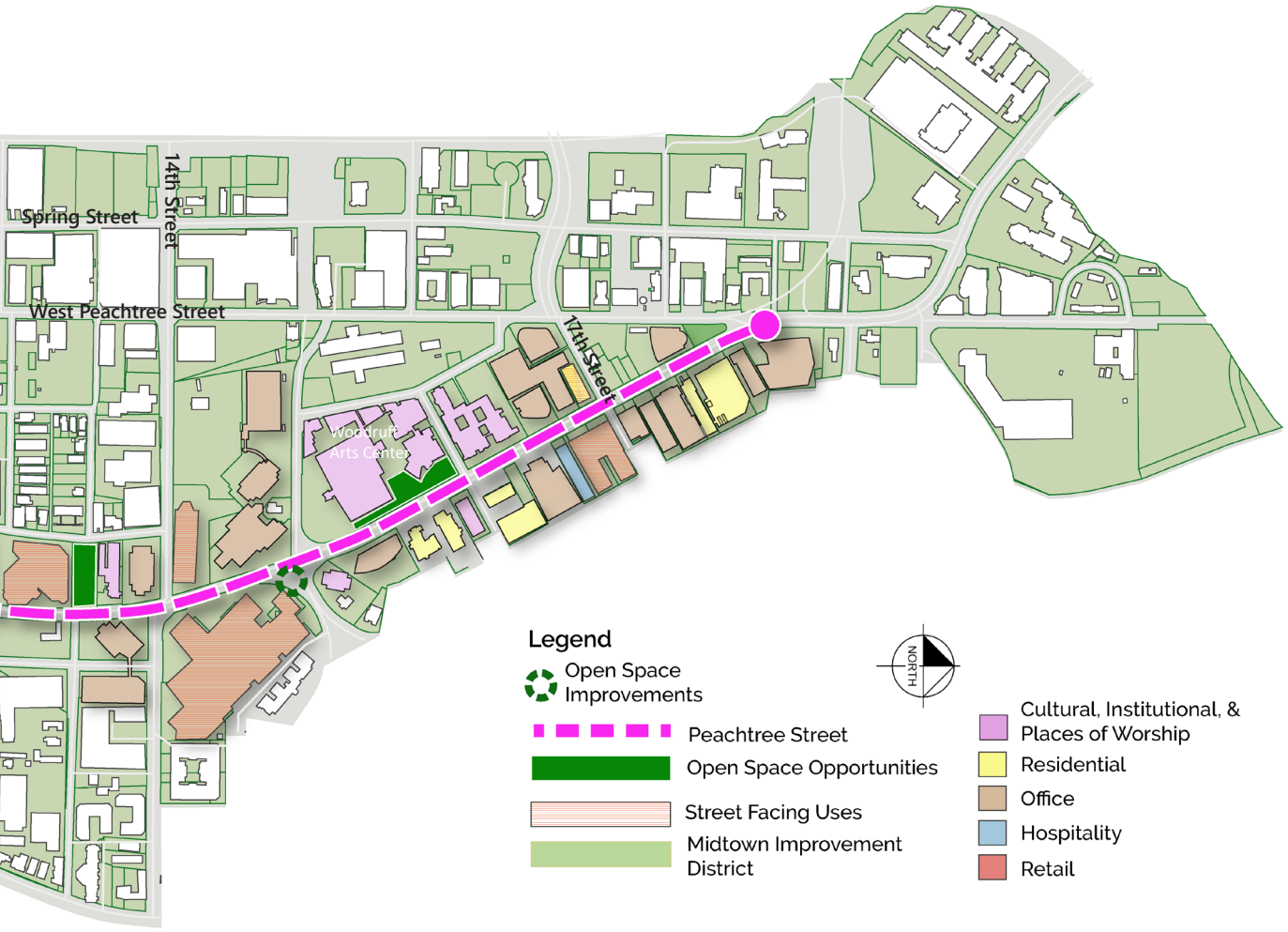


Open Space, Land Use, and Ground Floor Attractors

Peachtree Street functions as Midtown's main street and it's where much of Midtown's development emanated from. The stretch of Peachtree within the study area is home to the historic Fox Theatre on the southern end and the Woodruff Arts Center on the northern end. The corridor generally incorporates mixed-use mid and high-rise development along the length of it. The southern end of the street leans more residential with more street-level business while the northern stretch includes more office uses.

Much of Peachtree Street has opportunities for people attractors such as street facing retail. While this possibility is built into the newer residential buildings along the street and codified in the zoning overlay, many of the existing spaces are either dark retail or uses which do not activate the street.

Over time, Midtown has developed a series of open spaces along Peachtree as opportunistic interventions to activate unused space or to reclaim public space through intersection realignments and lane repurposing such as at 15th Street and Commercial Row on Peachtree Place. Multiple additional opportunities exist along to the corridor to further knit together an open space network as an overlay to Peachtree. Specific near-term opportunities are present with the grove of trees adjacent to the Fox Theatre, in front of the FDA building, and at the High Museum, all of which present opportunities to activate the edge of the street through unique programming and dynamic landscapes.


Spring Street
14th Street
West Peachtree Street
17th Street
Woodruff Arts Center
Legend
Open Space Improvements
Peachtree Street
Open Space Opportunities
Street Facing Uses
Midtown Improvement District
NORTH
Cultural, Institutional, & Places of Worship
Residential
Office
Hospitality
Retail



Access and Circulation

Peachtree Street is more than just a road — it is a **multi-modal corridor** that serves a wide variety of users every day. People travel on foot, by bike, on scooters, in cars, and aboard buses. It is also well-used by delivery and service vehicles. This diversity of travel modes reflects Peachtree's role as both a neighborhood main street and a regional destination.

Peachtree Street's current design tries to do two things at once: **move cars quickly** and **create a safe, welcoming environment for people on foot.** In reality, it succeeds at neither. Streets that prioritize fast vehicle movement inevitably compromise pedestrian comfort and safety, while streets designed for walking cannot function as efficient thoroughfares. By attempting to be both, Peachtree ends up falling short of its full potential.

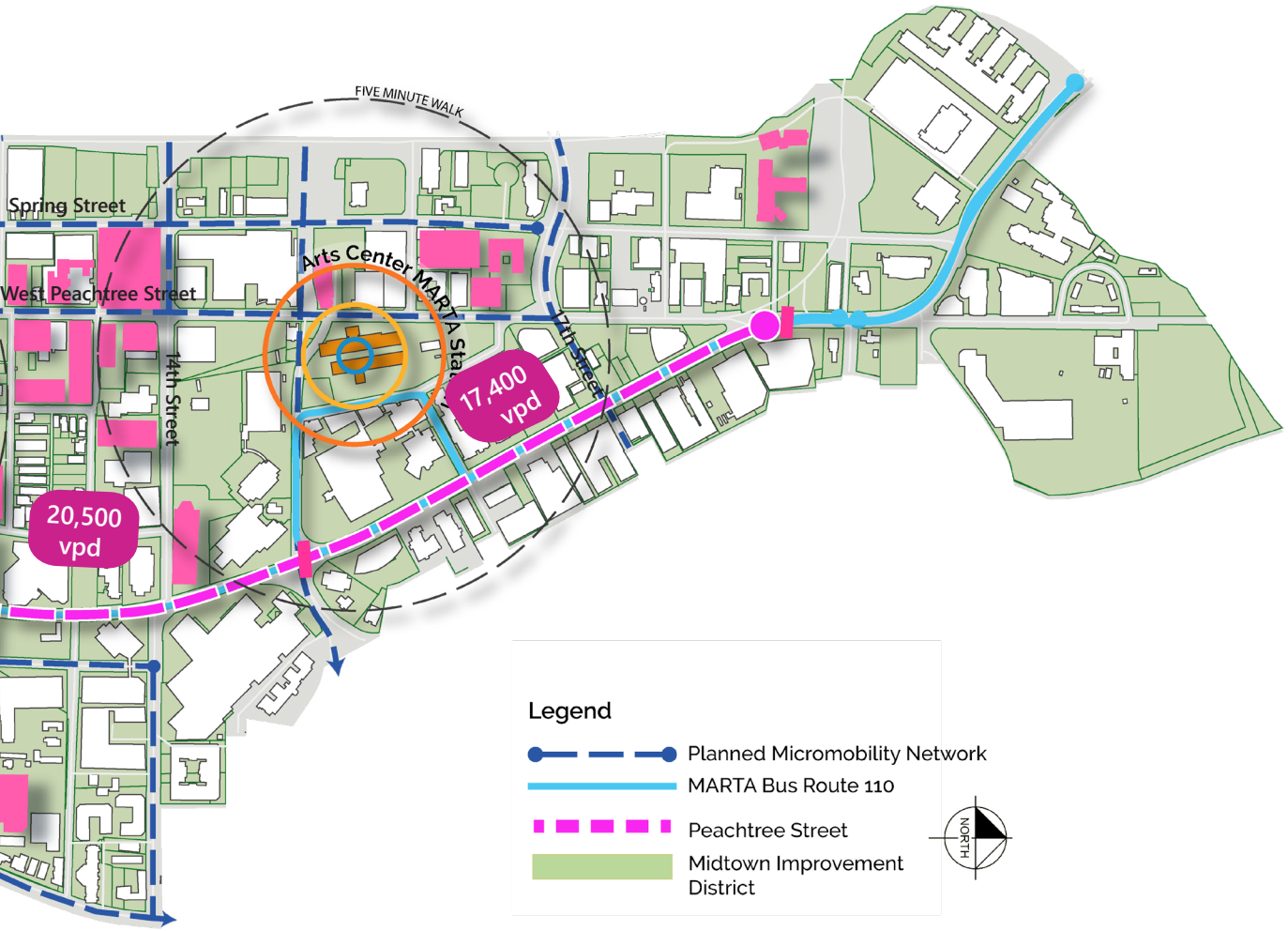
Vehicular Activity

While Peachtree is not the most efficient route for through traffic, it still carries a significant volume of cars each day. Given the density of destinations along the corridor, Peachtree often functions as the **"last mile" connection** for trips that begin on the Interstate and end at Midtown's offices, residences, and cultural venues. However, the efficiency of vehicle travel is increasingly undermined by **illegally parked delivery trucks and curbside activity** that block travel lanes. These conflicts contribute to congestion, delays, and frustration for drivers, while highlighting the need for better curb management and a more balanced street design.

- Peachtree Street in Midtown carries approximately **15,000 vehicles per day** on its southern end, about **18,000 vehicles per day** through its middle section, and about **17,500** in the northern segment.
- By comparison, **Peachtree Road just north of Midtown** carries about **42,000 vehicles daily** — more than double Midtown's volumes.
- Importantly, traffic volumes on Peachtree in Midtown have remained steady over time, even as the district has experienced extraordinary growth in residents, jobs, and destinations.

Pedestrian Activity:

Of all the users of Peachtree, **pedestrians define the street the most**. Peachtree has some of the highest pedestrian volumes in the city, with daily counts rivaling many peer districts across the Southeast, but its volumes still trail behind other signature destinations in Atlanta and beyond. This pedestrian energy is what gives Peachtree its



vibrancy — but it also underscores the need for a safer, more comfortable public realm that prioritizes people first.

- In 2024, average daily pedestrian counts ranged from **385 per day** at the northeast corner of 17th Street to **2,735 per day** at the northwest corner of 7th Street.
- By comparison, the Atlanta BeltLine Eastside Trail averages more than **5,300 pedestrians daily**.
- For context, on **5th Avenue in New York City**, some locations see more than **35,000 pedestrians per day**.

Transit Access

Peachtree Street is one of the most transit-rich corridors in Atlanta. Three MARTA heavy rail stations — North Avenue, Midtown, and Arts Center — are located just one or two blocks west of Peachtree, giving riders relatively fast and reliable connections to MARTA's service area.

Two bus routes also serve the street:

- Route 40 operates along Peachtree between Downtown and Arts Center Station, with frequent stops. As part of MARTA's NextGen Bus Network Redesign, Route 40 will soon be eliminated due to low ridership and overlap with the nearby rail line.
- Route 110 continues north from Arts Center Station through Buckhead.

While buses provide important connections today, bus stops along Peachtree currently offer little more than signage, with few amenities to support riders.

Bicycles and Micromobility

Although Peachtree lacks dedicated bike lanes, it still attracts a steady flow of people on bicycles and scooters. Riders are drawn by the street's many destinations, its central location, and its relative flatness compared to other Atlanta corridors. Midtown's growing **micromobility network** — including protected lanes on parallel streets and multiple east-west connections — feeds into Peachtree, reinforcing its role as a key destination within the network.

Peachtree already possesses many of the "must haves" for a great pedestrian environment — density, cultural hubs, restaurants, and a diverse mix of uses. Yet, it has not fully realized its potential to be the defining public space in Atlanta. The challenge, and the opportunity, lies in shifting our approach: **from treating Peachtree primarily as a traffic corridor to designing it as a true place for people.**

Strengths and Challenges

Peachtree's Strengths

Many of the building blocks of a **vibrant, people-oriented street** are already in place along Peachtree. The corridor offers a strong physical framework, a maturing tree canopy, and a distinctive identity — the result of planning and design efforts led by Midtown Alliance in the early 2000s. That initiative established a unified palette of materials, street furniture, and lighting, along with zoning standards that encouraged active ground-floor uses and generous sidewalks. Together, these features laid the foundation for Peachtree as Midtown's signature street.

Spatial Elements: A Street made for Strolling



Peachtree's design creates a rhythm and sense of movement that encourages people to walk. **A five-foot-wide furniture zone** with regularly spaced street trees and pedestrian scaled lights provides definition and comfort while accommodating benches, trash bins, bicycle racks, and other street furniture.

Between this zone and the building faces, zoning regulations call for a **20-foot-wide clear sidewalk**, sometimes expanded by an additional five-foot supplemental zone for café seating or displays. While these widths vary across the corridor — narrowing near historic buildings and widening in front of newer developments — the variation itself contributes to Peachtree's charm. The subtle "sway" of the sidewalk creates moments of **compression and openness**, offering opportunities for pocket parks, patios, plazas, and gardens that bring life to the street.

Although some materials, such as the concrete pavers and groundcover plantings, are showing signs of wear, the **cohesive streetscape palette** remains a valuable foundation to build upon. With thoughtful maintenance and design updates, these spatial qualities can continue to shape Peachtree into a comfortable, engaging place for people.

A Tree-Lined Street: Midtown's Living Canopy



One of Peachtree's greatest assets is its **lush and diverse tree canopy**. Along this stretch, five species of oak, two of elm, as well as maples, hollies, magnolias, and even a ginkgo tree line the sidewalks. The oaks, in particular, give Peachtree its recognizable rhythm — a living architecture that frames the street and shades those who walk beneath it.

While some trees are already mature, most are still within their first 25 years, meaning Peachtree's canopy will only become more impressive over time. Beyond their beauty, these trees play a critical environmental role — filtering air, managing stormwater, and dramatically reducing surface temperatures. On a typical summer day, **temperatures in the shade of Peachtree's trees can be more than 30 degrees cooler than in direct sun** as measured in the field.

Among dense urban main streets, few can rival Peachtree's lush tree canopy. Preserving and enhancing this living landscape is vital to the street's character and comfort. Future improvements should build upon this strength, keeping greenery at the heart of Peachtree's identity and daily experience.

A Strong Framework: Midtown's Connected Grid

Midtown's underlying street network is one of its greatest advantages. A fine-grained, highly connected grid supports walking, biking, and transit access while distributing vehicle traffic across multiple routes. Over the past two decades, Midtown Alliance and the City of Atlanta have worked to strengthen this framework — converting one-way streets to two-way, adding traffic signals and safe pedestrian crossings, and expanding a growing network of protected bicycle facilities.

This interconnected structure means Peachtree doesn't have to serve every mode equally. Wider, parallel north–south streets such as Spring and West Peachtree are better suited for through traffic and bicycle commuting, while existing and planned east–west connections link those users conveniently to Peachtree Street. Peachtree can instead focus on what it does best: being the heart of Midtown's public life.

With three nearby MARTA stations, robust regional and local bus connections, and a highly walkable block pattern, Peachtree has all the ingredients needed to become a truly people-first corridor. The Midtown community has consistently expressed this vision through surveys and planning efforts: residents and workers want a main street that prioritizes walking, gathering, shopping, and celebration — not just movement.

Peachtree should be a place to arrive at, not simply pass through — a place to meet friends, experience culture, and feel connected to the rhythm and identity of Midtown. Vehicular access will always remain part of the street, but it should no longer define it.



Peachtree's Challenges

While Peachtree Street possesses many of the ingredients of a great urban corridor, several key challenges prevent it from fully realizing its potential as Midtown's true main street. Many of these stem from design decisions made decades ago when Midtown was a collection of office buildings surrounded by parking lots, and streets were built to move cars rather than connect people.
Today, the district has transformed into a dense, mixed-use neighborhood, yet Peachtree's design has not kept pace. Three primary challenges shape how the street functions today: an outdated roadway design, unsafe speed and lane conditions, and limited street-level activation from adjacent buildings.

The Current Design of Peachtree

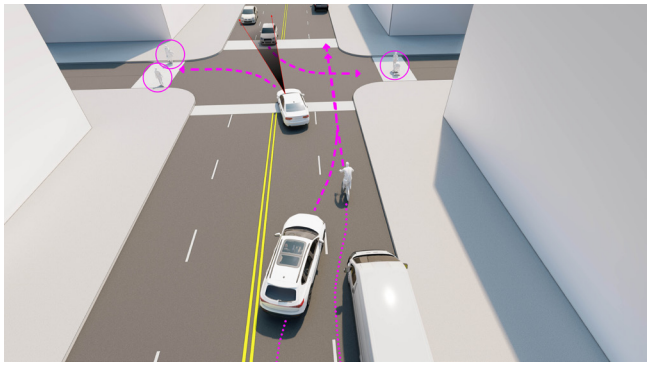
Within the project area, Peachtree Street takes on three main roadway configurations:

- **From North Avenue to Peachtree Place**: two lanes in each direction.
- **From Peachtree Place to 14th Street:** two lanes in each direction plus a dedicated left turn lane.
- **From 14th Street to West Peachtree Street:** two lanes in each direction, with intermittent medians, turn lanes, and limited on-street parking.

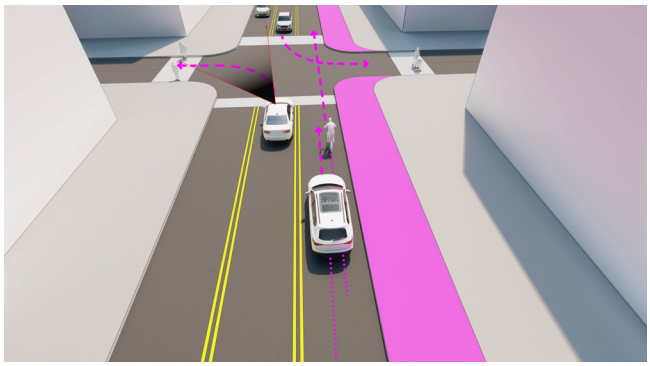
Across all segments, one pattern stands out — Peachtree devotes more space to vehicles than current traffic volumes require, creating both inefficiency and safety risks.

Despite decades of significant growth in Midtown, **vehicular volumes have remained steady or declined**. Many trips that once relied on cars are now made by walking, biking, or using scooters and transit. This shift further highlights the mismatch between the street's design — intended to accommodate high-speed, high-volume traffic — and today's multimodal use.

One of the most significant safety concerns of Peachtree's current design is the **dangerous left turns** that occur where no dedicated turn lanes exist. Drivers attempting to turn left often **cannot see around opposing left-turning vehicles**, making it difficult to judge gaps in oncoming traffic. At the same time, drivers frequently fail to adequately focus on pedestrians crossing at these intersections, creating a dangerous scenario for people on foot. This combination of lane geometry, excess pavement, and insufficient turn infrastructure is a major safety issue inherent to Peachtree's current design.



THE CURRENT UNSAFE CONDITIONS DUE TO GEOMETRY



IMPROVED LANE GEOMETRY MINIMIZES SAFETY CHALLENGES

Another factor affecting safety is Peachtree's **relative straightness**, and the lack of what roadway engineers call **horizontal deflection**. Streets with more curves or subtle shifts naturally command a driver's attention, encouraging slower speeds and greater vigilance. Peachtree's long, straight alignment, by contrast, can contribute to driver inattention, amplifying the risks associated with speeding, left turns, and curbside activity. This characteristic provides important context for one of the corridor's key safety recommendations: the introduction of **chicanes or lane shifts** to subtly slow traffic and increase driver awareness without reducing mobility.

The result is a street that is overbuilt for cars but under-designed for people, with wide lanes, unsafe turning movements, and long straight stretches contributing to discomfort and risk for pedestrians, cyclists, and drivers alike.



ILLEGAL LOADING

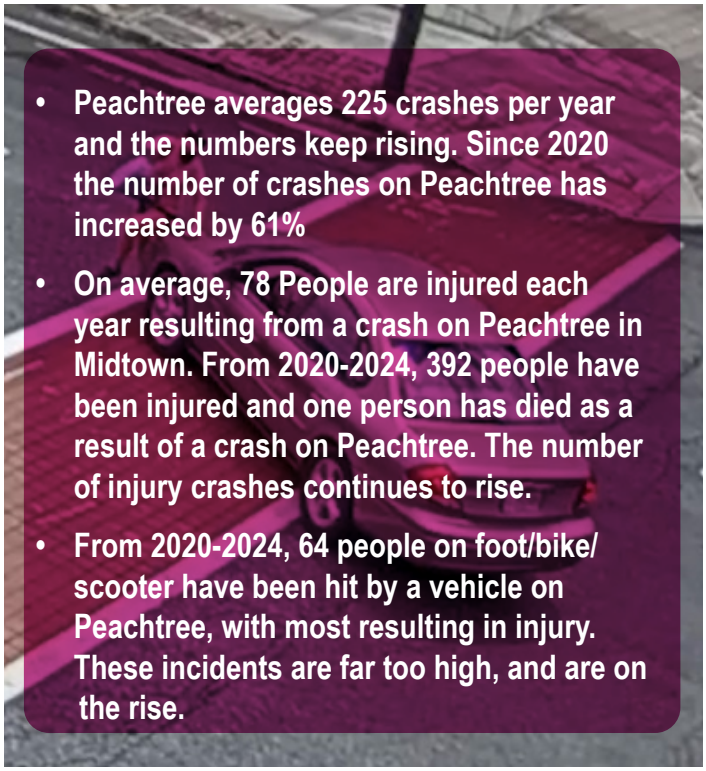
Illegal Parking and the Curbside Delivery Challenge

One of Peachtree Street's most **persistent operational challenges is illegal parking** in curbside travel lanes, primarily by delivery vehicles. Because Peachtree's current design provides excess roadway capacity and limited designated loading zones, drivers frequently stop in the outer travel lane to make quick deliveries. Over time, this behavior has become normalized—reinforced by inconsistent enforcement and the perceived availability of extra space.

The impact is far greater than a momentary inconvenience. **Each illegally parked vehicle effectively reduces Peachtree to a two-lane street**, forcing drivers to weave unpredictably around stopped trucks and vans. This leads to sudden braking, rear-end collisions, and dangerous side swipes, particularly during peak hours when sight distances and reaction times are reduced. The blocked lanes also impede emergency response times, creating safety risks that extend far beyond traffic flow.

What's most frustrating is that this problem is largely a product of design, not necessity. Nearly every building along this stretch of Peachtree has a loading dock or access via a side street—yet delivery drivers choose the curb out of convenience and efficiency. The rise of the on-demand economy has only amplified the issue, as more deliveries compete for limited curb space in real time.

A more intentional street design can change this behavior. By reallocating space to create clearly defined, time-limited loading areas and reinforcing them with consistent enforcement and visual cues, Peachtree can maintain its function while dramatically improving safety and reliability. Addressing this issue head-on is essential to restoring Peachtree's dignity as a main street—one that prioritizes people, not parked trucks.



Peachtree - a 'Triple Threat Street'

Peachtree has the unfortunate distinction of being designated a **"Triple Threat Street"** in the City of Atlanta's Vision Zero Plan — meaning it appears on three overlapping safety networks:

- The **High Injury Network** which defines the streets and intersections where the largest concentration of fatal and serious injury crashes occur.
- The **Systemic Risk Network** which identifies streets with attributes related to roadway design, land use, and other elements that are associated with high-risk locations, and
- The **Community Feedback Map** which includes streets identified as unsafe by the community.

In the Vision Zero plan, Peachtree ranks **#11 out of 225** streets on the city's **High Injury Network** — underscoring the urgency of redesigning it for safety.

- Peachtree Street in Midtown currently averages **225 crashes per year**. Since 2020 the number of crashes on Peachtree has **increased by 61%**.
- On average, **78 people are injured each year** resulting from a crash on Peachtree in Midtown. From 2020-2024, **392 people have been injured and one person has died** as a result of a crash on Peachtree. The number of injury crashes continues to rise with crashes increasing by 36% during this period.
- From 2020-2024, **64 people on foot/bike/scooter have been hit by a vehicle on Peachtree**, with most resulting in injury. These incidents are far too high and are on the rise.

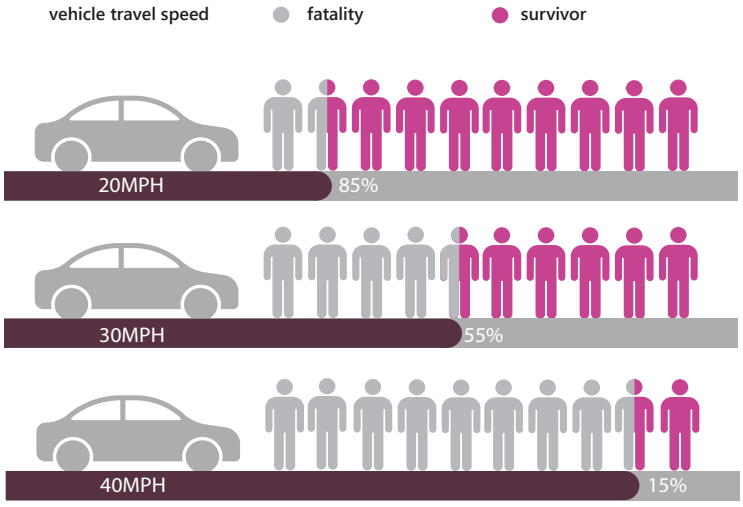
Excess Roadway and Unsafe Speeds

Why does speed matter so much? Research from the Federal Highway Administration and the National Transportation Safety Board shows a direct link between vehicle speed and both crash likelihood and injury severity.

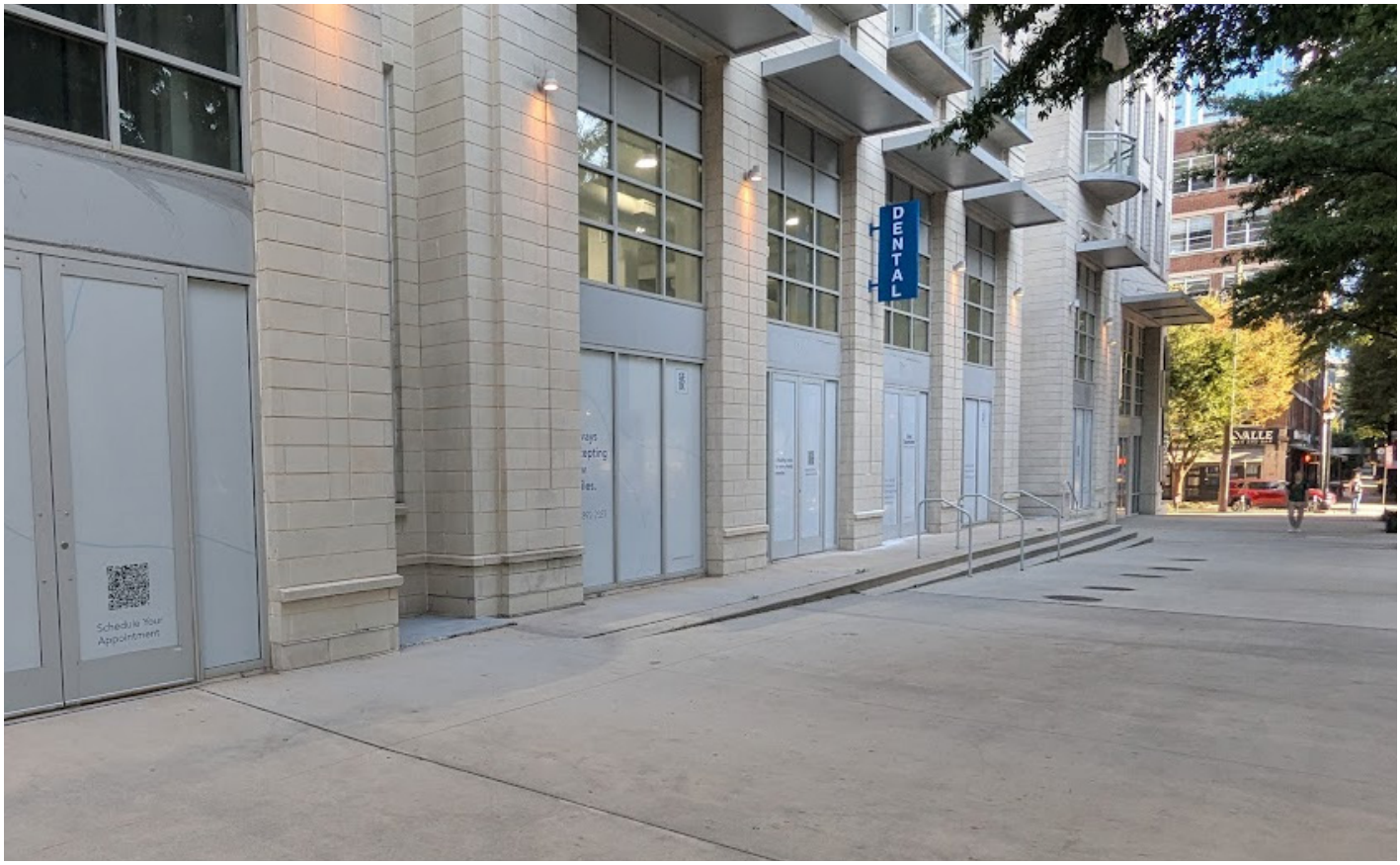
- At **20 mph**, a pedestrian struck by a vehicle has a **85% chance of survival**.
- At **40 mph**, survival **drops to 15%**.

In short, slower streets save lives.

Peachtree's current design — with multiple lanes and frequent illegal curbside loading — contributes to erratic driving behavior. Drivers weave in and out of lanes to avoid stopped vehicles, especially near fast-casual restaurants or package drop-off locations. These behaviors reduce visibility, increase crossing risk, and heighten tension for everyone using the street.



Statistics compiled by the National Transportation Safety Board



INACTIVE STORE FRONT

Storefronts and Street-Level Activation

Peachtree today lacks the everyday energy of a true main street — outside of special events, the street offers few reasons for people to stop, linger, or return. This major challenge for Peachtree lies not in its roadway, but in its **edges**. While newer developments generally comply with zoning standards for active ground floors, the street still struggles with long stretches of inactive frontage. Many ground floor spaces house uses that don't encourage foot traffic. Others were designed before today's expectations for vibrant, open public spaces.

The result is an inconsistent pedestrian experience — occasional lively storefronts scattered amongst mostly quiet, underused blocks. Some of this reflects changing habits since the pandemic, as many residents shifted toward delivery over in-person shopping or dining. But it also reflects untapped opportunity: demand clearly exists for **street-level dining, shopping, and gathering spaces**.

Beyond the types of uses along the street, Peachtree suffers from a **lack of dynamism in its public realm**.

Outside of internally focused events at cultural venues, the street presents a largely uniform experience from day to day, offering few reasons for people to return regularly. Plazas, supplemental zones, and setbacks are often uninviting, failing to encourage lingering, casual seating, or social interaction.

This underutilization is compounded by the street's **vehicular-dominated design**. Streets like Peachtree that are designed for cars limit opportunities for sidewalk cafés, street vendors, and other active uses that are critical to the character of a main street. As a result, Peachtree does not fully capitalize on its potential to foster a lively, engaging, and people-centered environment.

The Opportunity Ahead

Peachtree's challenges are not insurmountable — they are design challenges, not destiny. With a rebalanced street layout, safer speeds, and more engaging edges, Peachtree can once again become the **vibrant, people-first main street that Midtown deserves**.

Part 2
Public Engagement

Before designing a new plan for Peachtree Street, the project team conducted **months of study and community engagement** to understand the needs, concerns, and aspirations of people who live, work, and visit Midtown. This effort focused on identifying not only the frustrations people experience today but also what they'd like to see and experience along their main street in the future.

Community Meeting 1 - November 2023

The first community meeting introduced the public to the design team's early thinking. Kimley-Horn and Snohetta presented **concept diagrams** illustrating Peachtree's existing conditions and its potential to become an iconic corridor. The graphics were designed to help community members **see the street they traverse every day in a new light**, highlighting both challenges — such as an oversized roadway that encourages speeding — and opportunities for engaging public spaces.

At the conclusion of the presentation, participants shared their thoughts verbally as well as through **comment postcards**, providing feedback on the street's challenges, opportunities, and overall vision. These insights directly informed the corridor vision presented in the second community meeting.

Between the first and second meetings, the design team developed preliminary concepts for **rebalancing the roadway, expanding sidewalks, accommodating curbside needs, and implementing other traffic interventions**, setting the stage for more detailed discussions with the community.

Community Meeting 2 - March 2024

The second meeting took the form of an **open house**, allowing participants to interact directly with the design concepts. Two large-format plans of Peachtree Street were displayed on tables, where attendees could draw, comment, and place notes. To inspire ideas, the team also presented **precedent images from streets around the world** that successfully balance human comfort with functionality.

All comments collected during the open house were carefully r**ecorded, cataloged, and analyzed by topic**, ensuring that community input continued to shape the evolving vision. The insights gathered informed key decisions about pedestrian spaces, street design, and public realm improvements, reinforcing the project's commitment to a **people-first vision for Peachtree Street.**

Looking Ahead

Public engagement is an ongoing process. As the project moves forward, the team will continue to **seek input from residents, commuters, businesses, and visitors**, ensuring that the final design reflects the desires of the Midtown community and creates a street that is safe, vibrant, and welcoming for all users.



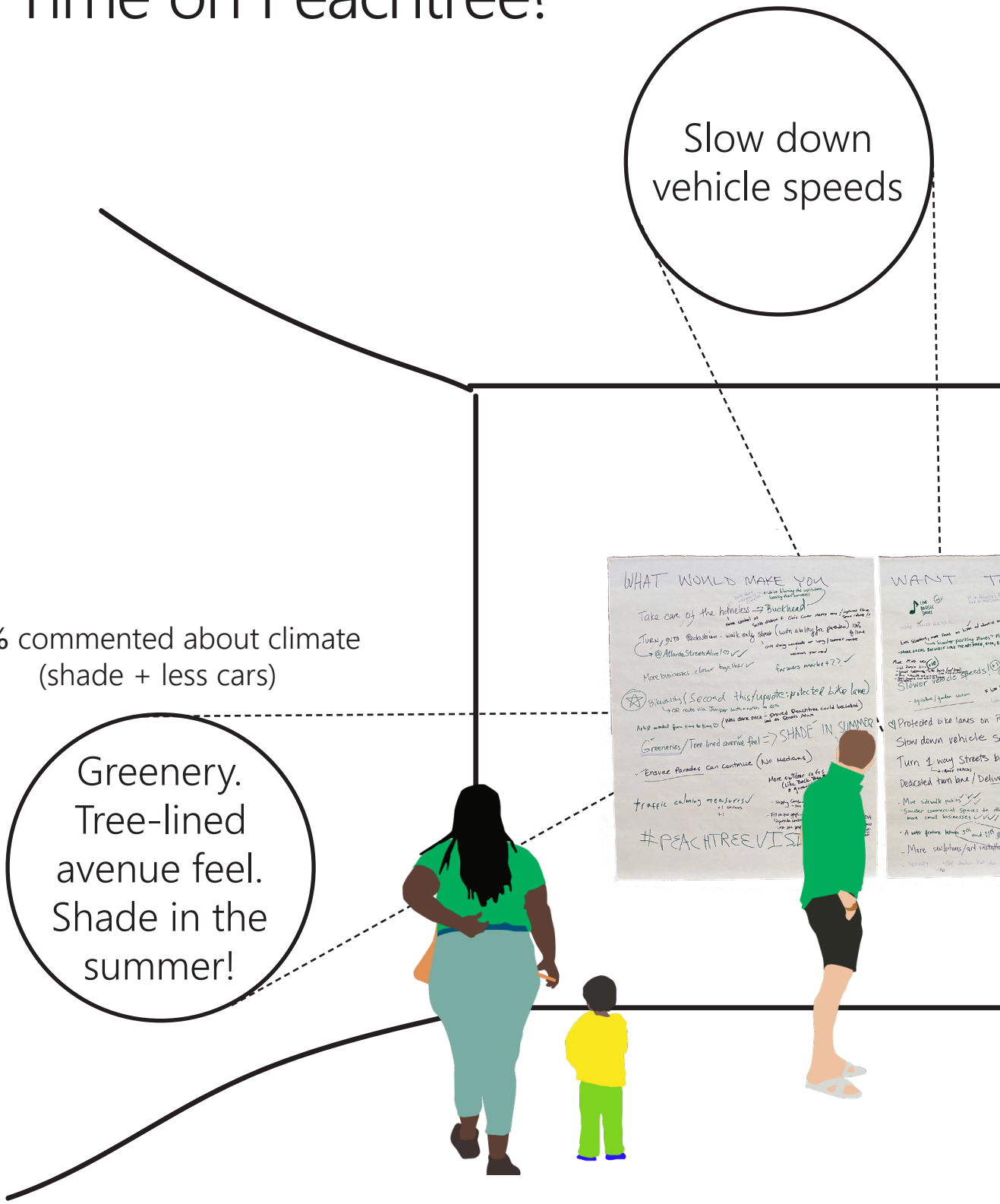



The Wimbish
Sidewalk is too narrow here
Vacancy
Bank of
Traffic signal priority for buses
Add Seating Where the Buildings hit the sidewalk to activate dead
No Median

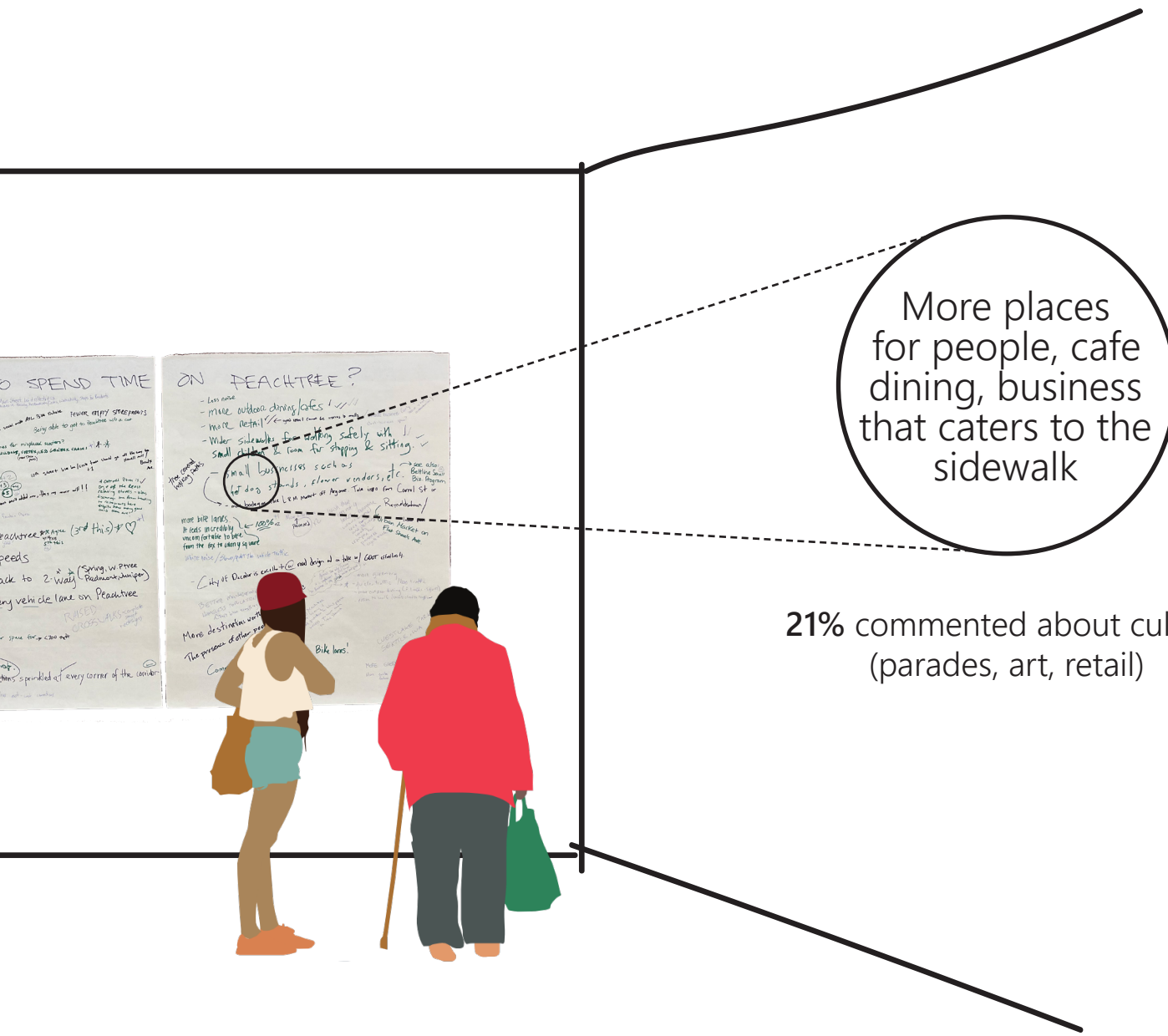




"What Would Make You Want to Spend Time on Peachtree?"



65% commented about comfort (seating, slower cars, more side-walk)



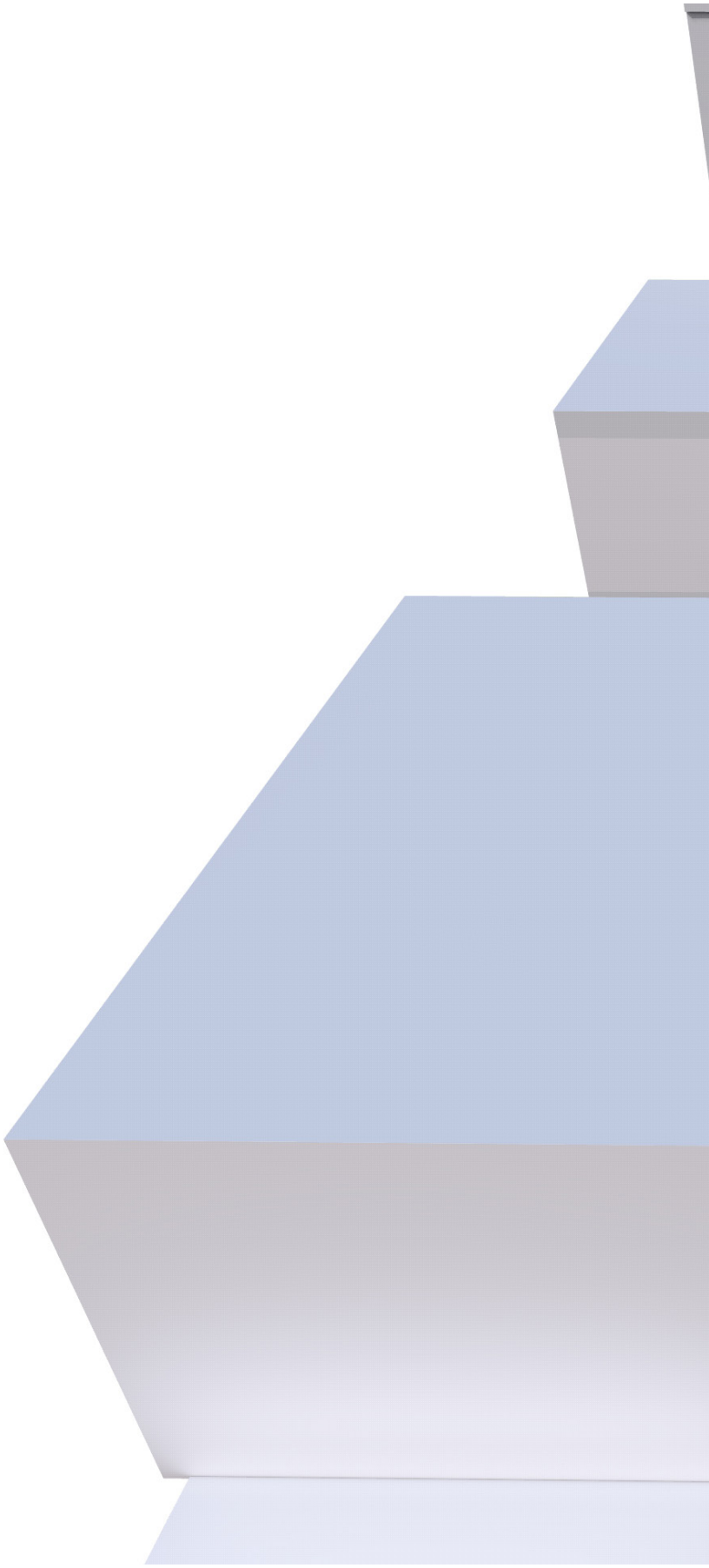
21% commented about culture (parades, art, retail)

Part 3
Vision

Conceptual Plan Vision Overview

The conceptual plan for Peachtree Street represents the culmination of **community input, analysis of existing conditions, and best practices for vibrant urban streets**. The vision prioritizes **people first**, with cars treated as invited guests rather than the dominant presence. Key elements of the plan include:

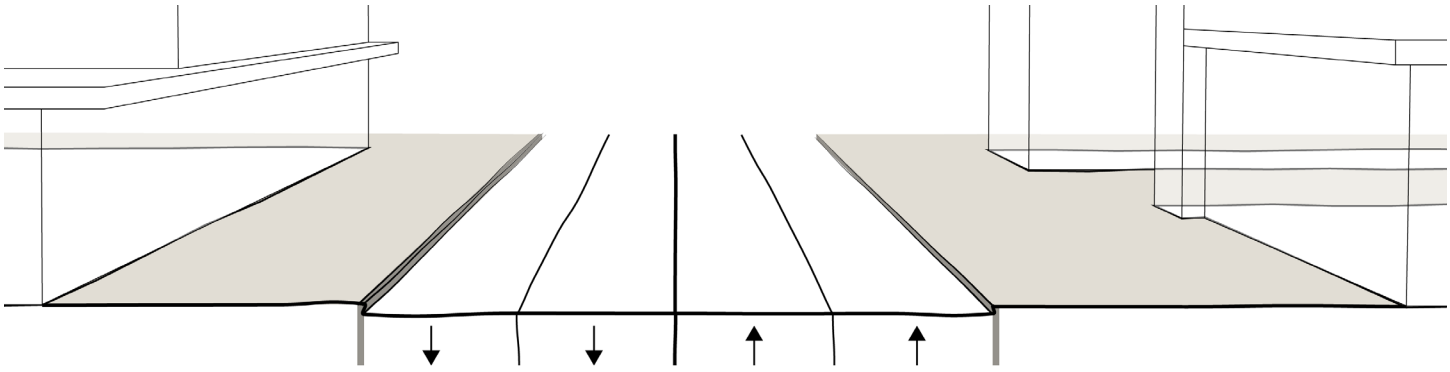
- **Providing more space for people:** Midtown continues to grow in population and density, and Peachtree must keep pace. The plan strategically **expands sidewalks** to create more room for pedestrians, dining, gathering, and leisurely enjoyment of the street.
- **Offering a safer pedestrian experience:** Rebalancing street space, adding **lane shifts**, and incorporating **raised intersections and mid-block crossings** will slow vehicle speeds, improve driver awareness, and reinforce Peachtree's pedestrian-first identity.
- **Creating a garden experience:** Building on the existing tree canopy, the plan adds layers of **additional landscaping, shade, and comfort** to make Peachtree an inviting, park-like urban corridor. This reinforces Atlanta's identity as a "city in a forest" and creates a street environment that residents and visitors can be proud of.
- **Flexible design:** The plan introduces **movable planters and adaptable zones** that can define gathering spaces, open for festivals, or provide parking and delivery areas depending on the time of day. This flexibility allows the street to serve multiple functions without compromising safety or vibrancy.
- **Enhancing the public realm:** By creating a **more supportive environment for restaurants, retail, and cultural venues,** the plan encourages street-level activity, supports existing businesses, and attracts new uses that meet the community's needs.



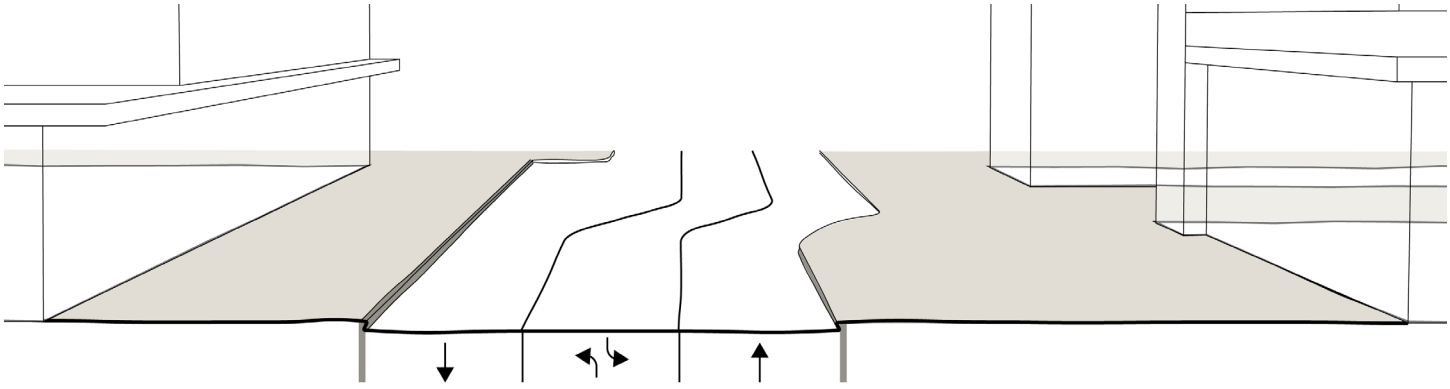


Reframing the Road

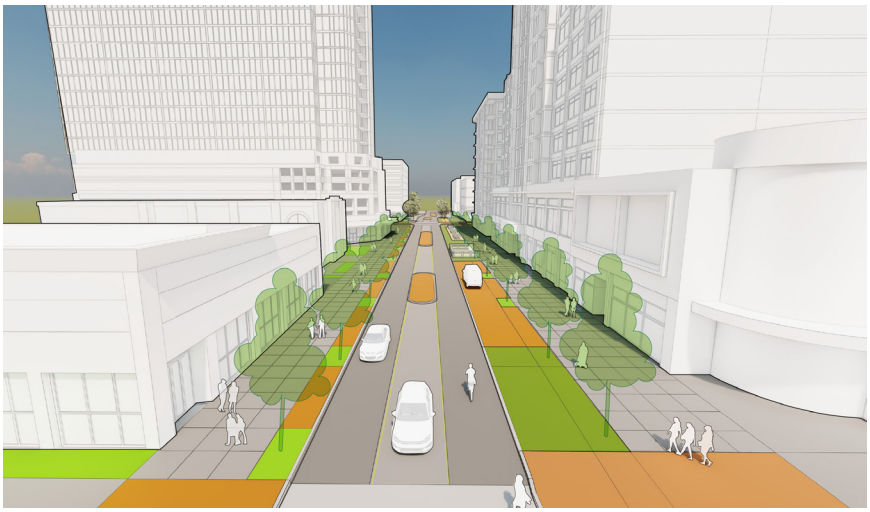
At the heart of Peachtree's transformation is rethinking how the roadway itself is designed. Current traffic patterns and volumes reveal that the street is inefficiently designed and that design has safety and comfort implications. By reallocating space, the plan addresses Peachtree's safety, pedestrian comfort, and underutilized public realm — all while preserving the corridor's existing strengths.



Existing condition - Four or Five lane, two way road
Today, Peachtree's multiple lanes in each direction encourage **weaving behaviors**, as drivers navigate around illegal curbside loading and left-turning vehicles. The result is **effectively a one-lane street in each direction**, increasing frustration and risk while discouraging foot traffic.

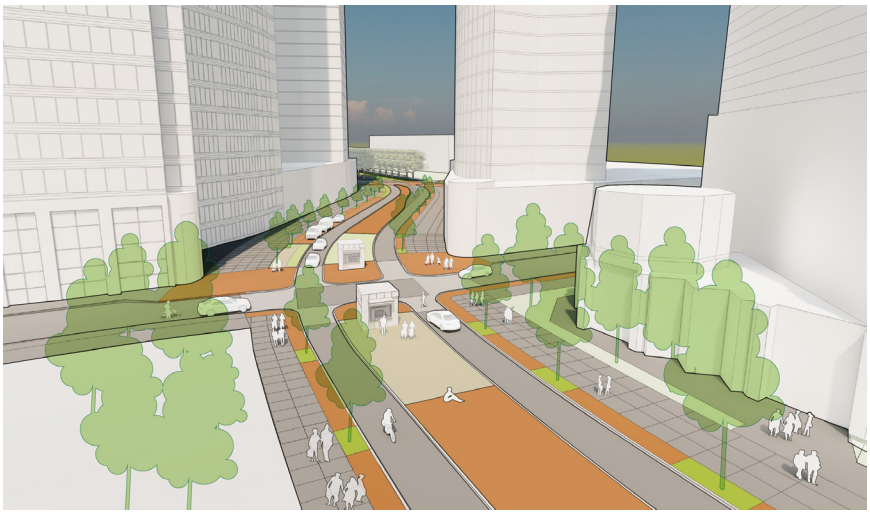


Proposed condition - Two lane, two -way road with formalized turn lanes
This simple yet transformative approach **reallocates vehicular space to sidewalk and loading needs**, improving safety and expanding areas for pedestrians, cafes, and landscaping. Where possible, **lane shifts (aka "chicanes")** create horizontal deflection, further calming traffic and improving driver attentiveness.



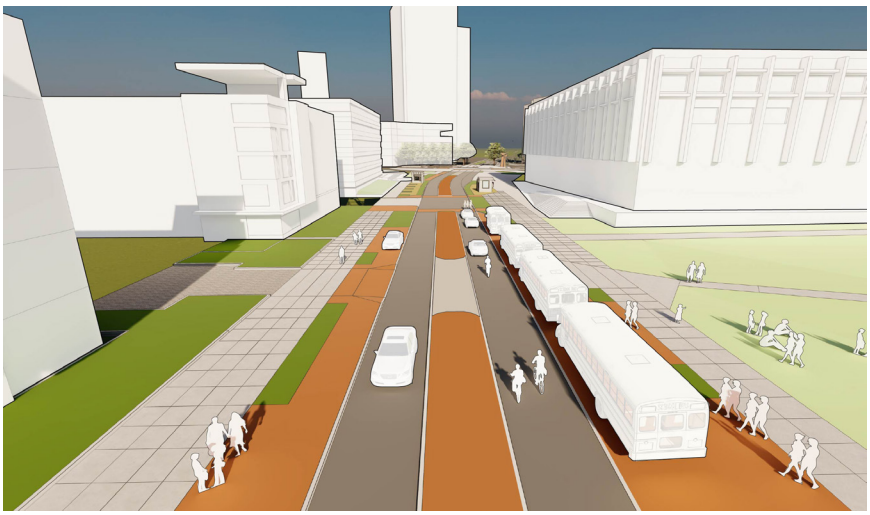
Proposed condition - Peachtree at 6th

- One travel lane in each direction, with a dedicated center left-turn lane.
- One travel lane is reallocated to pedestrian space, flexible loading zones, café areas, and expanded landscaping.
- The reallocated space can shift from **east to west** depending on retail or pedestrian needs, creating subtle **chicanes** to slow vehicles and encourage attentive driving.



Proposed condition - Peachtree at 12th

- One travel lane in each direction.
- 30+ feet of asphalt reallocated to a broad median that can serve as space for small kiosks and seating areas, while maintaining emergency vehicle access and the ability to close the street for festivals/parades/races.



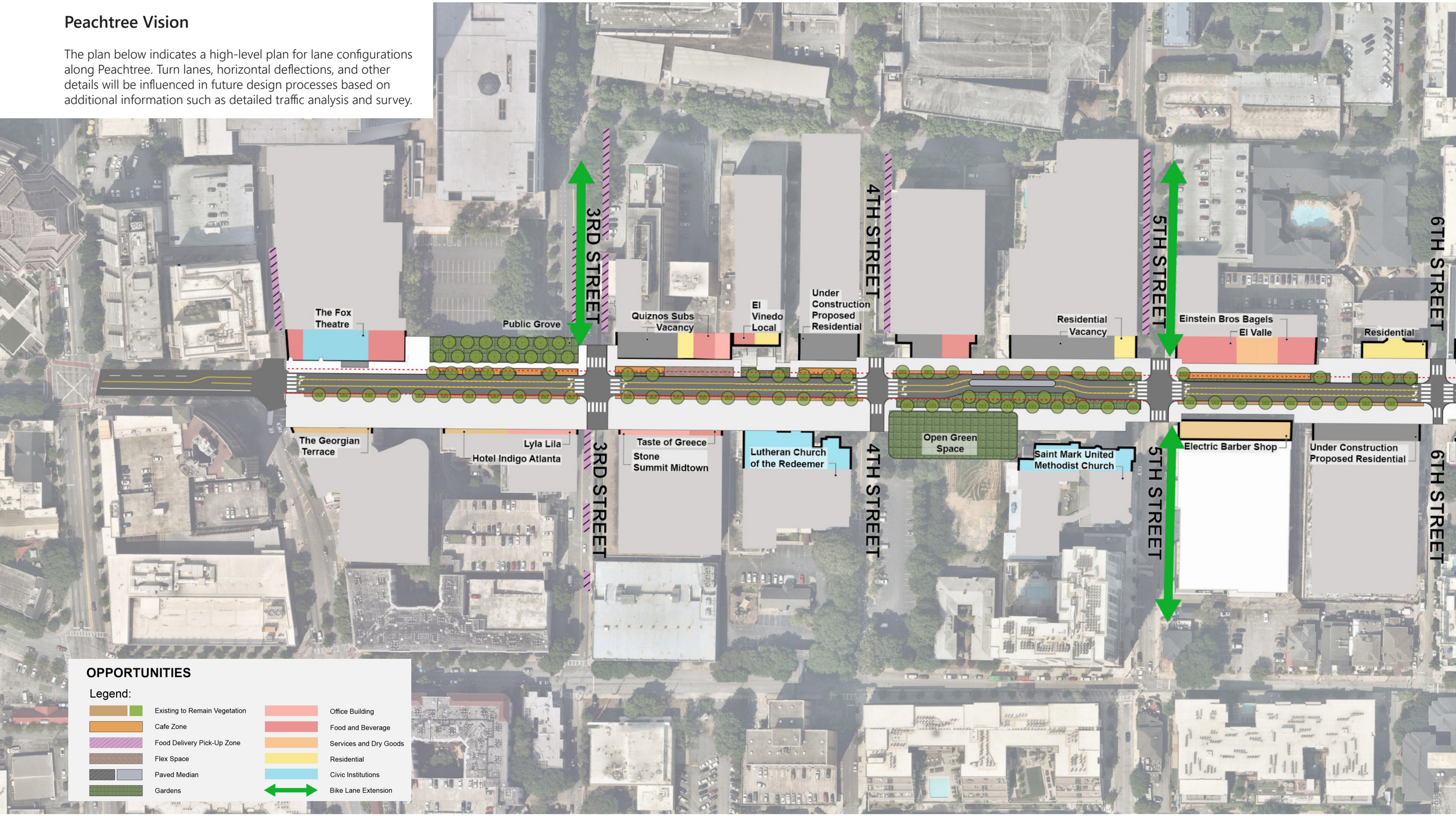
Proposed condition - Peachtree at 16th

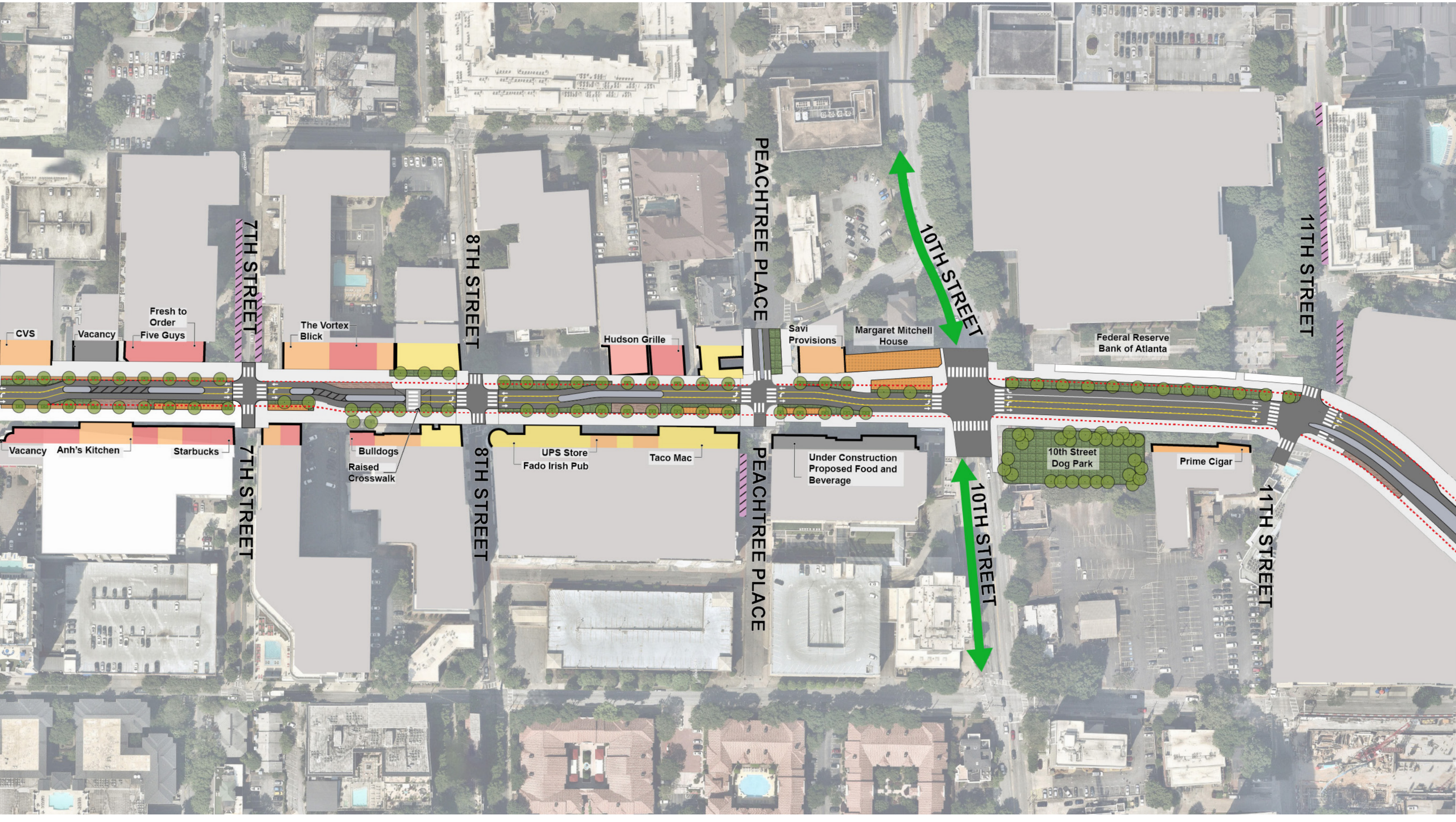
- One travel lane in each direction.
- Additional asphalt converted to **flexible loading zones** along both sides of the street, supporting buses and drop-offs for the **Woodruff Arts Center Campus.**
- New **medians and crossing points** shorten pedestrian crossings and improve safety.

This conceptual plan **transforms Peachtree from a car-dominated corridor into a people-first main street**, maintaining necessary vehicular access while creating an **inviting, dynamic, and safe public realm** that supports Midtown's residents, workers, and visitors

Peachtree Vision

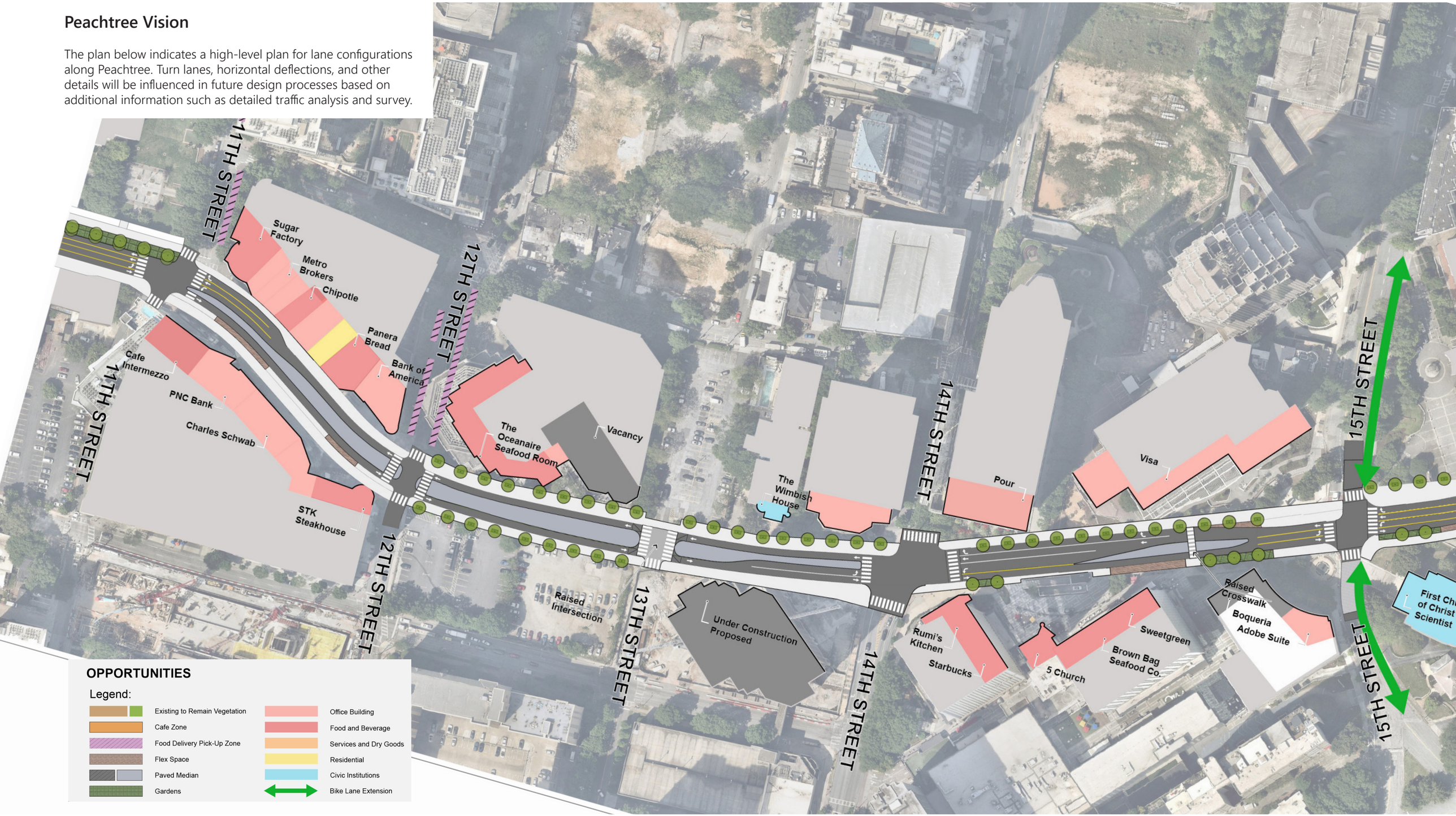
The plan below indicates a high-level plan for lane configurations along Peachtree. Turn lanes, horizontal deflections, and other details will be influenced in future design processes based on additional information such as detailed traffic analysis and survey.

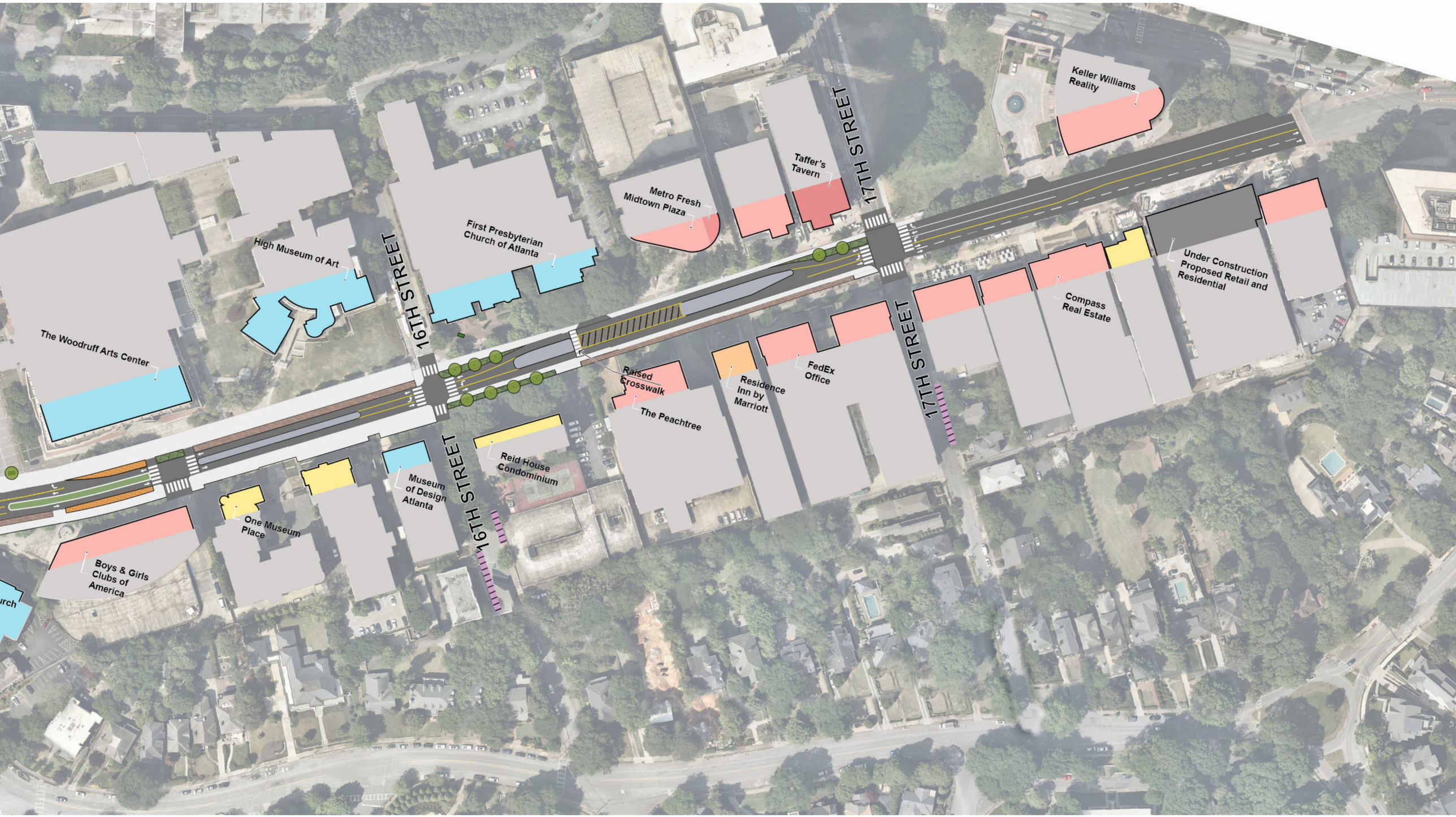



7TH STREET
8TH STREET
PEACHTREE PLACE
10TH STREET
11TH STREET
CVS
Vacancy
Fresh to Order
Five Guys
The Vortex
Blick
Hudson Grille
Savi Provisions
Margaret Mitchell House
Federal Reserve Bank of Atlanta
Vacancy
Anh's Kitchen
Starbucks
Bulldogs
Raised Crosswalk
UPS Store
Fado Irish Pub
Taco Mac
Under Construction
Proposed Food and Beverage
10th Street Dog Park
Prime Cigar

Peachtree Vision

The plan below indicates a high-level plan for lane configurations along Peachtree. Turn lanes, horizontal deflections, and other details will be influenced in future design processes based on additional information such as detailed traffic analysis and survey.




Keller Williams Reality
Taffer's Tavern
Metro Fresh Midtown Plaza
First Presbyterian Church of Atlanta
High Museum of Art
The Woodruff Arts Center
16TH STREET
17TH STREET
Under Construction Proposed Retail and Residential
Compass Real Estate
FedEx Office
Residence Inn by Marriott
Raised Crosswalk
The Peachtree
Reid House Condominium
Museum of Design Atlanta
One Museum Place
Boys & Girls Clubs of America

Peachtree Vision

The illustration below highlights the impacts of re-designing Peachtree. This view, looking north from the intersection of Peachtree and 6th Streets, shows how confronting the challenges described previously create opportunities to build upon the existing strengths of the street. By removing excess car space and using proven methods to slow traffic, additional flexibility is created along the street.

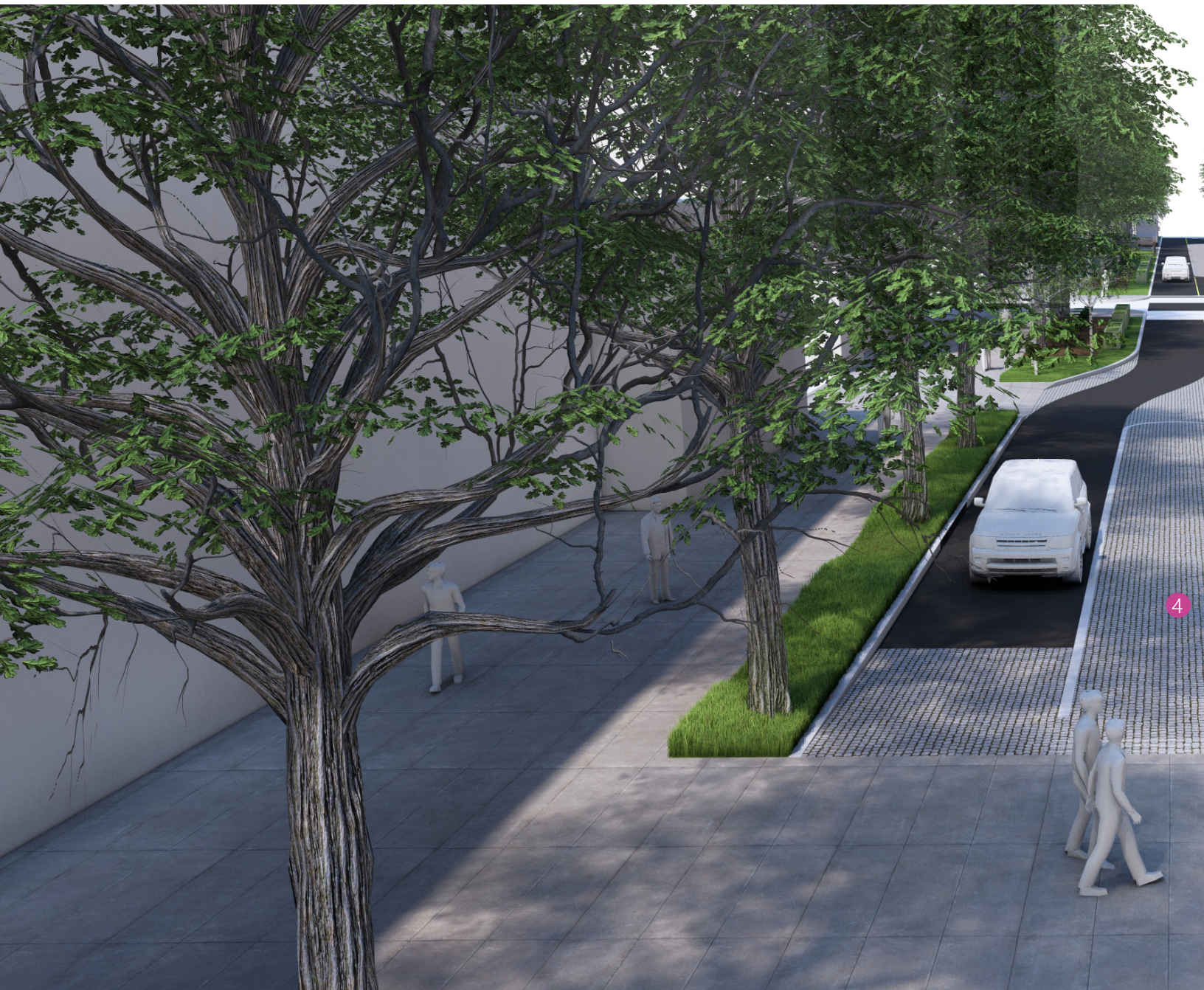


1. Flexible loading zones
2. Additional space for understory trees, dynamic landscapes, and stormwater treatment
3. Expansion of sidewalk creates outdoor cafe opportunities
4. Tactile medians slow cars while accommodating emergency vehicles
5. Parklet for gathering

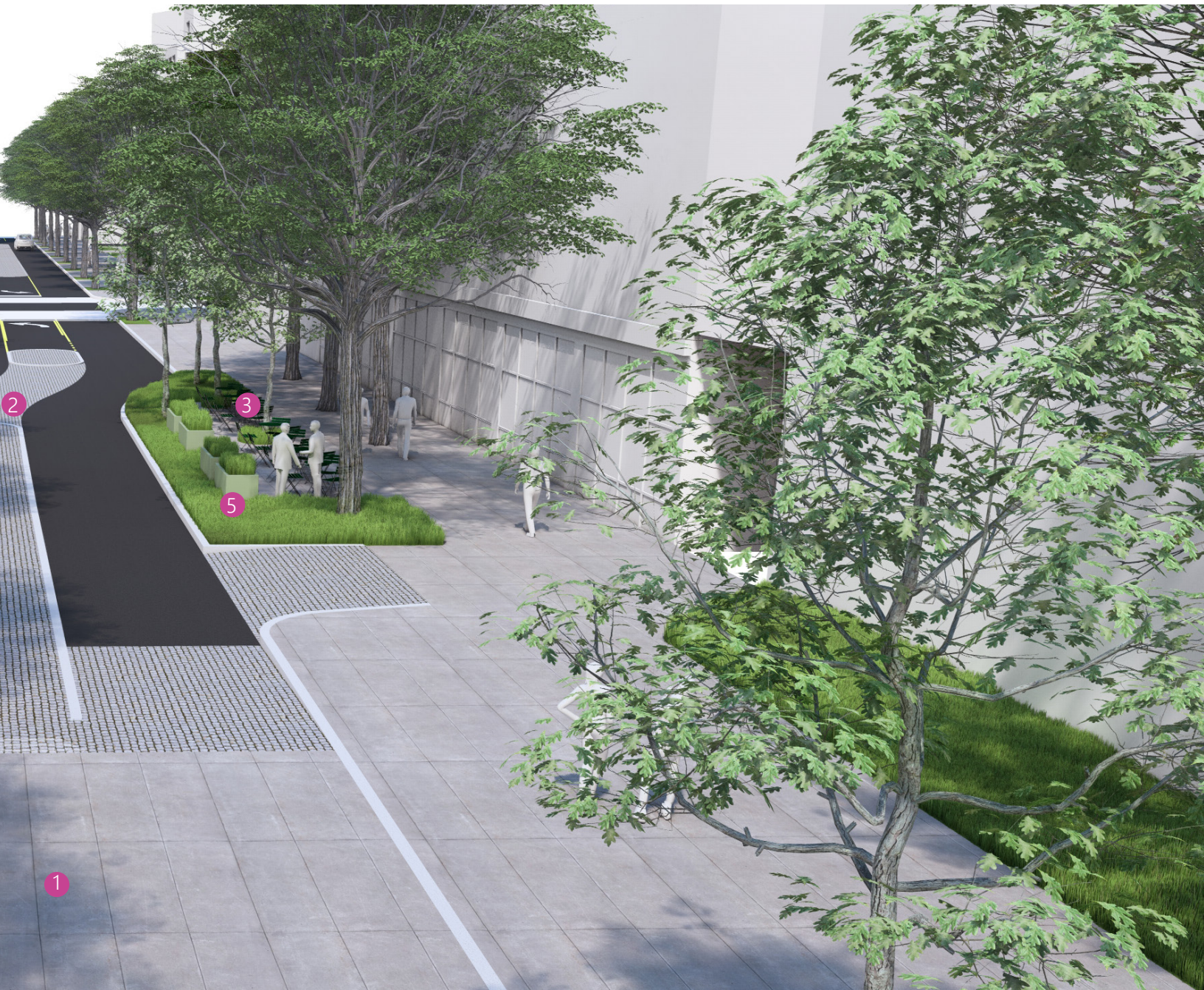


Peachtree Vision

Looking south from near the intersection of Peachtree and 7th Streets, additional features are highlighted as a means to slow traffic and create a safer environment for pedestrians. Traffic calming measures such as horizontal and vertical deflections within the roadway allow for at grade pedestrian crossings and create the ability to flex the additional people space from one side of the road to another based on need.



1. Vertical deflection - pedestrian crossing table
2. Horizontal deflection - chicane to slow and shift traffic while providing space to the western side of the road which is currently constrained at the Vortex
3. Expansion of sidewalk creates outdoor cafe opportunities
4. Tactile medians slow cars while accommodating emergency vehicles
5. Movable planters to create a dynamic landscape and provide protection to cafe dining spaces.



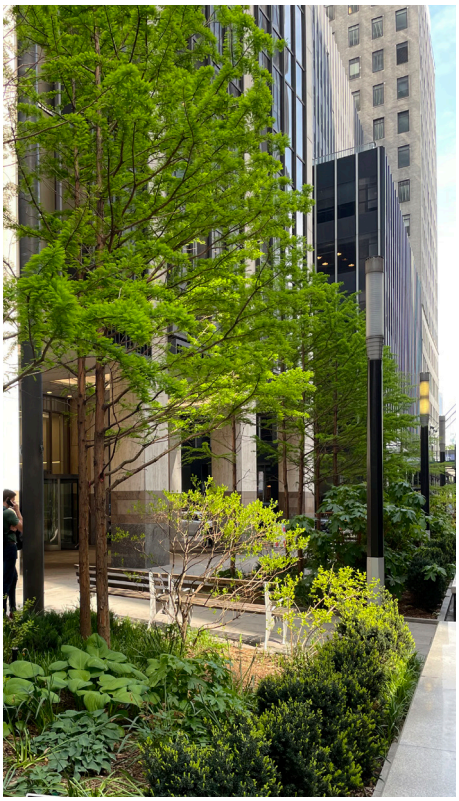
Part 4
Design Strategies

A Walking Path

Peachtree Street sits atop a ridge, with side streets gently falling away, giving the corridor a natural **swing and sway**. This geometry creates a unique opportunity to craft an **asymmetrical, dynamic, and energetic street**. Historically, Peachtree was a walking path, and traces of that history remain in the current street design.

Building heights vary dramatically, road alignments break from a rigid grid, and setbacks shift at unexpected angles. Historic structures sit beside thirty-story skyscrapers, creating a rich layering of scale and experience. These conditions provide the foundation for a **strong, distinctive design identity.**

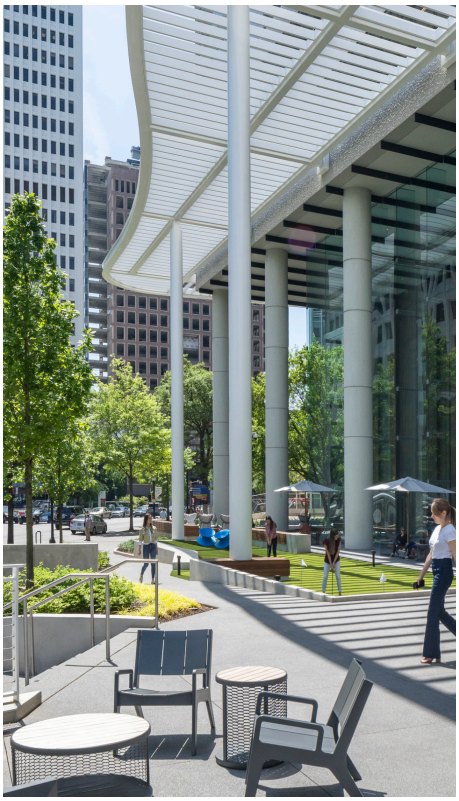
Along the corridor, several **focal nodes** naturally draw attention, including the Fox Theatre, the 10th Street area, and the area around Colony Square and the Woodruff Arts Center. These nodes serve as anchors for pedestrian activity and cultural engagement, reinforcing Peachtree's role as a main street and destination.



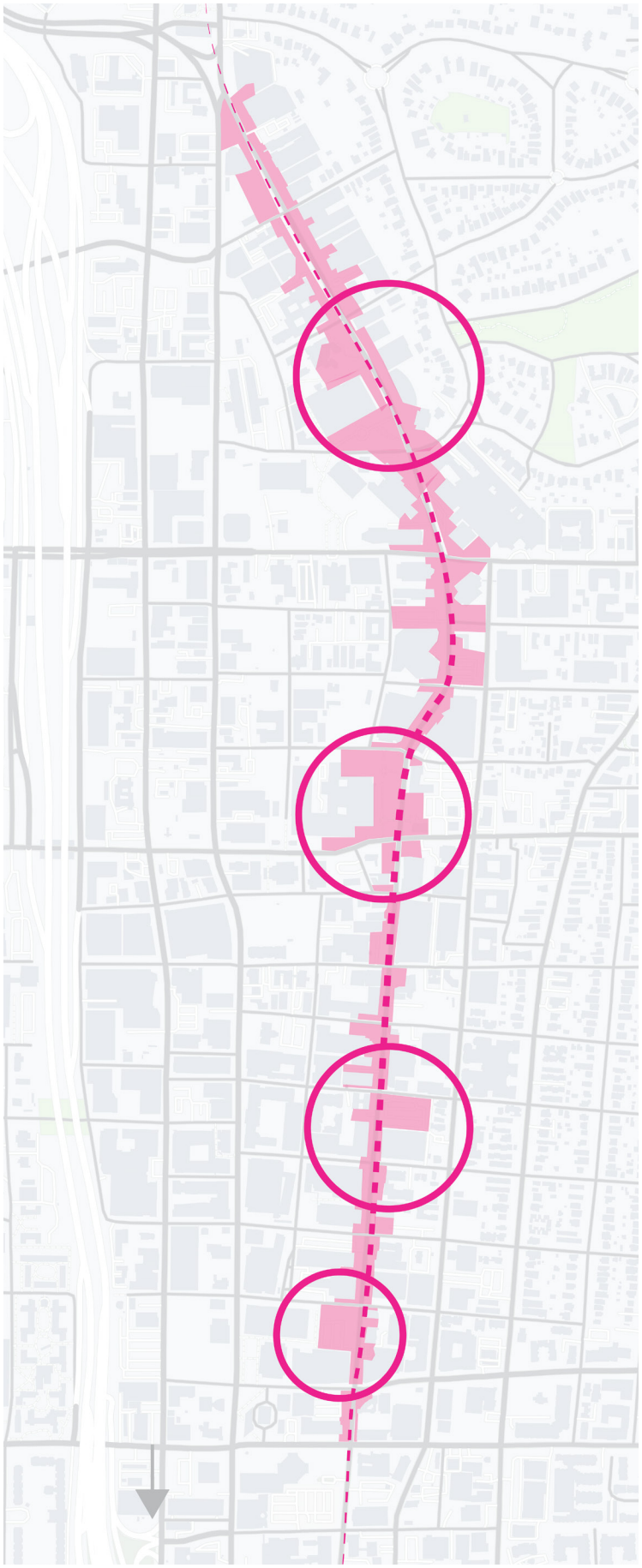
A Garden Landscape - opportunities abound to build a dynamic landscape beneath Peachtree's living canopy.



Embrace the Asymmetry - the variety of space created by the undulation of Peachtree's built environment should be built upon.



Incorporate the Whole Street - private property along the edge of the street should be captured where possible to create additional public-private space.





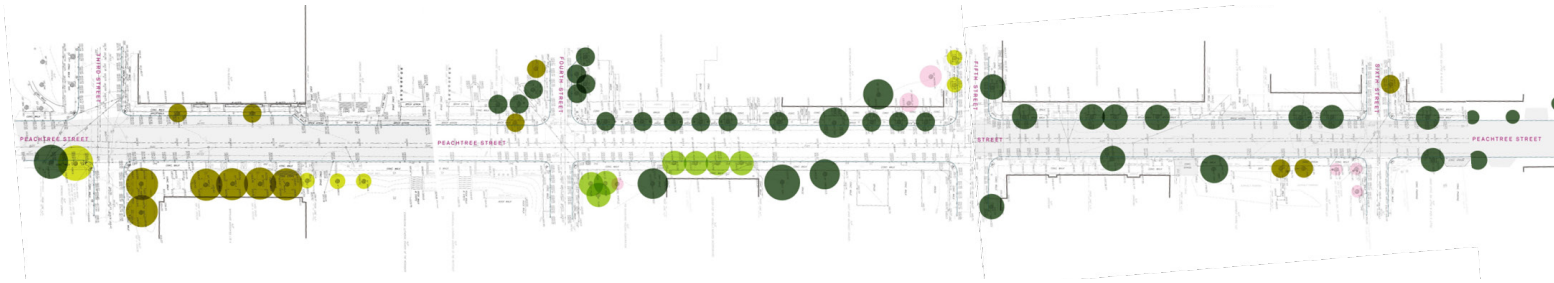


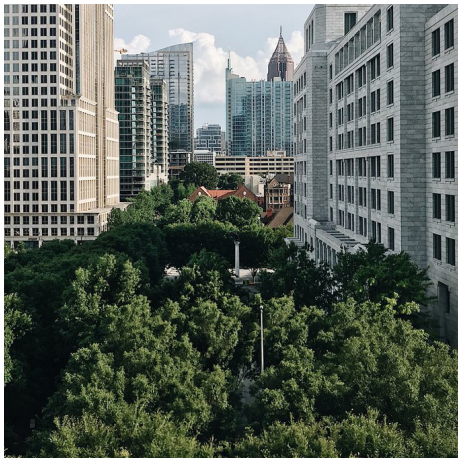

FOX

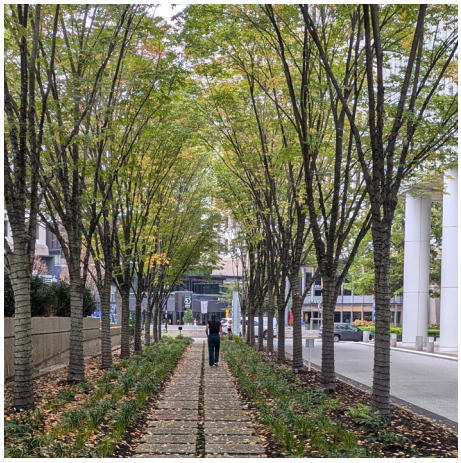
Street as Garden

Peachtree's other defining feature is its **robust tree canopy**, one of the street's most powerful assets. The design team approached the streetscape as a landscape project, conducting a thorough inventory of the existing trees and looking for ways to enhance their impact.

The canopy includes **nuttal oaks, lacebark elms, and smaller flowering trees**, some exceeding 60 feet in height. Unlike typical street trees planted in regimented rows, Peachtree's trees are often irregularly spaced and feature diverse species, giving the corridor a **layered, natural quality**. The layouts below highlight the unique spacing and variety of trees along Peachtree.







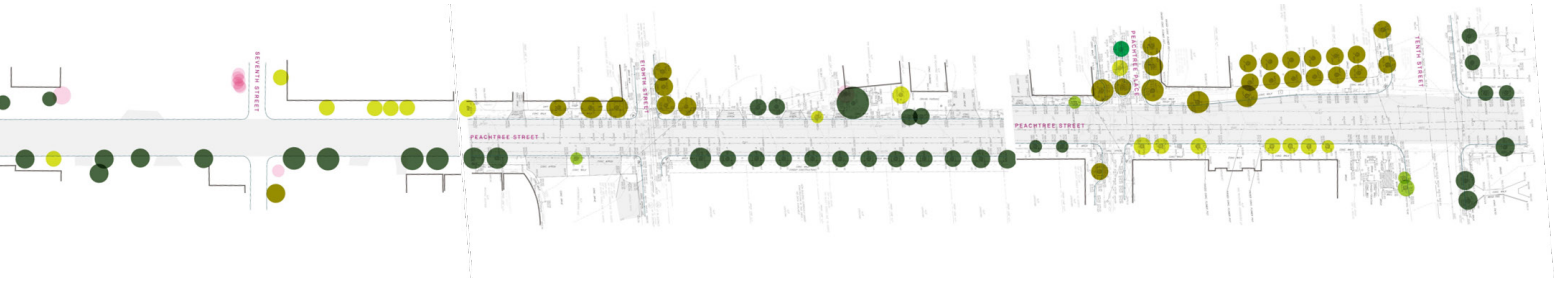








The strategy for enhancing this "garden-like" experience is to introduce a **mid-height layer of planting** between the sidewalk and the canopy. These plants provide **seasonal interest, cooling, and visual appeal** while also serving as a subtle barrier that slows vehicles and frames pedestrian spaces. In this way, the trees and understory plantings work together to create a **comfortable, human-scaled environment** that supports lingering, gathering, and exploration.





↑ Plan of existing street trees and variety of species

← A variety of tree canopies create distinctive spaces on Peachtree Street

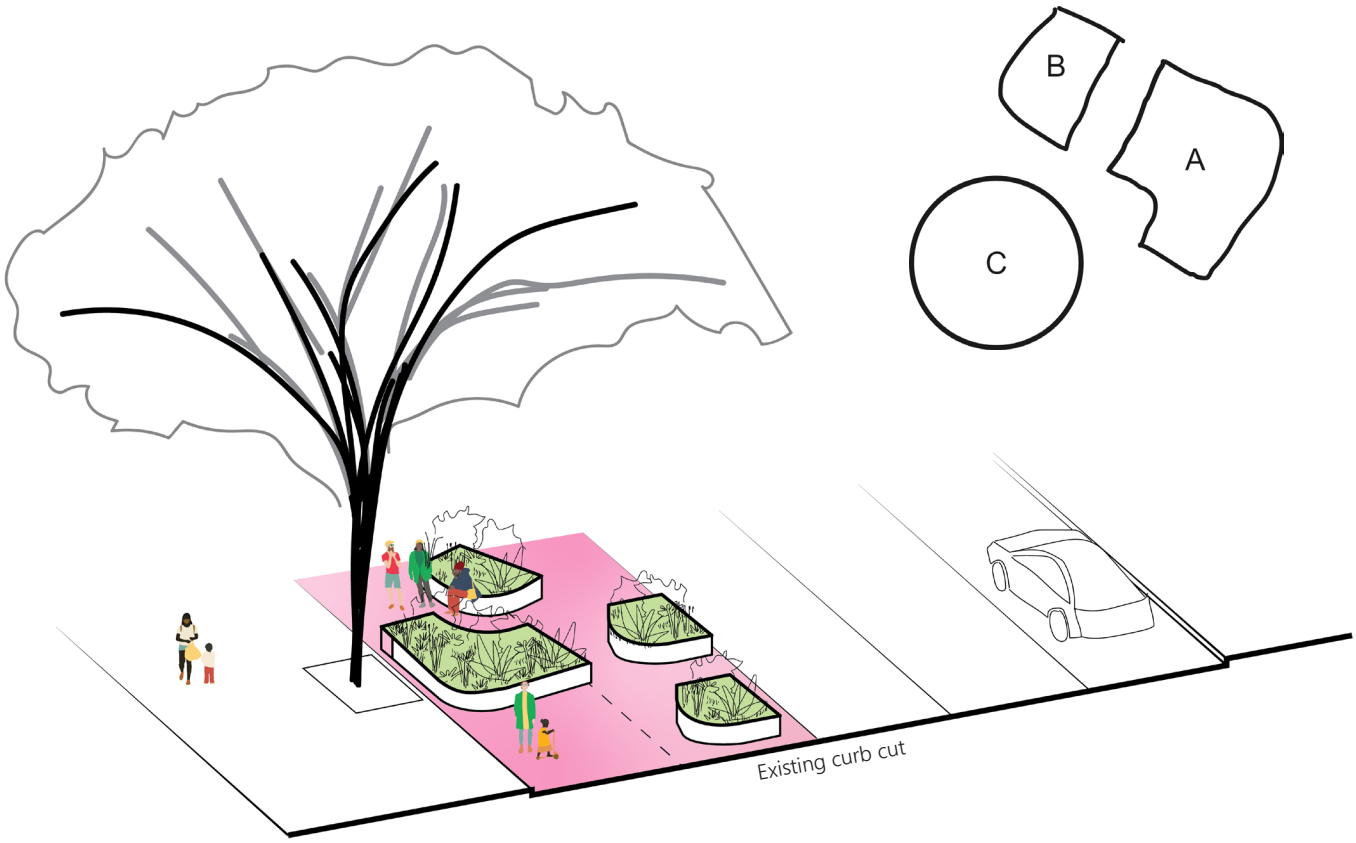
Flexible Design Strategy

The team drew inspiration from vibrant streetscapes such as the **Meatpacking District in New York City** and **Amsterdam Avenue in Mexico City**, both of which prioritize **mid-height plantings** to enhance urban design.

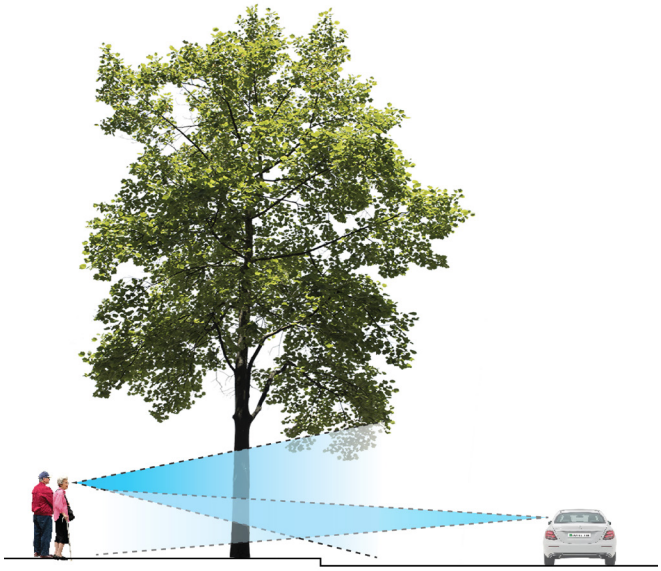
To achieve a similar effect and to accommodate flexibility with the design, the plan proposes **movable planters** along the sidewalk and, where appropriate, within the street itself. These planters vary in size and are filled with mid-height shrubs that complement the existing canopy. Beyond adding greenery, the planters act as **physical and visual buffers**, calming traffic while creating safe, programmable spaces for pedestrians.

For **interim conditions**, where full sidewalk expansion is not yet possible, existing lanes slated for conversion can be **temporarily painted and populated with planters**. This allows the public to begin enjoying the expanded pedestrian space immediately, helping users become familiar with the future layout before permanent construction occurs.

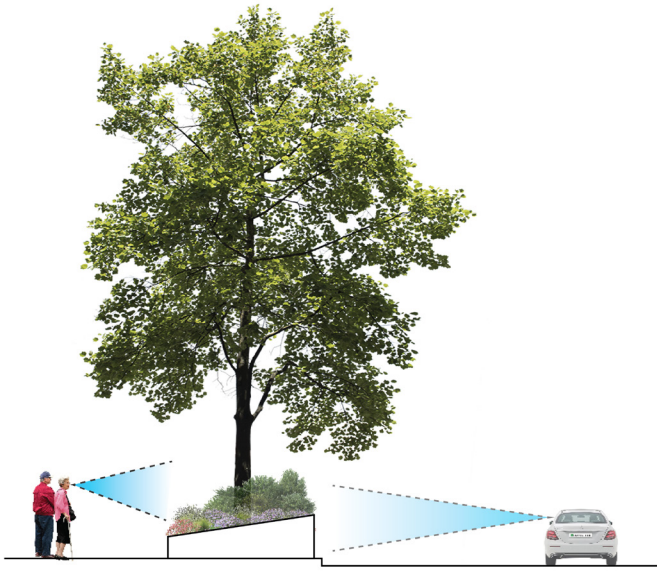
This approach **enhances Peachtree's natural assets, builds on its history, and introduces a flexible, layered streetscape** that prioritizes people while maintaining vehicular access. By treating the street as both a path and a garden, the design creates an inviting, dynamic, and resilient main street for Midtown.



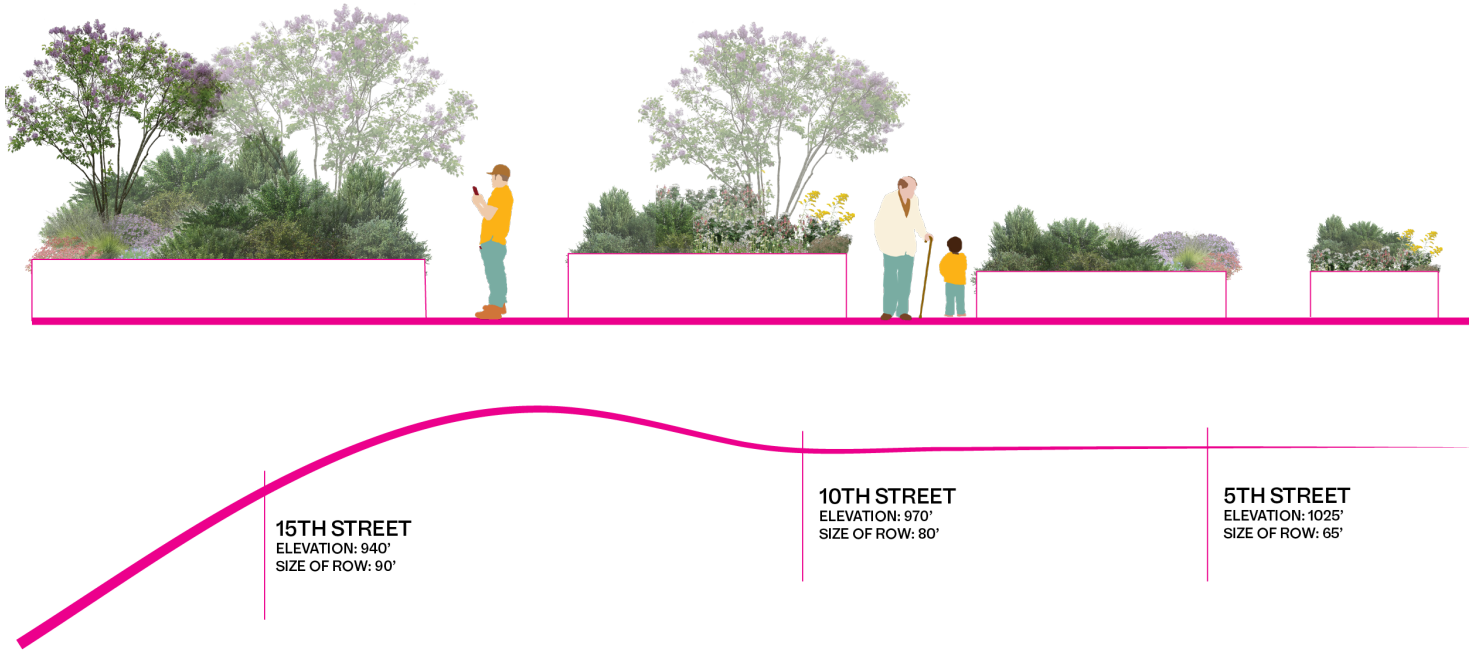
Interim condition
The existing road can be occupied by movable planters to allow people to start using the space. No subgrade construction is necessary.



Existing condition
No visual interest between tree canopy and the sidewalk. Pedestrians and drivers share the same empty space.



Proposed condition
The gap under the canopy is filled with planters that give seasonal interest. Cars have a visual barrier to the sidewalk and slow down.



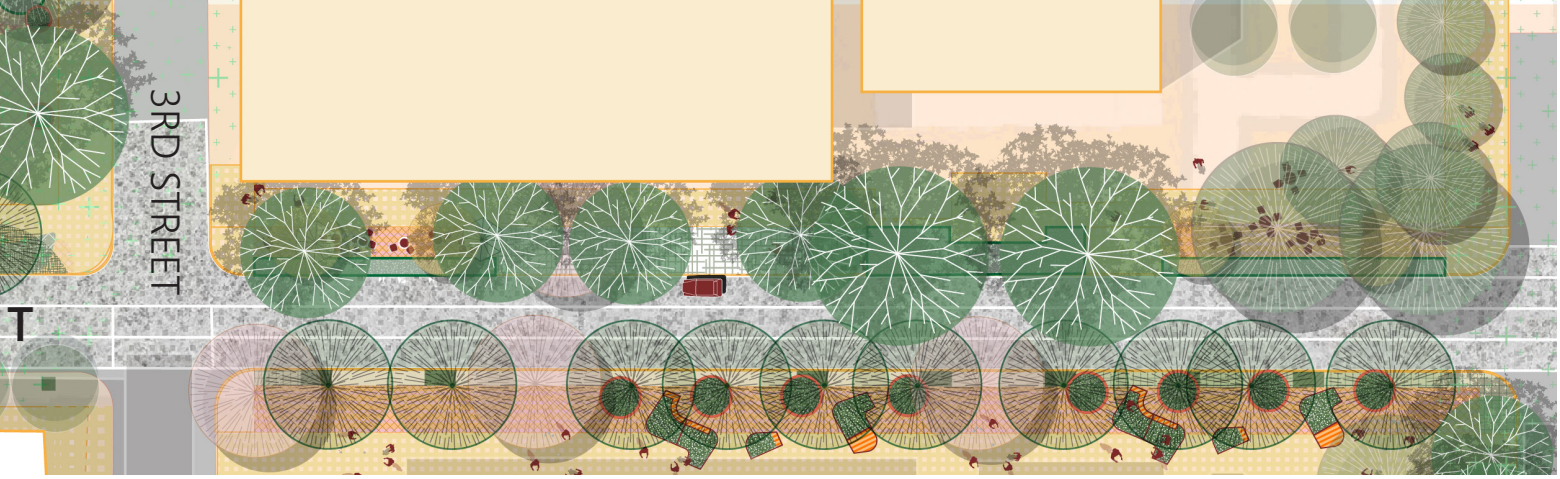
Movable Planters
Planters change in size as the street gets larger and the elevation gets lower as it moves North.

There are three different shapes that link together to create different spatial qualities. These can be adapted to be site specific and used strategically to shield the street from pedestrians, create nooks within the right of way, or frame existing trees with robust planting.




PONCE DE LEON AVE
Fox Theatre
PEACHTREE STREE


Movable planters
Gathering space
Seasonal planting
Added Seating



PALETTE

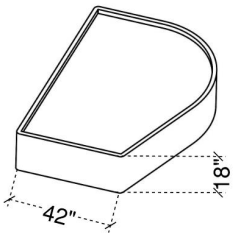
Perennial planting



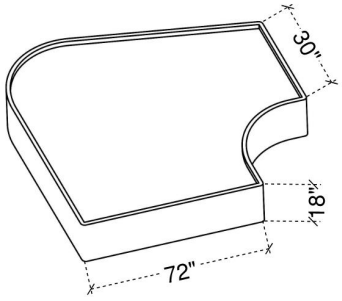
Ponce de Leon Avenue & Peachtree Street

On the southern portion of Peachtree Street, the distinct character and program that the Fox Theatre gives the area is amplified with wider sidewalks and more planting. This narrows the street to slow down vehicular traffic, but also gives more space to overflow space created from events at the theater and other similar buildings. The visitors to the area will linger as they feel more comfortable in the space, and give this area the vibrant character that it deserves.

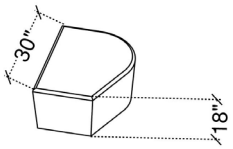
Movable planters



Planter A



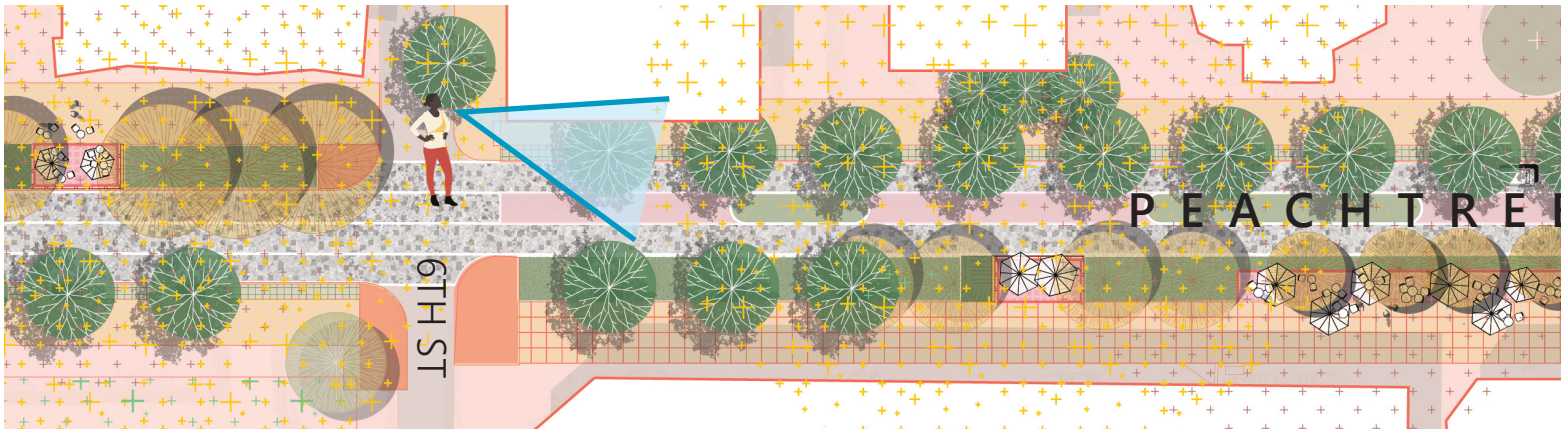
Planter B



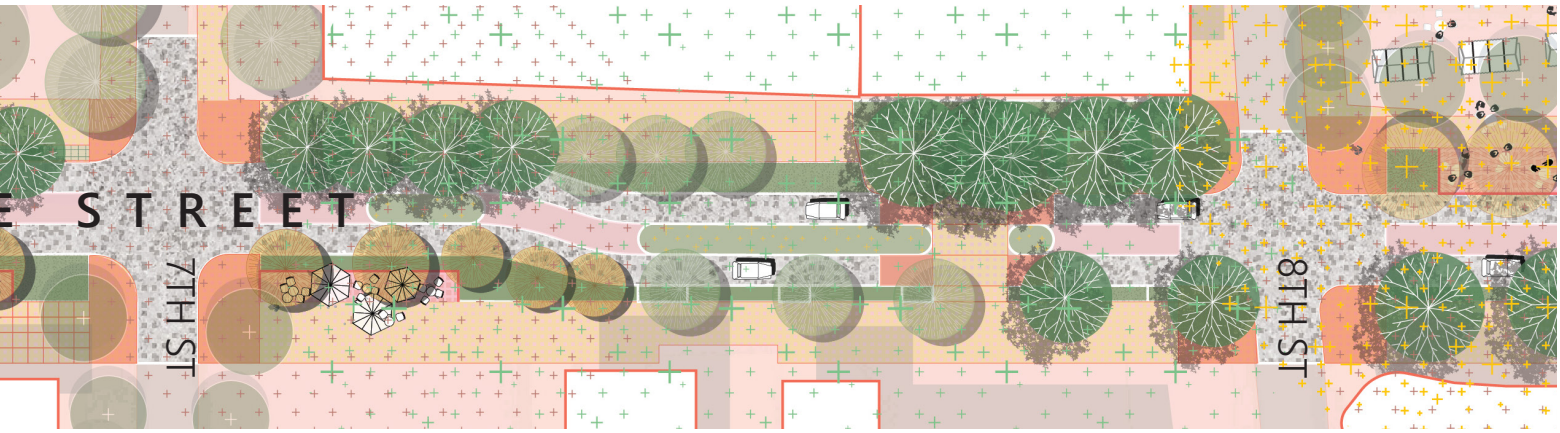
Pedestal seating



Existing


PEACHTRE
6TH ST


Ground floor retail
Added outdoor dining
Movable planters
Added Seating
Ambiant lighting
Seasonal planting

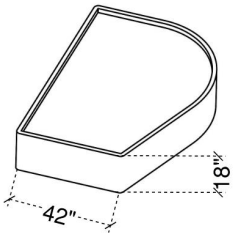


PALETTE

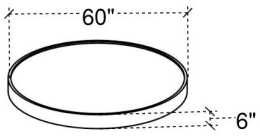
Perennial planting



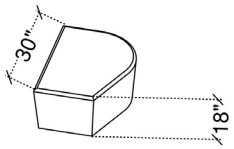
Movable planters



Planter A



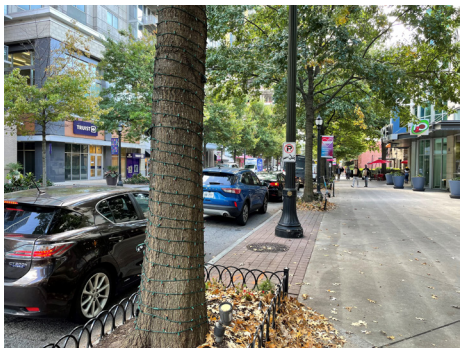
Planter C



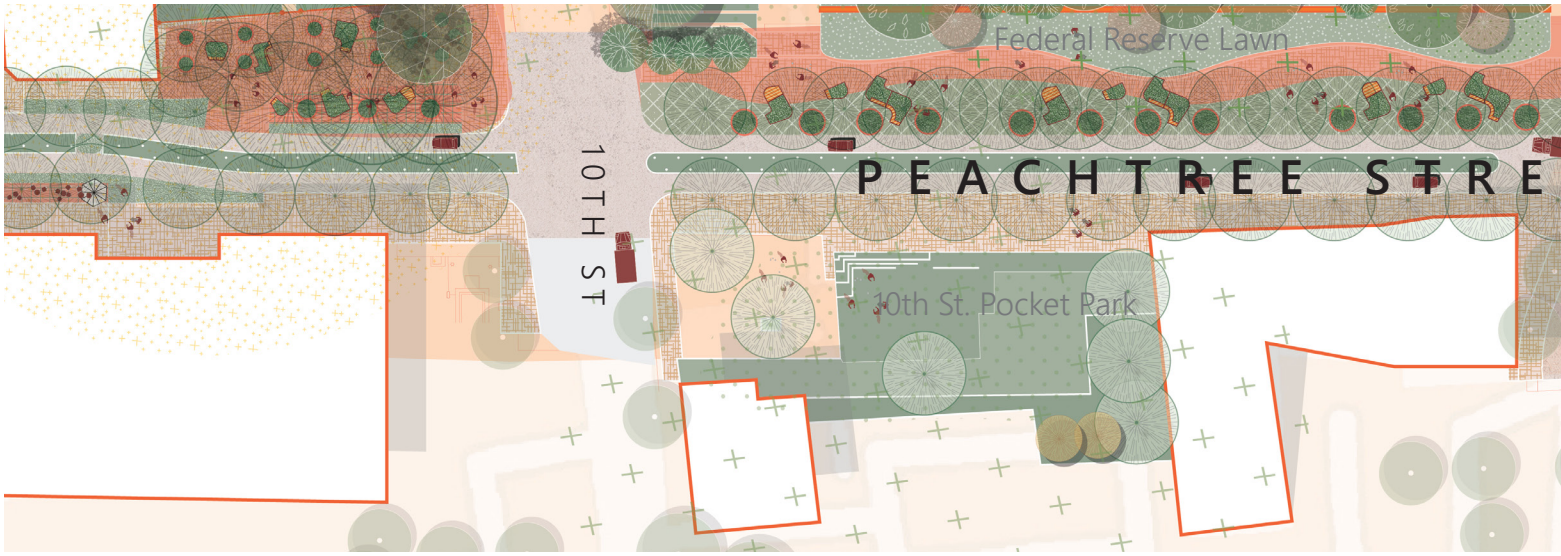
Pedestal seating

6th Street & Peachtree Street NE

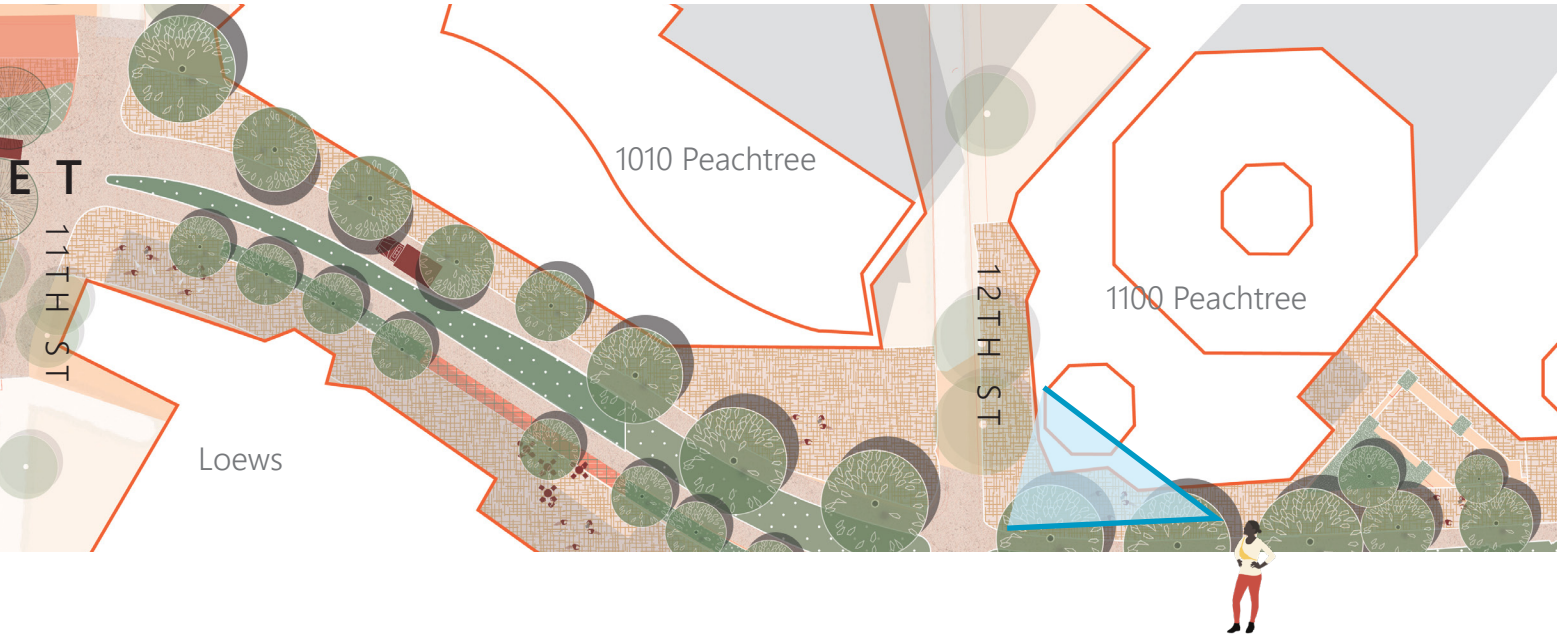
This portion of Peachtree has the potential to become a commercial hub of the corridor, and especially for the potential to become a vibrant area for nightlife. Expanded sidewalks give the chance for retail along the street to spill out through outdoor dining, gathering spaces, and enticing ground level storefronts. Distinct design elements like immersive lighting gives the area a unique identity.



Existing


Federal Reserve Lawn
PEACHTREE STRE
10TH ST
10th St. Pocket Park


Added Seating
Gathering Space
Seasonal planting

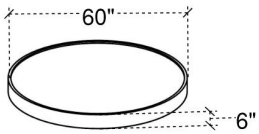


PALETTE

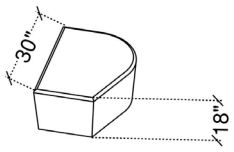
Perennial planting



Movable planters



Planter C



Pedestal seating

12th Street & Peachtree Street

This densely developed area of Peachtree is populated with tall skyscrapers and dramatic street trees. Mid-height planting around the trees can emphasize these canyon-like qualities. The existing generously sized roadways can be downsized to accommodate a human scale setting by adding medians and larger sidewalks. For events, like the Peachtree Road Race, this added planting and public space can accommodate gathering and vendors. Even with the decreased road size, annual events can still happen regularly, and the pedestrian experience will be more comfortable.



Existing


Woodruff
Arts Center
15TH ST


Woodruff
Arts Center
Vendor &
Café Zone
Expanded
sidewalk
Added
Seating
Seasonal
planting

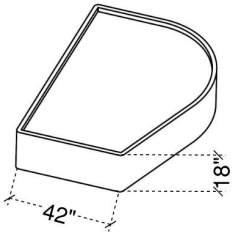


PALETTE

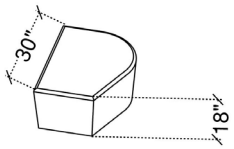
Perennial planting



Movable planters



Planter A



Pedestal seating

15th Street & Peachtree Street

The Museum Hub of Peachtree, this intersection has large setbacks and opportunities for building up robust and diverse planting that changes seasonally. Outside of prominent buildings like the Woodruff Arts Center, the sidewalk can be expanded to accommodate for gathering spaces and vendor zones. The goal is to draw in pedestrians to occupy the space around these cultural buildings, and to create a comfortable buffer with planting so that pedestrians feel protected from the adjacent vehicular traffic. This also allows comfortable venues for pop-up events along the street. New seating also allows for diverse populations to utilize the street.



Existing

Part 5
Traffic Summary

Aligning with recommendations within this study, **Peachtree Street is set to transform with significant geometric changes aimed at improving the multimodal experience for all its users**. The study corridor will see lane reductions, curb extensions, and median installations, all designed to enhance the street's functionality and safety. To ensure these changes are effective, various operational analyses were conducted confirming that the proposed modifications will maintain acceptable levels of service (LOS).

Current intersection capacity analysis shows that most intersections along Peachtree Street operate at acceptable LOS during peak hours, making lane reductions feasible. However, specific intersections like Peachtree at 14th, 15th, and 17th Streets are already nearing capacity and require careful consideration.

Assessments of the proposed reconfigurations reveal promising results. The Build I capacity analysis, using 2024 volumes, indicates that intersections south of 10th Street, within the study area, have ample excess capacity to handle existing traffic with the new designs. Intersections at 10th, 14th, and 15th Streets, however, will need attention as they approach or reach capacity. The intersection at 17th Street will need special care as it currently operates at capacity.

Further analysis, known as Build II, which factors in shifted 2024 volumes from the Midtown District Activity Based Travel Demand Model, shows that all intersections along the corridor will have enough capacity to accommodate these adjustments. Notably, the westbound approaches at 14th Street in the morning and 15th Street in the afternoon will operate at LOS E yet still function within acceptable levels.

Based on these capacity analyses, several strategic recommendations have emerged:

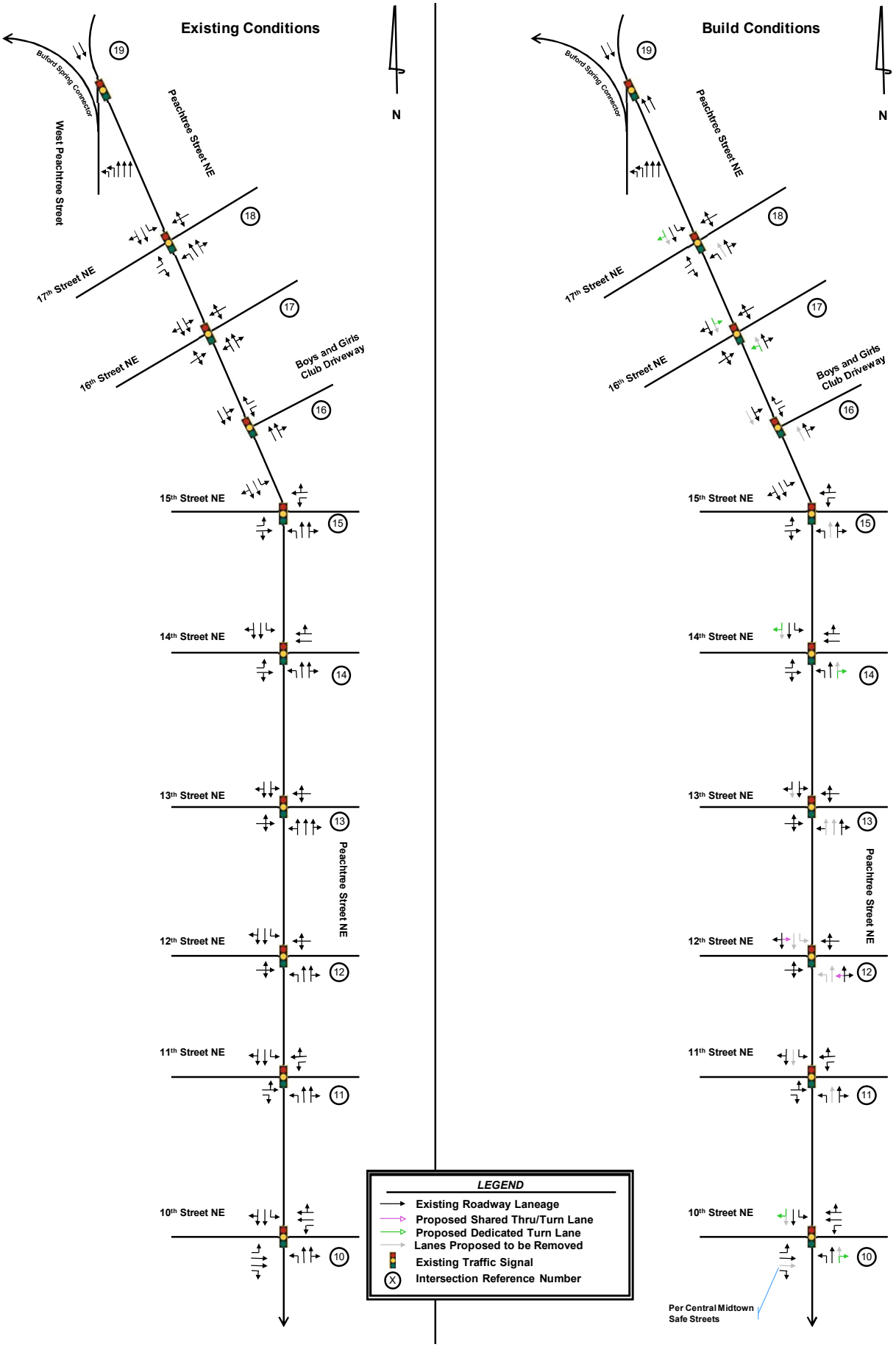
- Intersections of Peachtree Street at Peachtree Place, 12th, and 13th Streets will operate effectively without dedicated left-turn lanes due to low northbound left-turn volumes. Prohibiting these turns is an option, favoring the use of the local grid to manage traffic.

- Maintaining dedicated right-turn lanes at the Peachtree Street at 10th Street intersection is advised, in addition to dedicated left-turn lanes for both northbound and southbound approaches to manage current demand.

- At 14th Street, it is recommended to retain both right-turn and left-turn lanes for northbound and southbound traffic.

- The segment of Peachtree between 14th Street and the Woodruff Arts Center should keep two southbound through lanes to support existing and future traffic needs.

These changes aim to balance the diverse needs of Peachtree's users, ensuring it continues to serve as a critical artery in Midtown, accommodating not just vehicles but pedestrians, cyclists, and transit users alike.


Existing Conditions
Build Conditions
N
Buford Spring Connector
West Peachtree Street
Peachtree Street NE
17th Street NE
16th Street NE
Boys and Girls Club Driveway
15th Street NE
14th Street NE
13th Street NE
12th Street NE
11th Street NE
10th Street NE
19
18
17
16
15
14
13
12
11
10
LEGEND
Existing Roadway Laneage
Proposed Shared Thru/Turn Lane
Proposed Dedicated Turn Lane
Lanes Proposed to be Removed
Existing Traffic Signal
Intersection Reference Number
Per Central Midtown Safe Streets

Appendix




hello, fun.
hello, fun.
AIRTOWN

MEMORANDUM

To: Dan Hourigan
Midtown Alliance

From: Ana Eisenman, P.E.
Ben Blair, EIT
Kimley-Horn

Date: March 27, 2025

Subject: Peachtree Street Visioning
Operations Analysis
Fulton County, Georgia

Introduction

The Peachtree Street Visioning project is an enhancement project along the approximately 1.5-mile section of Peachtree Street from North Avenue to West Peachtree Street in Midtown Atlanta. The project aims to create a new vision for Peachtree Street in Midtown Atlanta that improves safety for all users, prioritizes non-motorized users, and creates a corridor that facilitates engagement with public spaces and street-level businesses. This project is in City of Atlanta jurisdiction and was originally identified in the Midtown Alliance *2022 Public Life Action Plan*. A project location map is provided in **Attachment A** and the proposed intersection reconfigurations are provided in **Attachment B.**

Study Area

For this analysis, the study area includes the portion of Peachtree Street between North Avenue and West Peachtree Street; however, the roadway geometric changes proposed as part of this project are limited to the portion of Peachtree Street between Ponce De Leon Avenue and 17th Street. Peachtree Street is a minor arterial oriented in the north-south direction. The posted speed limit is 25 miles per hour (mph). For the majority of the corridor, Peachtree Street has an undivided, four-lane cross-section. Dedicated left-turn lanes are present at major intersections. There are sections of raised median between 14th Street and 16th Street.

The study area includes 19 cross streets and study intersections:

- Peachtree Street at West Peachtree Street
- Peachtree Street at 17th Street
- Peachtree Street at 16th Street
- Peachtree Street at Boys and Girls Club
- Peachtree Street at 15th Street
- Peachtree Street at 14th Street

- Peachtree Street at 13th Street
- Peachtree Street at 12th Street
- Peachtree Street at 11th Street
- Peachtree Street at 10th Street
- Peachtree Street at Peachtree Place
- Peachtree Street at 8th Street
- Peachtree Street at 7th Street
- Peachtree Street at 6th Street
- Peachtree Street at 5th Street
- Peachtree Street at 4th Street
- Peachtree Street at 3rd Street
- Peachtree Street at Ponce De Leon Avenue
- Peachtree Street at North Avenue

Sidewalks are provided along both sides of Peachtree Street and along each cross street. Several cross streets have planned or existing bicycle facilities. Streetlighting is provided along both sides of Peachtree Street and at each study intersection.

Eight MARTA bus routes travel through or intersect the study section of Peachtree Street: Route 40 (Peachtree Street/Downtown), Route 110 (Peachtree Road/Buckhead), Route 94 (Northside Drive), Route 27 (Cheshire Bridge Road), Route 37 (Defoors Ferry Road), Route 36 (N Decatur Road/Virginia Highland), Route 2 (Ponce de Leon Avenue/Druid Hills), and Route 899 (Old Fourth Ward). The surrounding land uses are a mix of commercial and residential, including mainly ground-level retail and restaurant space, commercial office space, and multi-family residential buildings.

Existing Volume Development

Existing (2024) volume data was collected at the 19 study intersections to determine peak hours, heavy vehicle traffic, and traffic patterns in the study area. Volume development worksheets are provided in **Attachment B**.

Data Collection

Four-hour turning movement counts (TMCs) were collected from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM at the study intersections on Thursday, September 19, 2024. Vehicle, bicycle, and pedestrian volumes were collected in all TMCs to capture the multimodal characteristics of the study area.

Peak Hour Determination

Based on the turning movement count data collected at the intersections, the morning peak hour was determined to occur from 8:00 AM to 9:00 AM, and the evening peak hour was determined to occur from 5:00 PM to 6:00 PM.

Heavy Vehicle Percentages

Heavy vehicle percentages were evaluated along the corridor using the collected TMC count data. The daily percentage of heavy vehicles along Peachtree Street is typically between 1 to 2 percent

during the AM peak hour and 2 to 3 percent during the PM peak hour. The study section experiences a much higher volume of single-unit truck traffic as compared to multi-unit truck traffic, likely due to the multiple bus routes and bus stops along the corridor.

Existing Capacity Analysis

Intersection capacity analyses were completed for existing conditions using Trafficware's Synchro 12.0 software, which applies methodologies outlined in the *Highway Capacity Manual* (HCM). Delay, level-of-service (LOS), and queue lengths were evaluated for each of the study intersections using LOS criteria for signalized intersections. LOS is a quantitative measure from the HCM that represents a transportation facility's quality of service with six levels (A through F), with LOS A representing the best operating conditions and LOS F representing the worst. LOS is based on delay and volume-to-capacity ratio, as summarized for signalized intersections in **Table 1**.

Table 1: Level-of-service Criteria

Level of Service	Vehicle Seconds of Delay
A	≤10
B	>10 – 20
C	>20 – 35
D	>35 – 55
E	>55 – 80
F	>80

Existing conditions were evaluated with the Existing (2024) peak-hour volumes, calculated peak-hour factors (PHF), existing heavy-vehicle percentages, existing geometric inputs, and existing signal timings, which were provided by ATLDOT. Results are reported for the overall intersection as well as for each approach in **Table 2** and **Table 3**. Synchro analysis worksheets are provided in **Attachment D**.

Results of the Existing (2024) capacity analysis indicate that several study intersections along Peachtree Street operate at an acceptable LOS during both peak hours with excess capacity. The intersection of Peachtree Street at 14th Street operates acceptably in the PM peak hour but operates at LOS D in the AM peak hour with the westbound approach operating at LOS E (distinguished with dark orange text in **Table 2**). The intersection of Peachtree Street at 15th Street operates acceptably in the AM peak hour but operates at LOS D in the PM peak hour with the eastbound approach operating at LOS E and the westbound approach exceeds operating capacity (distinguished with red text in **Table 2**). The intersection of Peachtree Street at 17th Street operates acceptably in the PM peak hour, but operates at LOS D in the AM peak hour with the eastbound approach operating at LOS E. No turn-lane approach experiences queuing that exceeds the turn-lane capacity.

These results indicate that Peachtree Street has excess capacity for the majority of the study corridor and is a candidate for lane reduction and reconfiguration.

Table 2: Capacity Analysis LOS Results – Existing (2024) Conditions

Intersection	Peak Hour	LOS and Delay (sec)				
		Overall	NB	SB	EB	WB
Peachtree St at North Ave	AM	C (22.0)	C (28.9)	D (42.3)	B (18.3)	B (15.3)
	PM	C (31.5)	C (25.6)	D (45.3)	C (23.9)	C (34.9)
Peachtree St at Ponce De Leon Ave	AM	D (35.6)	D (48.0)	C (28.3)	D (38.7)	C (29.1)
	PM	C (33.0)	D (45.4)	C (29.9)	C (32.8)	C (20.9)
Peachtree St at 3rd St	AM	C (23.2)	A (9.4)	D (42.4)	B (18.6)	D (45.2)
	PM	B (12.7)	B (12.5)	A (0.8)	D (43.0)	C (33.8)
Peachtree St at 4th St	AM	A (8.5)	A (3.6)	B (12.1)	A (0.0)	C (34.3)
	PM	A (6.4)	B (11.5)	A (0.8)	A (0.0)	C (34.0)
Peachtree St at 5th St	AM	B (14.2)	B (17.9)	A (0.5)	C (25.8)	D (36.3)
	PM	B (13.2)	B (13.1)	A (1.0)	D (35.4)	D (43.9)
Peachtree St at 6th St	AM	B (14.9)	B (12.2)	B (18.0)	B (14.4)	B (14.4)
	PM	A (7.7)	B (11.6)	A (0.8)	C (34.5)	C (33.9)
Peachtree St at 7th St	AM	B (13.8)	B (18.9)	A (1.7)	C (24.5)	C (25.4)
	PM	A (9.6)	A (9.7)	A (1.0)	D (39.6)	D (41.4)
Peachtree St at 8th St	AM	B (10.9)	B (12.1)	A (0.5)	C (33.2)	C (34.2)
	PM	B (10.1)	B (11.4)	A (1.4)	D (38.2)	D (35.2)
Peachtree St at Peachtree Pl	AM	B (11.0)	B (13.9)	A (0.5)	C (31.5)	C (30.7)
	PM	C (21.5)	B (11.6)	C (22.2)	D (35.5)	D (38.1)
Peachtree St at 10th St	AM	D (37.3)	D (41.2)	D (49.1)	C (34.0)	C (29.6)
	PM	D (38.2)	D (41.4)	D (51.3)	B (19.9)	D (35.2)
Peachtree St at 11th St	AM	B (15.4)	B (17.9)	A (0.6)	C (30.0)	C (29.8)
	PM	B (16.9)	B (16.4)	A (1.6)	D (41.0)	C (34.0)
Peachtree St at 12th St	AM	B (18.1)	B (12.7)	B (12.5)	D (35.8)	D (41.0)
	PM	B (10.7)	B (10.1)	A (1.0)	D (43.4)	D (43.8)
Peachtree St at 13th St	AM	A (4.5)	A (3.0)	A (0.3)	D (47.5)	D (50.1)
	PM	A (4.1)	A (2.7)	A (0.4)	D (49.2)	D (52.7)
Peachtree St at 14th St	AM	D (37.7)	D (44.1)	C (30.1)	C (20.8)	E (55.3)
	PM	C (33.7)	D (53.5)	C (25.2)	C (26.5)	C (29.0)
Peachtree St at 15th St	AM	B (14.9)	B (14.6)	A (2.5)	D (41.5)	D (44.5)
	PM	D (35.7)	C (20.9)	A (3.6)	E (55.4)	F (139.8)
Peachtree St at Boys and Girls Club	AM	B (16.0)	A (6.0)	C (21.9)	-	D (39.2)
	PM	A (3.9)	A (6.7)	A (0.3)	-	D (39.0)
Peachtree St at 16th St	AM	B (13.6)	A (8.6)	B (10.5)	D (39.8)	D (44.1)
	PM	B (14.6)	B (10.8)	B (10.8)	D (41.2)	D (40.6)
Peachtree St at 17th St	AM	D (38.1)	C (29.4)	D (36.2)	E (58.4)	C (26.9)
	PM	B (18.7)	B (10.9)	B (10.9)	D (50.3)	D (42.7)
Peachtree St at West Peachtree St	AM	B (13.9)	C (24.4)	B (11.2)	A (9.6)	-
	PM	C (21.7)	A (8.4)	B (15.9)	D (53.2)	-

Table 3: Capacity Analysis Queue Results – Existing (2023) Conditions

Intersection	Peak Hour	95th Percentile Queue Length (ft)					
		NBL	NBT	NBR	SBL	SBT	SBR
Peachtree St at North Ave	AM		155	62		128	
	PM		255	139		271	
Peachtree St at Ponce De Leon Ave	AM		208			97	
	PM		286			212	
Peachtree St at 3rd St	AM		46			103	
	PM		34			38	
Peachtree St at 4th St	AM		11			47	
	PM		32			76	
Peachtree St at 5th St	AM		192			53	
	PM		95			56	
Peachtree St at 6th St	AM		160			98	
	PM		102			46	
Peachtree St at 7th St	AM		71			27	
	PM		36			33	
Peachtree St at 8th St	AM		117			18	
	PM		43			25	
Peachtree St at Peachtree Pl	AM		54			116	
	PM		44			392	
Peachtree St at 10th St	AM	66	196		108	177	
	PM	73	243		279	396	
Peachtree St at 11th St	AM	53	222		m29	107	
	PM	m62	210		32	412	
Peachtree St at 12th St	AM	m8	54		56	82	
	PM	12	61		65	255	
Peachtree St at 13th St	AM		15			2	
	PM		22			102	
Peachtree St at 14th St	AM	59	135		43	163	
	PM	31	185		m62	m335	
Peachtree St at 15th St	AM	m35	124		37	149	
	PM	m60	277		4	20	
Peachtree St at Boys and Girls Club	AM		122			70	
	PM		40			27	
Peachtree St at 16th St	AM		157			107	
	PM		121			240	
Peachtree St at 17th St	AM	91	121		37	335	
	PM	35	107		34	116	
Peachtree St at West Peachtree St	AM	13					
	PM	151					

95th percentile volume exceeds capacity, indicating queue length is likely longer than reported
m Volume for 95th percentile queue is metered by upstream signal

Peachtree Vision Capacity Analysis

The proposed Peachtree Vision enhancement project evaluation considered operational capacity analyses based on volume development for two scenarios:

- Build I: Geometry Changes
- Build II: Geometry + Volume Shift Changes

The operational impacts of the geometric reconfigurations and volume shifts along the study section of Peachtree Street were assessed to evaluate how the proposed reconfiguration would support the purposes of the Peachtree Street Visioning project.

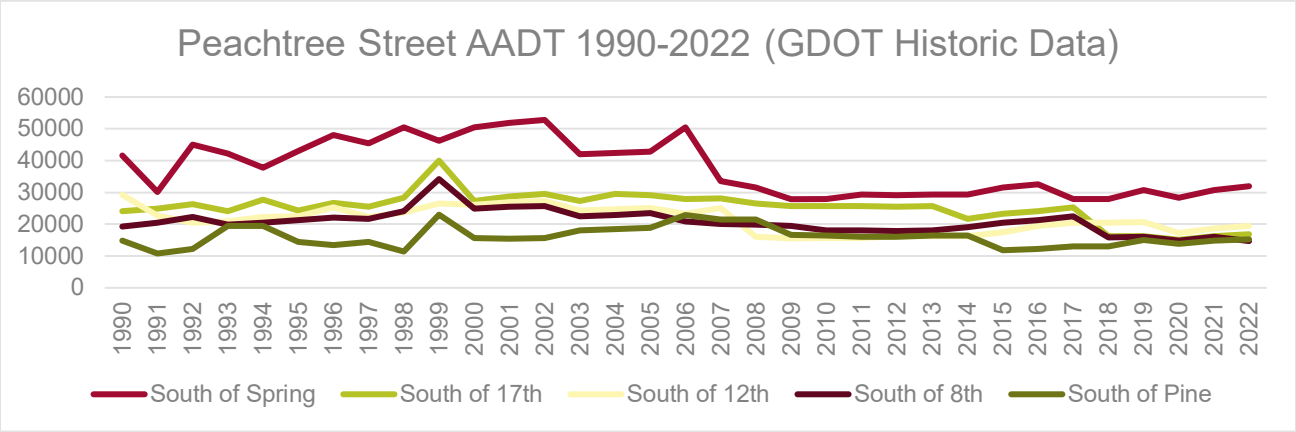
Build Traffic Volume Development

Historical count data from GDOT along Peachtree Street from 1990-2022 is presented in the figure below based on annual data from GDOT count stations along Peachtree Street. It is notable that traffic volumes along Peachtree Street have generally declined or remained flat over the 32-year period. During this period, total new development delivered in the Midtown District totaled 151 new buildings with the following quantities of specific land uses:

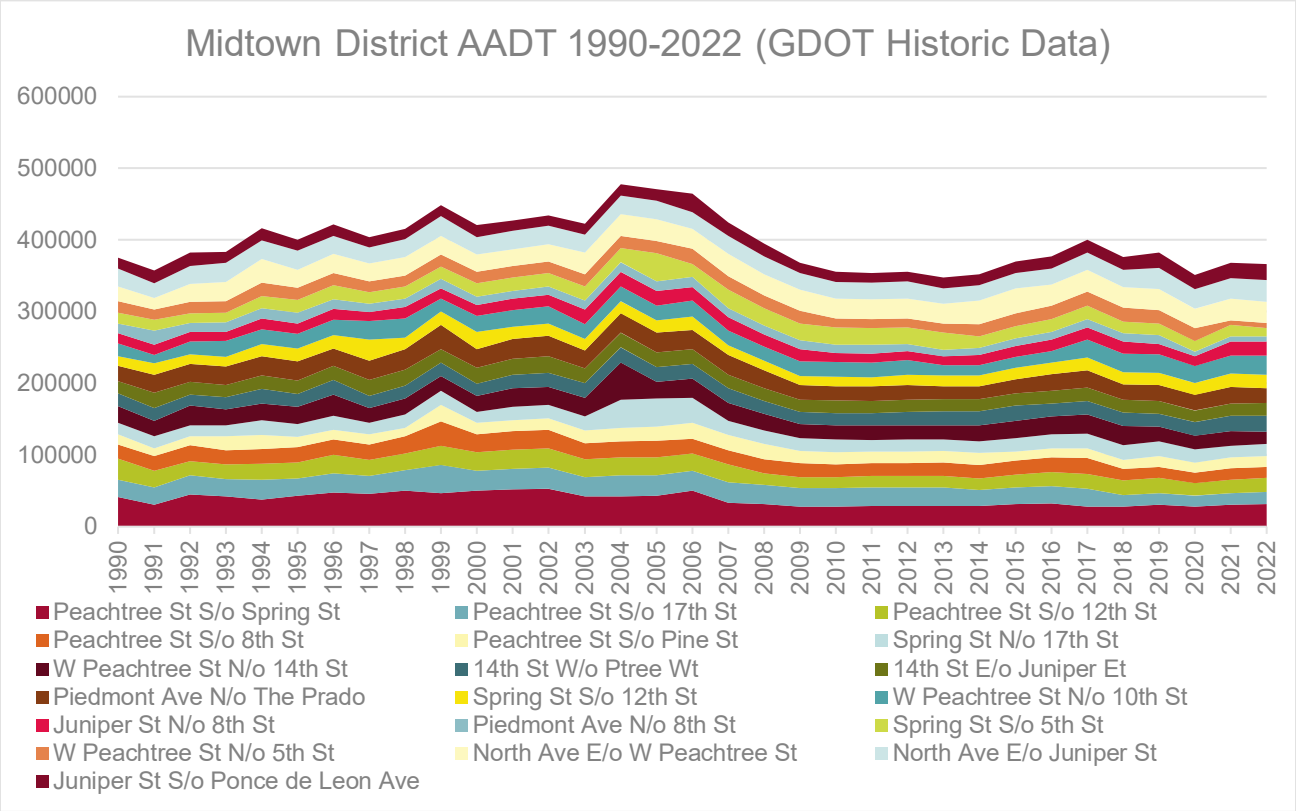
Table 4: Midtown District Development Statistics

Years	Resid. Units	Hotel Rooms	Office SF	Institutional SF	Retail SF
1990-2022	16,079	2,812	14,040,173	3,172,557	1,176,736

Also notable, Average Annual Daily Traffic (AADT) volumes were observed to be greater towards the northern end of the study area decreasing towards the southern end of the studied corridor.



The trends along Peachtree are also reflected at other GDOT count stations in the Midtown District, shown in the figure below, which suggests that traffic has remained fairly consistent and steady throughout the area, rather than growing some corridor traffic while shrinking other corridor activity.



Additionally, the study considered results from the Atlanta Regional Commission Activity-Based Travel Demand Model (ARC ABM). The ARC ABM is the regional Travel Demand Model associated with the current 2050 Metropolitan Transportation Plan (MTP) calibrated and validated at the regional level. For this project, the ARC ABM has been updated to calibrate and validate a more detailed Midtown District area, considering AADTs from GDOT count stations, additional 24-hour average daily traffic (ADT) counts collected for this study, and confirming the incorporation of Midtown's programmed list of projects below:

- 5th Street Complete St (Myrtle St to Williams St) – 2025
- Juniper Street Complete St (14th Street to Ponce) – 2025
- 15th Street Extension (West Peachtree to Williams) –2025
- Piedmont Complete Street (Ponce to 15th Street) – 2026
- Spring St Enhancements (Peachtree to 17th St) – 2026
- West Peachtree/Spring St "quick build" (W Ptree from Linden to 17th St and on Spring from 17th St to 3rd St) – 2026
- 10th Street Bridge Enhancements (Techwood Dr to Spring and Williams St from Peachtree Pl to 12th St) – 2026
- 15th Street Safe Street (West Peachtree St to Piedmont Ave) – 2027
- Central Midtown Safe Street (10th Street from Myrtle St to Crescent Ave and on Peachtree Pl from Crescent Ave to Williams St) – 2028

For this study, the ARC ABM calibration and validation for the Midtown District included the evaluation of the current year 2020 ARC ABM (2024 release) and the 2030 and 2040 future year

projections. Along with the programmed projects listed above, the calibrated and validated models include two additional projects included in the 2030 ARC ABM (MTP 2024 release): the Buford Spring Connector Roundabout (Completed) and the Cycle Atlanta Phase 1.0 lane reduction on Ralph McGill Blvd.

Following calibration and validation, the Peachtree Vision project was added to consider the impacts of the Peachtree Vision modifications to roadway geometry throughout the district. Based on the comparison of the 2030 and 2040 Existing + Committed (future years with all programmed/funded projects, including Midtown Alliance projects), and the 2030 and 2040 Build models, which considered the addition of the Peachtree Vision project on top of Existing + Committed projects.

In total, the ARC ABM modeling procedure produced the following models for comparison and the derivation of growth rates:

- 2020 No Build (Existing ARC ABM 2024 MTP Release)
- 2020 Existing + Committed (Existing Conditions with Programmed Projects Included)
- 2030 Existing + Committed (Future Conditions with Programmed Projects Included)
- 2030 Build (Future Conditions with Programmed Projects and Peachtree Visioning Included)
- 2040 Existing + Committed (Future Conditions with Programmed Projects Included)
- 2040 Build (Future Conditions with Programmed Projects and Peachtree Visioning Included)

The comparison of the 2030 and 2040 Existing + Committed models to their build counterparts isolate the effects of the geometric changes to Peachtree St on traffic patterns and volumes. The comparison of the 2030 and 2040 Build model results to the 2020 No Build and Existing + Committed models allows the calculation of growth rates and the summary of effects of both programmed projects (Existing + Committed) and geometric changes to Peachtree St (Build). Summary slides with information on the Midtown District Activity Based Model are provided in **Attachment C**.

The growth rate for future year scenarios was selected based upon analysis of the historical count data, a comparison of the average annual percent growth rates calculated for the corridor using data from the ARC ABM, and from ARC's projected population and employment growth rates which are summarized in **Table 5**. Based on the low growth rates from population projections and travel demand model results as well as the observed decrease in AADT, a design growth rate of 0% is assumed for any future year scenario.

Table 5: Growth Rates

ARC Population Projections Growth Rate	ARC TDM Growth Rate	GDOT TADA! Station Growth Rate	Design Growth Rate
1.39%	1.03%	-1.96%	0% (no growth)

Operational Analysis (Build I: Geometry Changes)

Build conditions were evaluated using the existing volumes outlined in the previous sections. The same truck percentages and peak hour factors were used to provide a baseline comparison; however, geometries along Peachtree Street and at the study intersections were revised to capture

the proposed reconfigurations. Results for the Build I (2024) intersection capacity analysis are summarized in **Table 6** and **Table 7**. Synchro analysis worksheets are provided in **Attachment D**.

The results of the Build I (2024) capacity analysis indicate that several intersections along the study section of Peachtree Street have sufficient, excess capacity to serve existing traffic volumes with the proposed reconfiguration. The following intersections operate at capacity, exceed capacity, or have approaches that exceed capacity:

- Peachtree Street at 10th Street: PM Peak Hour
  - Southbound approach operates at LOS E (distinguished with dark orange text in **Table 6**)
- Peachtree Street at 14th Street: AM Peak Hour
  - Northbound approach operates at LOS E
- Peachtree Street at 15th Street: PM Peak Hour
  - Northbound approach operates at LOS E
  - Eastbound approach operates at LOS F (distinguished with red text in **Table 6**)
  - Westbound approach operates at LOS E
- Peachtree Street at 17th Street: AM Peak Hour
  - Intersection operates at LOS F
  - Northbound approach operates at LOS F
  - Eastbound approach operates at LOS F

Additionally, most turn-lane approaches do not experience queueing greater than the turn-lane capacity. The intersection of Peachtree Street at 11th Street does exceed capacity for the northbound left-turn lane.

It is worth noting that the phasing at the intersection of Peachtree Street at 15th Street is proposed to undergo the following changes as part of the 15th Street Extension project: dedicated left-turn phase for the eastbound and westbound left turn movements (protected-permissive operations), lagging left-turn phases for all approaches, and leading pedestrian intervals for each pedestrian phase. These changes are reflected in the results.

Table 6: Capacity Analysis Results – Build I (2024) Conditions

Intersection	Peak Hour	LOS and Delay (sec)				
		Overall	NB	SB	EB	WB
Peachtree St at North Ave	AM	C (22.0)	C (28.9)	D (42.3)	B (18.3)	B (15.3)
	PM	C (31.5)	C (25.6)	D (45.3)	C (23.9)	C (34.9)
Peachtree St at Ponce De Leon Ave	AM	C (33.6)	D (44.0)	C (32.7)	C (28.2)	C (26.6)
	PM	C (33.1)	D (45.4)	C (28.5)	C (27.2)	C (25.6)
Peachtree St at 3rd St	AM	B (19.9)	B (11.2)	C (32.3)	B (19.3)	D (45.4)
	PM	B (14.3)	B (14.5)	A (2.5)	D (43.6)	C (33.8)
Peachtree St at 4th St	AM	B (13.1)	A (5.8)	C (20.7)	A (0.0)	C (34.4)
	PM	A (8.3)	B (13.8)	A (2.5)	A (0.0)	C (34.1)
Peachtree St at 5th St	AM	B (15.6)	C (20.3)	A (1.2)	C (25.8)	D (36.3)
	PM	B (14.8)	B (15.6)	A (2.5)	D (35.6)	D (44.1)
Peachtree St at 6th St	AM	B (17.8)	B (14.8)	C (21.5)	B (14.4)	B (14.5)
	PM	A (9.6)	B (13.8)	A (2.6)	C (34.8)	C (34.1)
Peachtree St at 7th St	AM	B (15.5)	C (22.1)	A (2.5)	C (24.5)	C (25.4)
	PM	B (11.1)	B (11.8)	A (2.5)	D (39.7)	D (41.7)
Peachtree St at 8th St	AM	B (12.0)	B (14.1)	A (1.0)	C (33.3)	C (34.3)
	PM	B (11.7)	B (13.5)	A (3.1)	D (38.3)	D (35.4)
Peachtree St at Peachtree Pl	AM	B (12.5)	B (16.6)	A (1.3)	C (31.5)	C (30.8)
	PM	B (17.6)	B (14.0)	B (13.9)	D (35.7)	D (38.8)
Peachtree St at 10th St	AM	D (38.1)	D (51.7)	D (50.4)	C (29.2)	C (30.0)
	PM	D (50.9)	D (44.5)	E (61.9)	D (46.4)	D (37.1)
Peachtree St at 11th St	AM	C (20.1)	C (25.9)	A (1.9)	C (30.2)	C (29.8)
	PM	C (24.6)	C (21.2)	B (13.9)	D (45.9)	C (34.9)
Peachtree St at 12th St	AM	C (21.9)	B (17.7)	B (16.8)	D (35.9)	D (41.7)
	PM	B (15.9)	B (14.6)	A (8.0)	D (44.2)	D (44.5)
Peachtree St at 13th St	AM	A (5.2)	A (4.3)	A (0.5)	D (47.5)	D (50.2)
	PM	A (4.6)	A (4.3)	A (0.2)	D (49.1)	D (52.7)
Peachtree St at 14th St	AM	D (39.7)	E (57.0)	C (25.3)	C (21.2)	D (53.5)
	PM	D (41.9)	D (37.3)	D (37.1)	D (54.6)	D (40.0)
Peachtree St at 15th St	AM	C (23.1	C (28.7)	B (11.7)	D (39.1)	D (38.9)
	PM	D (53.7)	E (71.4)	A (9.0)	F (85.3)	E (56.8)
Peachtree St at Boys and Girls Club	AM	C (22.1)	A (7.3)	C (30.9)	-	D (39.2)
	PM	A (5.9)	A (9.6)	A (1.5)	-	D (39.0)
Peachtree St at 16th St	AM	B (17.8)	B (10.7)	B (16.6)	D (39.8)	D (44.2)
	PM	B (18.7)	B (15.4)	B (15.5)	D (41.4)	D (40.6)
Peachtree St at 17th St	AM	F (94.1)	F (88.9)	D (51.4)	F (222.3)	D (42.8)
	PM	C (22.0)	B (15.5)	B (14.2)	D (51.4)	D (42.7)
Peachtree St at West Peachtree St	AM	B (12.2)	B (14.4)	B (10.0)	A (9.5)	-
	PM	C (21.1)	A (6.6)	B (15.9)	D (53.2)	-

Table 7: Capacity Analysis Queue Results – Build I (2024) Conditions

Intersection	Peak Hour	95th Percentile Queue Length (ft)					
		NBL	NBT	NBR	SBL	SBT	SBR
Peachtree St at North Ave	AM		229	121		180	
	PM		255	139		281	
Peachtree St at Ponce De Leon Ave	AM	m42	416		74	270	
	PM	m32	553		85	328	
Peachtree St at 3rd St	AM	m9	52		m2	51	
	PM	m9	60		m4	122	
Peachtree St at 4th St	AM	m2	54		m2	93	
	PM	m5	124		m4	173	
Peachtree St at 5th St	AM	11	95		m13	108	
	PM	m10	114		m12	120	
Peachtree St at 6th St	AM	m10	132			130	
	PM	m9	136			121	
Peachtree St at 7th St	AM	6	57		m6	49	
	PM	m10	98		m13	138	
Peachtree St at 8th St	AM	m6	63		m8	40	
	PM	m5	78		m20	154	
Peachtree St at Peachtree Pl	AM		72			m525	
	PM		102			m748	
Peachtree St at 10th St	AM	44	256	0	m180	#644	
	PM	59	462	1	m174	m#748	m23
Peachtree St at 11th St	AM	m39	267		m15	410	
	PM	m#73	505		m12	m#691	
Peachtree St at 12th St	AM		92			316	
	PM		122			#682	
Peachtree St at 13th St	AM		61			m140	
	PM		159			m276	
Peachtree St at 14th St	AM	26	231	0	40	513	m0
	PM	59	414	2	m42	#809	m0
Peachtree St at 15th St	AM	59	327		m1	0	
	PM	m39	#922		m3	71	
Peachtree St at Boys and Girls Club	AM		49			53	
	PM		m67			52	
Peachtree St at 16th St	AM	23	249		m18	310	
	PM	m20	395		m17	243	
Peachtree St at 17th St	AM	38	217		29	204	11
	PM	m40	264		34	282	12
Peachtree St at West Peachtree St	AM	156					
	PM	151					

95th percentile volume exceeds capacity, indicating queue length is likely longer than reported
m Volume for 95th percentile queue is metered by upstream signal

In the Build I (2024) capacity analysis, the existing cycle lengths at all intersections were retained. The delays outlined in **Table 6** do reflect adjustments in splits and timings in order to better serve the proposed reconfigurations.

Operational Analysis (Build II: Geometry + Volume Shift Changes)

In addition to the analysis outlined in the previous section, a Build II (2024) capacity analysis was conducted using the proposed geometric changes as well as the projected volume shifts from the Midtown District Activity Based Travel Demand Model. The same truck percentages and peak hour factors were used to provide a baseline comparison, and the same geometry conditions from the Build I (2024) evaluation were used in the Build II (2024) evaluation. Results for the Build II (2024) intersection capacity analysis are summarized in **Table 8** and **Table 9**. Synchro analysis worksheets are provided in **Attachment D**.

The results of the Build II (2024) capacity analysis similarly indicate that several intersections along the study section of Peachtree Street have sufficient capacity to serve the shifted traffic volumes from the Midtown District Activity Based Travel Demand Model with the proposed reconfiguration. The results also indicate that most of the intersections identified in the Build I (2024) conditions with nearing or at capacity approaches experience a reduction in delay and return to acceptable operations with the projected volume shift. The following intersections still have approaches nearing capacity:

- Peachtree Street at 14th Street: AM Peak Hour
  - Westbound approach operates at LOS E
- Peachtree Street at 15th Street: PM Peak Hour
  - Westbound approach operates at LOS E

Additionally, all turn-lane approaches do not experience queueing greater than the turn-lane capacity.

Table 8: Capacity Analysis LOS Results – Build II (2024) Conditions

Intersection	Peak Hour	LOS and Delay (sec)				
		Overall	NB	SB	EB	WB
Peachtree St at North Ave	AM	C (23.5)	C (28.4)	D (40.3)	B (18.4)	C (21.6)
	PM	C (29.1)	C (25.0)	D (39.2)	C (24.1)	C (33.2)
Peachtree St at Ponce De Leon Ave	AM	C (32.3)	D (49.5)	D (35.0)	B (18.7)	C (22.6)
	PM	C (28.5)	D (43.5)	C (26.7)	C (24.0)	B (16.0)
Peachtree St at 3rd St	AM	C (22.1)	B (13.5)	C (34.8)	B (18.7)	D (45.2)
	PM	B (15.6)	B (12.3)	A (1.0)	D (43.6)	C (33.8)
Peachtree St at 4th St	AM	B (11.6)	A (4.7)	B (16.9)	A (0.0)	C (34.3)
	PM	A (7.2)	B (11.9)	A (1.2)	A (0.0)	C (34.1)
Peachtree St at 5th St	AM	B (15.4)	B (18.0)	A (0.7)	C (25.8)	C (36.5)
	PM	B (16.4)	B (13.2)	A (1.2)	D (35.7)	D (44.9)
Peachtree St at 6th St	AM	B (15.8)	B (13.0)	B (19.2)	B (14.4)	B (14.5)
	PM	A (9.2)	B (12.2)	A (1.3)	C (34.8)	C (34.1)
Peachtree St at 7th St	AM	B (15.7)	B (20.0)	A (1.8)	C (24.5)	C (25.4)
	PM	B (12.1)	B (10.3)	A (1.0)	D (39.7)	D (41.7)
Peachtree St at 8th St	AM	B (13.0)	B (12.4)	A (0.5)	C (33.1)	C (34.2)
	PM	B (12.2)	B (11.7)	A (1.3)	D (38.3)	D (35.4)
Peachtree St at Peachtree Pl	AM	B (13.0)	B (14.5)	A (0.7)	C (31.5)	C (30.8)
	PM	B (19.6)	B (12.2)	B (16.1)	D (35.7)	D (38.1)
Peachtree St at 10th St	AM	C (34.1)	D (41.4)	D (46.1)	C (29.0)	C (30.7)
	PM	D (45.2)	D (35.6)	D (45.2)	D (37.3)	D (37.3)
Peachtree St at 11th St	AM	B (18.2)	C (20.5)	A (0.9)	C (30.2)	C (29.8)
	PM	C (21.9)	B (18.0)	A (2.5)	D (45.9)	C (33.8)
Peachtree St at 12th St	AM	C (21.1)	B (13.7)	B (13.4)	D (35.9)	D (42.8)
	PM	B (14.1)	B (11.4)	A (1.8)	D (44.2)	D (44.5)
Peachtree St at 13th St	AM	A (5.5)	A (3.7)	A (0.4)	D (47.5)	D (50.2)
	PM	A (5.6)	A (3.4)	A (0.5)	D (49.1)	D (52.7)
Peachtree St at 14th St	AM	D (36.1)	D (45.0)	C (24.0)	C (21.9)	E (55.1)
	PM	C (28.8)	C (33.1)	B (13.6)	D (41.2)	C (31.4)
Peachtree St at 15th St	AM	C (28.3)	C (28.4)	B (15.3)	D (42.2)	D (41.8)
	PM	C (33.6)	C (31.7)	B (19.1	D (47.0)	E (50.0)
Peachtree St at Boys and Girls Club	AM	B (18.6)	A (7.0)	C (26.3)	-	D (39.3)
	PM	A (4.7)	A (7.8)	A (0.9)	-	D (39.0)
Peachtree St at 16th St	AM	B (16.0)	A (9.6)	B (13.2)	D (39.9)	D (43.7)
	PM	B (17.0)	B (12.8)	B (12.8)	D (41.4)	D (40.4)
Peachtree St at 17th St	AM	C (24.3)	B (15.4)	B (16.2)	D (43.3)	D (37.8)
	PM	C (20.8)	B (13.0)	B (12.6)	D (48.6)	D (42.7)
Peachtree St at West Peachtree St	AM	B (10.9)	B (12.0)	B (11.0)	A (10.0)	-
	PM	C (22.6)	A (7.9)	B (15.6)	D (53.3)	-

Table 9: Capacity Analysis Queue Results – Build II (2024) Conditions

Intersection	Peak Hour	95th Percentile Queue Length (ft)					
		NBL	NBT	NBR	SBL	SBT	SBR
Peachtree St at North Ave	AM		137	55		107	
	PM		229	121		180	
Peachtree St at Ponce De Leon Ave	AM	m52	273		51	184	
	PM	m42	416		74	270	
Peachtree St at 3rd St	AM	m14	73		12	88	
	PM	m9	52		m2	51	
Peachtree St at 4th St	AM	m1	18		m9	105	
	PM	m2	54		m2	93	
Peachtree St at 5th St	AM	27	174		15	129	
	PM	11	95		m13	108	
Peachtree St at 6th St	AM	m0	207			157	
	PM	m10	132			130	
Peachtree St at 7th St	AM	m7	157		5	50	
	PM	6	57		m6	49	
Peachtree St at 8th St	AM	m6	136		4	26	
	PM	m6	63		m8	40	
Peachtree St at Peachtree Pl	AM		73			192	
	PM		72			m525	
Peachtree St at 10th St	AM	48	255	2	75	205	43
	PM	44	256	0	m180	#644	
Peachtree St at 11th St	AM	40	304		m13	113	
	PM	m39	267		m15	410	
Peachtree St at 12th St	AM		94			119	
	PM		92			316	
Peachtree St at 13th St	AM		40			107	
	PM		61			m140	
Peachtree St at 14th St	AM	55	234	0	40	194	11
	PM	26	231	0	40	513	m0
Peachtree St at 15th St	AM	m81	248		28	205	
	PM	59	327		m1	0	
Peachtree St at Boys and Girls Club	AM		188			256	
	PM		49			53	
Peachtree St at 16th St	AM	m16	217		m10	145	
	PM	23	249		m18	310	
Peachtree St at 17th St	AM	31	86		30	494	61
	PM	38	217		29	204	11
Peachtree St at West Peachtree St	AM	25					
	PM	156					

95th percentile volume exceeds capacity, indicating queue length is likely longer than reported
m Volume for 95th percentile queue is metered by upstream signal

Conclusion

The Peachtree Street Visioning project is an enhancement project along the approximately 1.5-mile section of Peachtree Street from North Avenue to West Peachtree Street in Midtown Atlanta. The project aims to create a new vision for Peachtree Street in Midtown Atlanta that improves safety for all users, prioritizes non-motorized users, and creates a corridor that facilitates engagement with public spaces and street-level businesses. This project is in City of Atlanta jurisdiction and was originally identified in the Midtown Alliance *2022 Public Life Action Plan*.

As part of this project, the study corridor of Peachtree Street is proposed to undergo geometric changes, lane reductions, curb extensions, and median installations throughout the corridor. Due to these changes, operations analyses were completed to confirm the proposed changes will operate at an acceptable LOS.

Intersection capacity analyses were completed for existing conditions, and results indicate that several study intersections along the study section of Peachtree Street operate at an acceptable LOS during both peak hours, indicating acceptable potential for lane reduction. The intersections of Peachtree Street at 14th Street, Peachtree Street at 15th Street, and Peachtree Street at 17th Street have approaches nearing or at capacity in existing conditions.

The operational impacts of the reconfigurations were assessed to evaluate how the proposed design would support the purposes of the Peachtree Vision project. The results of the Build I (2024) capacity analysis, which evaluates the reconfigurations with the existing 2024 volumes, indicate that the intersections south of 10th Street have sufficient, excess capacity to serve existing traffic volumes with the proposed intersection reconfigurations. The intersections of Peachtree Street at 10th Street, Peachtree Street at 14th Street, and Peachtree Street at 15th Street have approaches nearing or operating at capacity. The intersection of Peachtree Street at 17th Street operates at capacity.

The results of the Build II (2024) capacity analysis, which evaluates the reconfigurations with shifted 2024 volumes based on results from the Midtown District Activity Based Travel Demand Model, indicate that all intersections along the study corridor have sufficient capacity to serve the shifted traffic volumes with the proposed intersection reconfigurations. The intersection of Peachtree Street at 14th Street has the westbound approach operating at LOS E in the AM peak hour, and the intersection of Peachtree Street at 15th Street has the westbound approach operating at LOS E in the PM peak hour; however, the intersections both operate at acceptable levels of service for both peak hours.

The following recommendations were developed based on the results of the capacity analyses for the three scenarios evaluated:

- The intersections of Peachtree Street at Peachtree Place, 12th Street, and 13th Street operate acceptably without dedicated left-turn lanes; none are recommended
    - Northbound left-turn volumes were observed and projected to be low volume movements at these locations. Northbound left-turns could be prohibited, though the option to use the local grid at these locations is desirable as opposed to adding northbound left-turning traffic at the nearby intersections of 14th Street or 10th Street

- The intersection of Peachtree Street at 10th Street is recommended to retain dedicated right-turn lanes in addition to the dedicated left-turn lanes for the northbound and southbound approaches as a short-term measure to address the existing traffic demand at the intersection
- The intersection of Peachtree Street at 14th Street is recommended to retain dedicated right-turn lanes and left-turn lanes on the northbound and southbound approaches
- The section of Peachtree Street between 14th Street and the Woodruff Arts Center is recommended to retain two southbound through lanes to accommodate existing and shifted traffic demand

Attachments

The following attachments are included to supplement this memorandum:

Attachment A: Project Location Map

Attachment B: Proposed Reconfiguration

Attachment C: Volume Development Worksheets

Attachment D: Midtown District Activity Based Model Slides

Attachment E: Synchro Worksheets

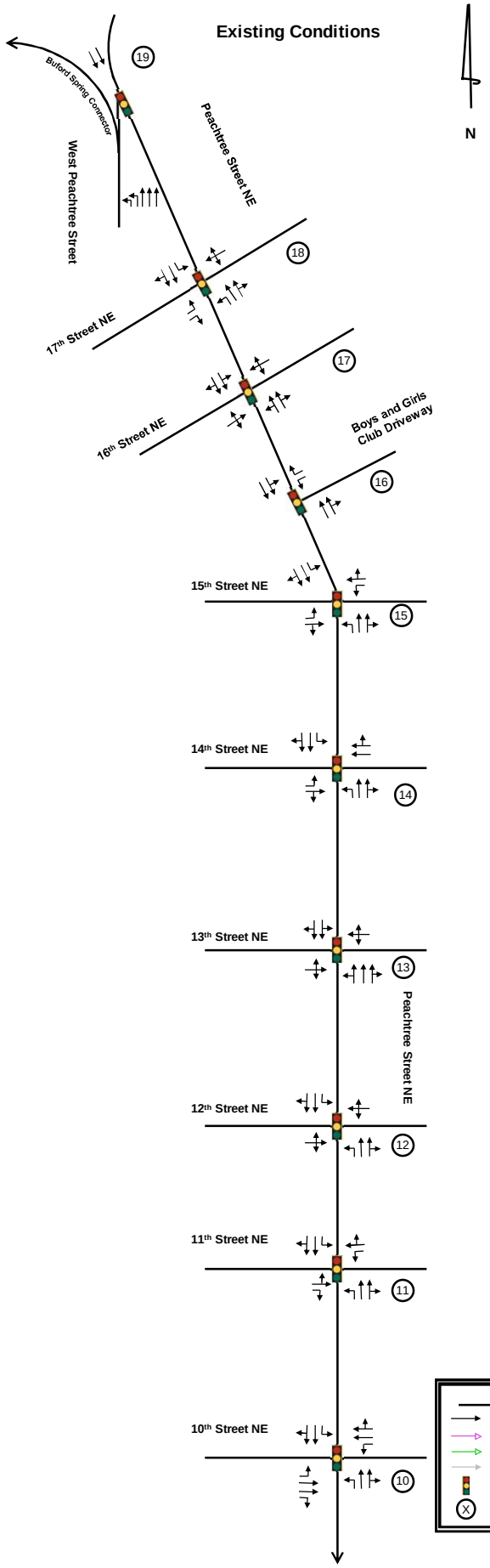
Attachment A:

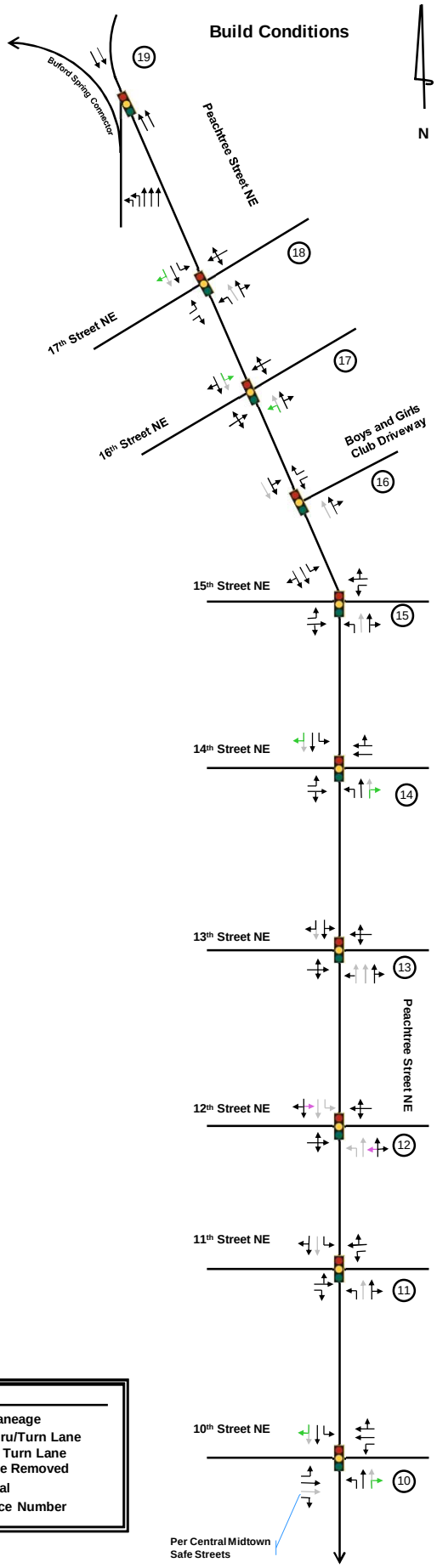
Project Location Map

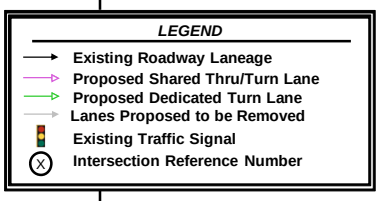


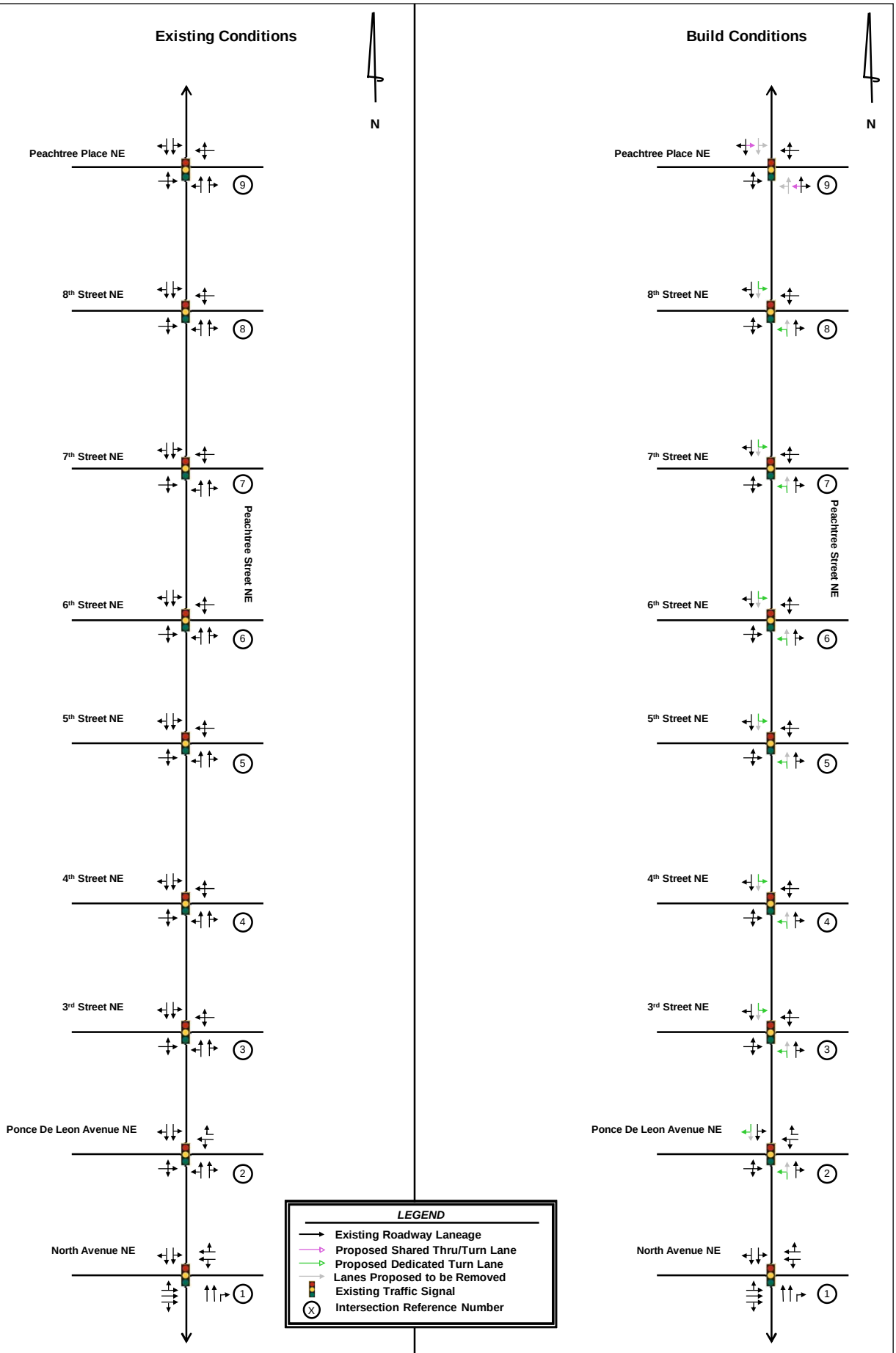
PROJECT LOCATION MAP

PEACHTREE STREET VISION


Existing Conditions
N
Buford Spring Connector
West Peachtree Street
Peachtree Street NE
17th Street NE
16th Street NE
Boys and Girls Club Driveway
15th Street NE
14th Street NE
13th Street NE
12th Street NE
11th Street NE
10th Street NE
19
18
17
16
15
14
13
12
11
10


Build Conditions
N
Buford Spring Connector
Peachtree Street NE
17th Street NE
16th Street NE
Boys and Girls Club Driveway
15th Street NE
14th Street NE
13th Street NE
12th Street NE
11th Street NE
10th Street NE
19
18
17
16
15
14
13
12
11
10
Per Central Midtown Safe Streets


LEGEND
Existing Roadway Laneage
Proposed Shared Thru/Turn Lane
Proposed Dedicated Turn Lane
Lanes Proposed to be Removed
Existing Traffic Signal
X
Intersection Reference Number


Existing Conditions
N
Peachtree Place NE
8th Street NE
7th Street NE
6th Street NE
5th Street NE
4th Street NE
3rd Street NE
Ponce De Leon Avenue NE
North Avenue NE
Peachtree Street NE
9
8
7
6
5
4
3
2
1
LEGEND
Existing Roadway Laneage
Proposed Shared Thru/Turn Lane
Proposed Dedicated Turn Lane
Lanes Proposed to be Removed
Existing Traffic Signal
Intersection Reference Number
Build Conditions
N
Peachtree Place NE
8th Street NE
7th Street NE
6th Street NE
5th Street NE
4th Street NE
3rd Street NE
Ponce De Leon Avenue NE
North Avenue NE
Peachtree Street NE
9
8
7
6
5
4
3
2
1

Attachment C:

Volume Development Worksheets

VOLUME DEVELOPMENT SHEET

Existing	*2024*			
Base	*2025*			
Design	*2024*			
Monthly Factor	*0.99*	*0.99*		
Daily Factor	*0.93*	*0.93*		
	NB	*SB*	EB	WB
AM Volume Shift	*-16%*	*0%*	*3%*	*-4%*
PM Volume Shift	*-16%*	*0%*	*3%*	*-4%*

Count Date 9/19/2024
AM Peak Hour 8:00
PM Peak Hour 17:00

		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
W Peachtree St	Minor Arterial	0.99	0.93
	Local	0.97	0.93

Peachtree St at W Peachtree St

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE				3 Buford Spring Connector N/Bound On-				Peachtree St NW				Peachtree St NE (East)			
		Northbound				Southbound				Eastbound				Westbound		
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	2	0	0	77	0	0	0	0	0	326	89	3	0	128	0	0
8:15 AM	3	0	1	70	0	0	0	0	0	384	61	5	0	130	0	0
8:30 AM	1	0	0	97	0	0	0	0	0	390	88	7	0	180	0	0
8:45 AM	10	0	0	66	0	0	0	0	0	326	109	6	0	206	0	0
2024 Peak Hour Traffic	**16**	**0**	**1**	**310**	**0**	**0**	**0**	**0**	**0**	**1,426**	**347**	**21**	**0**	**644**	**0**	**0**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**15**	**0**	**0**	**280**	**0**	**0**	**0**	**0**	**0**	**1,285**	**315**	**20**	**0**	**580**	**0**	**0**
PHF		0.83				0.00				0.92				0.78		
Heavy Vehicle Count	0	0	0	3	0	0	0	0	0	54	7	1	0	27	0	0
Heavy Vehicle % of Total		1%				#DIV/0!				3%				4%		
Heavy Vehicle %	0.0%	2.0%	0.0%	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
ARC ABM Shift (E+C vs. Build)	*-16.0%*	*-16.0%*	*-16.0%*	*-16.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*-4.0%*	*-4.0%*	*-4.0%*	*-4.0%*
2024 Projected Traffic	**15**	**0**	**0**	**235**	**0**	**0**	**0**	**0**	**0**	**1,325**	**325**	**20**	**0**	**555**	**0**	**0**
Traffic Adjustments												*-15*				
2024 Build II: Volume Shift	**15**	**0**	**0**	**235**	**0**	**0**	**0**	**0**	**0**	**1,325**	**325**	**5**	**0**	**555**	**0**	**0**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE				3 Buford Spring Connector N/Bound On-				Peachtree St NW				Peachtree St NE (East)			
		Northbound				Southbound				Eastbound				Westbound		
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	0	0	191	0	0	0	0	0	425	146	6	0	158	0	0
5:15 PM	0	0	0	226	0	0	0	0	0	439	125	7	0	220	0	0
5:30 PM	0	0	0	193	0	0	0	0	0	430	126	5	0	166	0	0
5:45 PM	0	0	0	195	0	0	0	0	0	432	114	1	0	112	0	0
2024 Peak Hour Traffic	**0**	**0**	**0**	**805**	**0**	**0**	**0**	**0**	**0**	**1,726**	**511**	**19**	**0**	**656**	**0**	**0**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**0**	**0**	**725**	**0**	**0**	**0**	**0**	**0**	**1,555**	**460**	**15**	**0**	**590**	**0**	**0**
PHF		0.89				0.00				0.98				0.75		
Heavy Vehicle Count	0	0	0	5	0	0	0	0	0	18	4	0	0	18	0	0
Heavy Vehicle % of Total		1%				#DIV/0!				1%				3%		
Heavy Vehicle %	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.8%	0.0%	0.0%	2.7%	0.0%	0.0%
ARC ABM Shift (E+C vs. Build)	*-16.0%*	*-16.0%*	*-16.0%*	*-16.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*-4.0%*	*-4.0%*	*-4.0%*	*-4.0%*
2024 Build II: Volume Shift	**0**	**0**	**0**	**610**	**0**	**0**	**0**	**0**	**0**	**1,600**	**475**	**15**	**0**	**565**	**0**	**0**

VOLUME DEVELOPMENT SHEET

Existing	*2024*			
Base	*2025*			
Design	*2040*			
Monthly Factor	*0.99*	*0.98*		
Daily Factor	*0.93*	*0.94*		
	NB	*SB*	EB	WB
AM Volume Shift	*-22%*	*-14%*	*-10%*	*0%*
PM Volume Shift	*-22%*	*-14%*	*-10%*	*0%*

Peachtree St at 17th St

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				17th St NE (West) Eastbound				17th St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	23	86	3	0	5	131	15	0	9	2	37	0	1	12	4
8:15 AM	0	24	75	4	0	5	125	15	0	13	13	46	0	2	22	5
8:30 AM	0	28	89	5	0	6	143	24	0	16	9	72	0	1	23	2
8:45 AM	0	16	66	3	0	4	200	21	0	20	11	69	0	4	40	3
2024 Peak Hour Traffic	**0**	**91**	**316**	**15**	**0**	**20**	**599**	**75**	**0**	**58**	**35**	**224**	**0**	**8**	**97**	**14**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**80**	**285**	**15**	**0**	**20**	**540**	**70**	**0**	**50**	**30**	**200**	**0**	**5**	**85**	**10**
PHF			0.86				0.77				0.79				0.63	
Heavy Vehicle Count	0	3	3	1	0	1	27	0	0	0	2	3	0	0	0	1
Heavy Vehicle % of Total			2%				4%				2%				1%	
Heavy Vehicle %	2.0%	2.0%	0.9%	2.0%	2.0%	2.0%	2.0%	0.0%	2.0%	0.0%	2.0%	1.3%	2.0%	0.0%	0.0%	2.0%
ARC ABM Shift (E+C vs. Build)	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*-14.0%*	*-14.0%*	*-14.0%*	*-14.0%*	*-10.0%*	*-10.0%*	*-10.0%*	*-10.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Projected Traffic	**0**	**60**	**220**	**10**	**0**	**15**	**465**	**60**	**0**	**45**	**25**	**180**	**0**	**5**	**85**	**10**
Traffic Adjustments							*-35*							*10*		
2024 Build II: Volume Shift	**0**	**60**	**220**	**10**	**0**	**15**	**430**	**60**	**0**	**45**	**25**	**180**	**0**	**15**	**85**	**10**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				17th St NE (West) Eastbound				17th St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	24	170	6	0	4	156	17	0	11	13	40	0	2	29	2
5:15 PM	0	21	194	5	0	11	193	11	0	9	15	48	0	1	36	5
5:30 PM	0	21	177	8	0	24	110	16	0	12	26	35	0	1	38	3
5:45 PM	0	15	172	3	0	20	117	14	0	9	10	30	0	3	41	2
2024 Peak Hour Traffic	**0**	**81**	**713**	**22**	**0**	**59**	**576**	**58**	**0**	**41**	**64**	**153**	**0**	**7**	**144**	**12**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**75**	**640**	**20**	**0**	**55**	**520**	**50**	**0**	**35**	**60**	**140**	**0**	**5**	**130**	**10**
PHF			0.93				0.81				0.88				0.89	
Heavy Vehicle Count	0	0	2	0	0	2	16	0	0	2	1	3	0	0	0	0
Heavy Vehicle % of Total			0%				3%				2%				0%	
Heavy Vehicle %	0.0%	0.0%	0.3%	0.0%	0.0%	3.4%	2.8%	0.0%	0.0%	4.9%	1.6%	2.0%	0.0%	0.0%	0.0%	0.0%
ARC ABM Shift (E+C vs. Build)	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*-14.0%*	*-14.0%*	*-14.0%*	*-14.0%*	*-10.0%*	*-10.0%*	*-10.0%*	*-10.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Build II: Volume Shift	**0**	**60**	**500**	**15**	**0**	**45**	**445**	**45**	**0**	**30**	**55**	**125**	**0**	**5**	**130**	**10**

Count Date	9/19/2024
AM Peak Hour	8:00
PM Peak Hour	17:00

		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
17th St	Local	0.98	0.94
	Local	0.97	0.93

Kimley-Horn and Associates, Inc.

VOLUME DEVELOPMENT SHEET

Existing	*2024*			
Base	*2025*			
Design	*2040*			
Monthly Factor	*0.99*	*0.98*		
Daily Factor	*0.93*	*0.94*		
	NB	*SB*	EB	WB
AM Volume Shift	*-22%*	*-22%*	*5%*	*-12%*
PM Volume Shift	*-22%*	*-22%*	*5%*	*-12%*

Count Date 9/19/2024
AM Peak Hour 8:00
PM Peak Hour 17:00

		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
16th St	Local	0.98	0.94
	Local	0.97	0.93

Peachtree St at 16th St

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South)				Peachtree St NE (North)				16th St NE (West)				16th St NE (East)			
		Northbound				**Southbound**				**Eastbound**				**Westbound**		
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	4	116	2	0	1	137	13	0	1	1	3	0	3	5	3
8:15 AM	0	4	113	5	0	4	128	9	0	2	0	6	0	1	10	6
8:30 AM	0	2	123	0	0	7	153	14	0	1	1	3	0	0	13	0
8:45 AM	0	5	91	2	0	16	207	18	0	0	6	4	0	1	28	9
2024 Peak Hour Traffic	**0**	**15**	**443**	**9**	**0**	**28**	**625**	**54**	**0**	**4**	**8**	**16**	**0**	**5**	**56**	**18**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**15**	**400**	**10**	**0**	**25**	**565**	**50**	**0**	**5**	**5**	**15**	**0**	**5**	**50**	**15**
PHF			0.93				0.73				0.70				0.52	
Heavy Vehicle Count	0	0	8	0	0	0	21	7	0	0	0	0	0	0	1	0
Heavy Vehicle % of Total			2%				4%				0%				1%	
Heavy Vehicle %	2.0%	0.0%	1.8%	0.0%	2.0%	0.0%	2.0%	2.0%	2.0%	0.0%	0.0%	0.0%	2.0%	0.0%	1.8%	0.0%
ARC ABM Shift (E+C vs. Build)	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*-12.0%*	*-12.0%*	*-12.0%*	*-12.0%*
2024 Projected Traffic	**0**	**10**	**310**	**10**	**0**	**20**	**440**	**40**	**0**	**5**	**5**	**15**	**0**	**5**	**45**	**15**
Traffic Adjustments						*10*	*10*	*10*								
2024 Build II: Volume Shift	**0**	**10**	**310**	**10**	**0**	**30**	**450**	**50**	**0**	**5**	**5**	**15**	**0**	**5**	**45**	**15**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South)				Peachtree St NE (North)				16th St NE (West)				16th St NE (East)			
		Northbound				**Southbound**				**Eastbound**				**Westbound**		
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	7	181	2	0	4	180	14	0	5	8	17	0	5	4	3
5:15 PM	0	8	199	6	0	9	182	12	0	4	13	10	0	1	13	5
5:30 PM	0	7	177	3	0	4	120	15	0	2	10	6	0	4	19	4
5:45 PM	0	10	185	6	0	8	137	24	0	2	6	5	0	2	23	4
2024 Peak Hour Traffic	**0**	**32**	**742**	**17**	**0**	**25**	**619**	**65**	**0**	**13**	**37**	**38**	**0**	**12**	**59**	**16**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**30**	**670**	**15**	**0**	**25**	**560**	**60**	**0**	**10**	**35**	**35**	**0**	**10**	**55**	**15**
PHF			0.93				0.87				0.73				0.75	
Heavy Vehicle Count	0	1	1	0	0	0	11	7	0	0	1	1	0	0	0	0
Heavy Vehicle % of Total			0%				3%				2%				0%	
Heavy Vehicle %	0.0%	3.1%	0.1%	0.0%	0.0%	0.0%	1.8%	10.8%	0.0%	0.0%	2.7%	2.6%	0.0%	0.0%	0.0%	0.0%
ARC ABM Shift (E+C vs. Build)	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*-12.0%*	*-12.0%*	*-12.0%*	*-12.0%*
2024 Build II: Volume Shift	**0**	**25**	**525**	**10**	**0**	**20**	**435**	**45**	**0**	**10**	**35**	**35**	**0**	**10**	**50**	**15**

Kimley-Horn and Associates, Inc.

VOLUME DEVELOPMENT SHEET

Existing	*2024*			
Base	*2025*			
Design	*2040*			
Monthly Factor	*0.99*	*0.98*		
Daily Factor	*0.93*	*0.94*		
	NB	*SB*	EB	WB
AM Volume Shift	*-26%*	*-22%*	*0%*	*0%*
PM Volume Shift	*-26%*	*-22%*	*0%*	*0%*

Count Date 9/19/2024
AM Peak Hour 8:00
PM Peak Hour 17:00

		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
Driveway	Local	0.98	0.94
	Local	0.97	0.93

Peachtree St at Boys and Girls Club Driveway

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South)				Peachtree St NE (North)								Boys And Girls Club Driveway			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	0	121	2	0	2	141	0	0	0	0	0	0	1	0	0
8:15 AM	0	0	121	3	0	0	132	0	0	0	0	0	0	1	0	0
8:30 AM	0	0	123	3	0	1	154	0	0	0	0	0	0	0	0	3
8:45 AM	0	0	99	5	0	0	204	0	0	0	0	0	0	0	0	1
2024 Peak Hour Traffic	**0**	**0**	**464**	**13**	**0**	**3**	**631**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**4**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**0**	**420**	**10**	**0**	**5**	**570**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
PHF			0.95				0.78				0.00				0.50	
Heavy Vehicle Count	0	0	8	0	0	0	21	0	0	0	0	0	0	0	0	0
Heavy Vehicle % of Total			2%				3%				#DIV/0!				0%	
Heavy Vehicle %	2.0%	2.0%	1.7%	0.0%	2.0%	0.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	0.0%	2.0%	0.0%
ARC ABM Shift (E+C vs. Build)	*-26.0%*	*-26.0%*	*-26.0%*	*-26.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2027 Projected Traffic	**0**	**0**	**310**	**5**	**0**	**5**	**445**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
Traffic Adjustments			*55*	*10*												
2024 Build II: Volume Shift	**0**	**0**	**365**	**15**	**0**	**5**	**445**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South)				Peachtree St NE (North)								Boys And Girls Club Driveway			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	0	190	2	0	1	193	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	201	2	0	0	173	0	0	0	0	0	0	2	0	2
5:30 PM	0	0	190	6	0	0	127	0	0	0	0	0	0	2	0	2
5:45 PM	0	0	193	3	0	0	146	0	0	0	0	0	0	1	0	2
2024 Peak Hour Traffic	**0**	**0**	**774**	**13**	**0**	**1**	**639**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**7**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**0**	**695**	**10**	**0**	**0**	**575**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**5**
PHF			0.97				0.82				0.00				0.81	
Heavy Vehicle Count	0	0	2	4	0	0	11	0	0	0	0	0	0	0	0	0
Heavy Vehicle % of Total			1%				2%				#DIV/0!				0%	
Heavy Vehicle %	0.0%	0.0%	0.3%	30.8%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ARC ABM Shift (E+C vs. Build)	*-26.0%*	*-26.0%*	*-26.0%*	*-26.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Build II: Volume Shift	**0**	**0**	**515**	**5**	**0**	**0**	**450**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**5**

Kimley-Horn and Associates, Inc.

VOLUME DEVELOPMENT SHEET

Existing	*2024*			
Base	*2025*			
Design	*2040*			
Monthly Factor	*0.99*	*0.98*		
Daily Factor	*0.93*	*0.94*		
	NB	*SB*	EB	WB
AM Volume Shift	*-22%*	*-26%*	*-2%*	*-12%*
PM Volume Shift	*-22%*	*-26%*	*-2%*	*-12%*

Peachtree St at 15th St

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				15th St NE (West) Eastbound				15th St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	18	116	10	0	11	114	20	0	4	4	17	0	19	25	3
8:15 AM	0	27	115	9	0	7	111	16	0	3	4	15	0	23	29	3
8:30 AM	0	27	117	16	0	17	101	22	0	6	4	19	0	21	22	5
8:45 AM	0	28	99	21	0	18	148	39	0	2	6	19	0	25	36	2
2024 Peak Hour Traffic	**0**	**100**	**447**	**56**	**0**	**53**	**474**	**97**	**0**	**15**	**18**	**70**	**0**	**88**	**112**	**13**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**90**	**405**	**50**	**0**	**50**	**425**	**85**	**0**	**15**	**15**	**60**	**0**	**80**	**100**	**10**
PHF			0.94				0.76				0.89				0.85	
Heavy Vehicle Count	0	2	3	3	0	1	13	7	0	4	0	3	0	0	0	1
Heavy Vehicle % of Total			1%				3%				7%				0%	
Heavy Vehicle %	2.0%	2.0%	0.7%	2.0%	2.0%	1.9%	2.0%	2.0%	2.0%	2.0%	0.0%	2.0%	2.0%	0.0%	0.0%	2.0%
ARC ABM Shift (E+C vs. Build)	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*-26.0%*	*-26.0%*	*-26.0%*	*-26.0%*	*-2.0%*	*-2.0%*	*-2.0%*	*-2.0%*	*-12.0%*	*-12.0%*	*-12.0%*	*-12.0%*
2024 Projected Traffic	**0**	**70**	**315**	**40**	**0**	**35**	**315**	**65**	**0**	**15**	**15**	**60**	**0**	**70**	**90**	**10**
Traffic Adjustments		*50*		*20*		*10*		*30*		*47*	*17*	*68*		*25*	*32*	*19*
2024 Build II: Volume Shift	**0**	**120**	**315**	**60**	**0**	**45**	**315**	**95**	**0**	**65**	**35**	**130**	**0**	**100**	**125**	**30**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				15th St NE (West) Eastbound				15th St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	21	176	29	0	10	157	9	0	9	22	48	0	40	23	8
5:15 PM	0	30	179	28	0	7	162	5	0	18	17	60	0	29	15	3
5:30 PM	0	20	163	29	0	4	121	8	0	18	24	58	0	33	14	6
5:45 PM	0	37	185	35	0	4	146	5	0	13	19	48	0	32	13	4
2024 Peak Hour Traffic	**0**	**108**	**703**	**121**	**0**	**25**	**586**	**27**	**0**	**58**	**82**	**214**	**0**	**134**	**65**	**21**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**95**	**635**	**110**	**0**	**25**	**530**	**25**	**0**	**50**	**75**	**195**	**0**	**120**	**60**	**20**
PHF			0.91				0.91				0.89				0.77	
Heavy Vehicle Count	0	3	4	2	0	0	5	6	0	2	1	4	0	3	2	0
Heavy Vehicle % of Total			1%				2%				2%				2%	
Heavy Vehicle %	0.0%	2.8%	0.6%	1.7%	0.0%	0.0%	0.9%	22.2%	0.0%	3.4%	1.2%	1.9%	0.0%	2.2%	3.1%	0.0%
ARC ABM Shift (E+C vs. Build)	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*-26.0%*	*-26.0%*	*-26.0%*	*-26.0%*	*-2.0%*	*-2.0%*	*-2.0%*	*-2.0%*	*-12.0%*	*-12.0%*	*-12.0%*	*-12.0%*
2024 Projected Traffic	**0**	**75**	**495**	**85**	**0**	**20**	**390**	**20**	**0**	**50**	**75**	**190**	**0**	**105**	**55**	**20**
Traffic Adjustments		*25*	*-35*	*-25*		*-20*		*50*		*-22*	*-34*	*-85*		*51*	*27*	*10*
2024 Build II: Volume Shift	**0**	**100**	**460**	**60**	**0**	**0**	**390**	**70**	**0**	**30**	**45**	**105**	**0**	**160**	**85**	**30**

Kimley-Horn and Associates, Inc.

*decrease SBRT HV% for Build II scenario

Count Date	9/19/2024
AM Peak Hour	8:00
PM Peak Hour	17:00

		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
15th St	Local	0.98	0.94
	Local	0.97	0.93

VOLUME DEVELOPMENT SHEET

Existing	*2024*			
Base	*2025*			
Design	*2040*			
Monthly Factor	*0.99*	*0.99*		
Daily Factor	*0.93*	*0.93*		
	NB	*SB*	EB	WB
AM Volume Shift	*-35%*	*-22%*	*0%*	*-1%*
PM Volume Shift	*-35%*	*-22%*	*0%*	*-1%*

Count Date	9/19/2024
AM Peak Hour	8:00
PM Peak Hour	17:00

		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
14th St	Minor Arterial	0.99	0.93
	Local	0.97	0.93

Peachtree St at 14th St

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South)				Peachtree St NE (North)				14th St NW (West)				14th St NW (East)			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	27	96	6	0	16	87	15	0	38	69	32	0	0	129	25
8:15 AM	0	33	126	5	0	19	108	16	0	34	58	34	0	0	114	28
8:30 AM	0	30	106	10	0	21	92	17	0	39	66	40	0	0	112	35
8:45 AM	0	39	126	8	0	22	107	22	0	52	67	38	0	0	111	22
2024 Peak Hour Traffic	**0**	**129**	**454**	**29**	**0**	**78**	**394**	**70**	**0**	**163**	**260**	**144**	**0**	**0**	**466**	**110**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**115**	**410**	**25**	**0**	**70**	**355**	**65**	**0**	**145**	**235**	**130**	**0**	**0**	**420**	**100**
PHF		0.88				0.90				0.90				0.94		
Heavy Vehicle Count	0	1	8	0	0	4	9	1	0	1	8	0	0	0	4	2
Heavy Vehicle % of Total		1%				3%				2%				1%		
Heavy Vehicle %	2.0%	0.8%	1.8%	0.0%	2.0%	2.0%	2.0%	1.4%	2.0%	0.6%	2.0%	0.0%	2.0%	2.0%	0.9%	1.8%
ARC ABM Shift (E+C vs. Build)	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*-0.5%*	*-0.5%*	*-0.5%*	*-0.5%*
2024 Projected Traffic	**0**	**75**	**265**	**15**	**0**	**55**	**275**	**50**	**0**	**145**	**235**	**130**	**0**	**0**	**420**	**100**
Traffic Adjustments							*65*	*10*		*11*	*18*	*10*		*0*	*23*	*6*
2024 Build II: Volume Shift	**0**	**75**	**265**	**15**	**0**	**55**	**340**	**60**	**0**	**160**	**255**	**140**	**0**	**0**	**445**	**110**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South)				Peachtree St NE (North)				14th St NW (West)				14th St NW (East)			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	19	132	15	0	34	173	9	0	36	92	53	1	0	70	33
5:15 PM	0	17	155	9	0	26	214	15	0	28	85	53	0	1	70	21
5:30 PM	0	15	141	5	0	23	145	5	0	51	86	54	0	1	71	20
5:45 PM	0	19	178	11	0	29	223	10	0	49	67	33	0	1	41	28
2024 Peak Hour Traffic	**0**	**70**	**606**	**40**	**0**	**112**	**755**	**39**	**0**	**164**	**330**	**193**	**1**	**3**	**252**	**102**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**65**	**545**	**35**	**0**	**100**	**680**	**35**	**0**	**150**	**295**	**175**	**0**	**5**	**225**	**90**
PHF		0.86				0.86				0.90				0.86		
Heavy Vehicle Count	0	0	6	2	0	1	9	1	0	1	1	1	0	0	2	1
Heavy Vehicle % of Total		1%				1%				0%				1%		
Heavy Vehicle %	0.0%	0.0%	1.0%	5.0%	0.0%	0.9%	1.2%	2.6%	0.0%	0.6%	0.3%	0.5%	0.0%	0.0%	0.8%	1.0%
ARC ABM Shift (E+C vs. Build)	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*-22.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*-0.5%*	*-0.5%*	*-0.5%*	*-0.5%*
2024 Projected Traffic	**0**	**40**	**355**	**25**	**0**	**80**	**530**	**25**	**0**	**150**	**295**	**175**	**0**	**5**	**225**	**90**
Traffic Adjustments							*-20*			*0*	*0*	*-35*		*-5*	*-57*	*-23*
2024 Build II: Volume Shift	**0**	**40**	**355**	**25**	**0**	**80**	**510**	**25**	**0**	**150**	**295**	**140**	**0**	**0**	**170**	**70**

VOLUME DEVELOPMENT SHEET

Existing	*2024*			
Base	*2025*			
Design	*2040*			
Monthly Factor	*0.99*	*0.98*		
Daily Factor	*0.93*	*0.94*		
	NB	*SB*	EB	WB
AM Volume Shift	*-35%*	*-35%*	*0%*	*0%*
PM Volume Shift	*-35%*	*-35%*	*0%*	*0%*

Count Date 9/19/2024
AM Peak Hour 8:00
PM Peak Hour 17:00

		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
13th St	Local	0.98	0.94
	Local	0.97	0.93

Peachtree St at 13th St

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South)				Peachtree St NE (North)				Driveway				13th St NE			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	0	120	3	0	4	116	1	0	0	0	1	0	4	1	11
8:15 AM	0	0	151	0	0	6	142	1	0	0	0	1	0	0	0	10
8:30 AM	0	0	155	0	0	6	123	0	0	1	0	0	0	2	1	7
8:45 AM	0	0	161	1	0	7	136	1	0	0	0	1	0	8	0	12
2024 Peak Hour Traffic	**0**	**0**	**587**	**4**	**0**	**23**	**517**	**3**	**0**	**1**	**0**	**3**	**0**	**14**	**2**	**40**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**0**	**530**	**5**	**0**	**20**	**465**	**5**	**0**	**0**	**0**	**5**	**0**	**10**	**0**	**35**
PHF			0.91				0.91				1.00				0.70	
Heavy Vehicle Count	0	0	9	0	0	0	9	0	0	0	0	0	0	1	0	0
Heavy Vehicle % of Total			2%				2%				0%				2%	
Heavy Vehicle %	2.0%	2.0%	1.5%	0.0%	2.0%	0.0%	1.7%	0.0%	2.0%	0.0%	2.0%	0.0%	2.0%	2.0%	0.0%	0.0%
ARC ABM Shift (E+C vs. Build)	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Projected Traffic	**0**	**0**	**345**	**5**	**0**	**15**	**300**	**5**	**0**	**0**	**0**	**5**	**0**	**10**	**0**	**35**
Traffic Adjustments				*20*			*100*	*5*								
2024 Build II: Volume Shift	**0**	**0**	**345**	**25**	**0**	**15**	**400**	**10**	**0**	**0**	**0**	**5**	**0**	**10**	**0**	**35**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South)				Peachtree St NE (North)				Driveway				13th St NE			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	0	168	4	0	14	225	5	0	1	1	2	0	8	1	6
5:15 PM	0	0	174	7	0	9	250	3	0	0	0	0	0	12	0	10
5:30 PM	0	1	157	8	0	13	200	2	0	0	0	3	0	4	0	13
5:45 PM	0	1	184	7	0	8	249	6	1	0	0	0	0	12	2	8
2024 Peak Hour Traffic	**0**	**2**	**683**	**26**	**0**	**44**	**924**	**16**	**1**	**1**	**1**	**5**	**0**	**36**	**3**	**37**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**0**	**615**	**25**	**0**	**40**	**830**	**15**	**0**	**0**	**0**	**5**	**0**	**30**	**5**	**35**
PHF			0.93				0.94				0.50				0.86	
Heavy Vehicle Count	0	0	8	1	0	0	11	0	0	0	0	0	0	1	0	0
Heavy Vehicle % of Total			1%				1%				0%				1%	
Heavy Vehicle %	0.0%	0.0%	1.2%	3.8%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	0.0%
ARC ABM Shift (E+C vs. Build)	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Projected Traffic	**0**	**0**	**400**	**15**	**0**	**25**	**540**	**10**	**0**	**0**	**0**	**5**	**0**	**30**	**5**	**35**
Traffic Adjustments							*35*									
2024 Build II: Volume Shift	**0**	**0**	**400**	**15**	**0**	**25**	**575**	**10**	**0**	**0**	**0**	**5**	**0**	**30**	**5**	**35**

Kimley-Horn and Associates, Inc.

VOLUME DEVELOPMENT SHEET

Existing	*2024*		
Base	*2025*		
Design	*2040*		
Monthly Factor	*0.99*	*0.98*	
Daily Factor	*0.93*	*0.94*	
	NB	*SB*	EB	WB
AM Volume Shift	*-37%*	*-35%*	*0%*	*0%*
PM Volume Shift	*-37%*	*-35%*	*0%*	*0%*

Count Date 9/19/2024
AM Peak Hour 8:00
PM Peak Hour 17:00

		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
12th St	Local	0.98	0.94
	Local	0.97	0.93

Peachtree St at 12th St

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				12th St NE (West) Eastbound				12th St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	4	114	19	0	27	80	4	0	0	3	6	0	2	9	15
8:15 AM	0	6	140	19	0	28	91	10	0	5	9	9	0	12	10	23
8:30 AM	0	9	152	17	0	19	82	8	0	2	3	5	0	7	19	12
8:45 AM	0	4	154	22	0	23	89	13	0	3	7	7	0	8	26	23
2024 Peak Hour Traffic	**0**	**23**	**560**	**77**	**0**	**97**	**342**	**35**	**0**	**10**	**22**	**27**	**0**	**29**	**64**	**73**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**20**	**505**	**70**	**0**	**85**	**310**	**30**	**0**	**10**	**20**	**25**	**0**	**25**	**55**	**65**
PHF			0.92				0.92				0.64				0.73	
Heavy Vehicle Count	0	0	10	2	0	0	9	0	0	0	0	1	0	1	1	0
Heavy Vehicle % of Total			2%				2%				2%				1%	
Heavy Vehicle %	2.0%	0.0%	1.8%	2.0%	2.0%	0.0%	2.0%	0.0%	2.0%	0.0%	0.0%	2.0%	2.0%	2.0%	1.6%	0.0%
ARC ABM Shift (E+C vs. Build)	*-37.0%*	*-37.0%*	*-37.0%*	*-37.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Projected Traffic	**0**	**15**	**320**	**45**	**0**	**55**	**200**	**20**	**0**	**10**	**20**	**25**	**0**	**25**	**55**	**65**
Traffic Adjustments							*50*	*20*								*10*
2024 Build II: Volume Shift	**0**	**15**	**320**	**45**	**0**	**55**	**250**	**40**	**0**	**10**	**20**	**25**	**0**	**25**	**55**	**75**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				12th St NE (West) Eastbound				12th St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	8	152	14	0	19	217	19	0	6	18	15	0	2	14	17
5:15 PM	0	12	168	8	0	15	236	12	0	5	18	13	0	8	3	12
5:30 PM	0	11	134	9	0	30	209	11	0	4	14	20	0	12	13	18
5:45 PM	0	3	155	9	0	20	217	13	0	4	14	11	0	14	13	16
2024 Peak Hour Traffic	**0**	**34**	**609**	**40**	**0**	**84**	**879**	**55**	**0**	**19**	**64**	**59**	**0**	**36**	**43**	**63**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**30**	**550**	**35**	**0**	**75**	**790**	**50**	**0**	**15**	**60**	**55**	**0**	**30**	**40**	**55**
PHF			0.91				0.97				0.91				0.83	
Heavy Vehicle Count	0	0	9	0	0	0	12	1	0	0	1	0	0	0	0	0
Heavy Vehicle % of Total			1%				1%				1%				0%	
Heavy Vehicle %	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	1.4%	1.8%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%
ARC ABM Shift (E+C vs. Build)	*-37.0%*	*-37.0%*	*-37.0%*	*-37.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Projected Traffic	**0**	**20**	**345**	**20**	**0**	**50**	**515**	**35**	**0**	**15**	**60**	**55**	**0**	**30**	**40**	**55**
Traffic Adjustments			*15*	*10*												
2024 Build II: Volume Shift	**0**	**20**	**360**	**30**	**0**	**50**	**515**	**35**	**0**	**15**	**60**	**55**	**0**	**30**	**40**	**55**

Kimley-Horn and Associates, Inc.

VOLUME DEVELOPMENT SHEET

Existing	*2024*			
Base	*2025*			
Design	*2040*			
Monthly Factor	*0.99*	*0.98*		
Daily Factor	*0.93*	*0.94*		
	NB	*SB*	EB	WB
AM Volume Shift	*-28%*	*-37%*	*0%*	*0%*
PM Volume Shift	*-28%*	*-37%*	*0%*	*0%*

Count Date 9/19/2024
AM Peak Hour 8:00
PM Peak Hour 17:00

		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
11th St	Local	0.98	0.94
	Local	0.97	0.93

Peachtree St at 11th St

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				11th St NE (West) Eastbound				11th St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	16	123	14	0	8	68	10	0	3	10	14	0	3	11	9
8:15 AM	0	21	143	12	0	7	93	7	0	3	10	24	0	8	10	13
8:30 AM	0	18	170	11	0	5	87	5	0	5	6	33	0	10	12	9
8:45 AM	0	25	174	17	0	6	89	6	0	2	10	25	0	6	12	6
2024 Peak Hour Traffic	**0**	**80**	**610**	**54**	**0**	**26**	**337**	**28**	**0**	**13**	**36**	**96**	**0**	**27**	**45**	**37**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**70**	**550**	**50**	**0**	**25**	**305**	**25**	**0**	**10**	**30**	**85**	**0**	**25**	**40**	**35**
PHF			0.86				0.91				0.82				0.88	
Heavy Vehicle Count	0	0	8	0	0	0	10	1	0	2	0	0	0	0	1	2
Heavy Vehicle % of Total			1%				3%				1%				3%	
Heavy Vehicle %	2.0%	0.0%	1.3%	0.0%	2.0%	0.0%	2.0%	2.0%	2.0%	2.0%	0.0%	0.0%	2.0%	0.0%	2.0%	2.0%
ARC ABM Shift (E+C vs. Build)	*-28.0%*	*-28.0%*	*-28.0%*	*-28.0%*	*-37.0%*	*-37.0%*	*-37.0%*	*-37.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Projected Traffic	**0**	**50**	**395**	**35**	**0**	**15**	**190**	**15**	**0**	**10**	**30**	**85**	**0**	**25**	**40**	**35**
Traffic Adjustments		*15*		*10*				*15*								
2024 Build II: Volume Shift	**0**	**65**	**395**	**45**	**0**	**15**	**190**	**30**	**0**	**10**	**30**	**85**	**0**	**25**	**40**	**35**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				11th St NE (West) Eastbound				11th St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	13	151	10	0	11	226	10	0	7	29	79	0	11	14	19
5:15 PM	0	16	149	7	0	9	229	8	1	11	33	87	0	10	8	32
5:30 PM	0	16	135	11	0	17	239	8	0	5	40	70	0	10	13	17
5:45 PM	0	17	149	9	0	14	203	10	0	2	33	59	0	15	21	19
2024 Peak Hour Traffic	**0**	**62**	**584**	**37**	**0**	**51**	**897**	**36**	**1**	**25**	**135**	**295**	**0**	**46**	**56**	**87**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**55**	**525**	**35**	**0**	**45**	**810**	**30**	**0**	**25**	**120**	**265**	**0**	**40**	**50**	**80**
PHF			0.98				0.93				0.86				0.86	
Heavy Vehicle Count	0	0	8	0	0	1	11	0	0	0	3	1	0	0	1	1
Heavy Vehicle % of Total			1%				1%				1%				1%	
Heavy Vehicle %	0.0%	0.0%	1.4%	0.0%	0.0%	2.0%	1.2%	0.0%	0.0%	0.0%	2.2%	0.3%	0.0%	0.0%	1.8%	1.1%
ARC ABM Shift (E+C vs. Build)	*-28.0%*	*-28.0%*	*-28.0%*	*-28.0%*	*-37.0%*	*-37.0%*	*-37.0%*	*-37.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Projected Traffic	**0**	**40**	**380**	**25**	**0**	**30**	**510**	**20**	**0**	**25**	**120**	**265**	**0**	**40**	**50**	**80**
Traffic Adjustments																*-20*
2024 Build II: Volume Shift	**0**	**40**	**380**	**25**	**0**	**30**	**510**	**20**	**0**	**25**	**120**	**265**	**0**	**40**	**50**	**60**

VOLUME DEVELOPMENT SHEET

Existing	*2024*			
Base	*2025*			
Design	*2040*			
Monthly Factor	*0.99*	*0.99*		
Daily Factor	*0.93*	*0.93*		
	NB	*SB*	EB	WB
AM Volume Shift	*-36%*	*-28%*	*-1%*	*4%*
PM Volume Shift	*-36%*	*-28%*	*-1%*	*4%*

Count Date 9/19/2024
AM Peak Hour 8:00
PM Peak Hour 17:00

		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
10th St	Minor Arterial	0.99	0.93
	Local	0.97	0.93

Peachtree St at 10th St

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South)				Peachtree St NE (North)				10th St NE (West)				10th St NE (East)			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	16	86	9	0	15	51	24	0	40	134	26	0	1	92	29
8:15 AM	0	8	96	4	0	31	60	23	0	34	161	24	0	4	82	44
8:30 AM	0	11	100	10	0	24	68	29	0	45	112	21	0	8	99	55
8:45 AM	0	13	94	11	0	24	77	30	0	62	128	28	0	8	88	54
2024 Peak Hour Traffic	**0**	**48**	**376**	**34**	**0**	**94**	**256**	**106**	**0**	**181**	**535**	**99**	**0**	**21**	**361**	**182**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**45**	**340**	**30**	**0**	**85**	**230**	**95**	**0**	**165**	**480**	**90**	**0**	**20**	**325**	**165**
PHF		0.95				0.87				0.93				0.87		
Heavy Vehicle Count	0	1	3	2	0	2	7	1	0	3	18	4	0	2	7	2
Heavy Vehicle % of Total		1%				2%				3%				2%		
Heavy Vehicle %	2.0%	2.0%	0.8%	2.0%	2.0%	2.0%	2.0%	0.9%	2.0%	1.7%	2.0%	2.0%	2.0%	2.0%	1.9%	1.1%
ARC ABM Shift (E+C vs. Build)	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-28.0%*	*-28.0%*	*-28.0%*	*-28.0%*	*-1.0%*	*-1.0%*	*-1.0%*	*-1.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*
2024 Projected Traffic	**0**	**30**	**220**	**20**	**0**	**60**	**165**	**70**	**0**	**165**	**475**	**90**	**0**	**20**	**340**	**170**
Traffic Adjustments										*15*						*10*
2024 Build II: Volume Shift	**0**	**30**	**220**	**20**	**0**	**60**	**165**	**70**	**0**	**180**	**475**	**90**	**0**	**20**	**340**	**180**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South)				Peachtree St NE (North)				10th St NE (West)				10th St NE (East)			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	21	120	10	0	75	200	44	0	20	91	23	0	10	62	30
5:15 PM	0	15	109	9	0	98	202	30	0	27	153	21	0	10	76	32
5:30 PM	0	17	109	12	0	84	203	33	0	30	125	30	0	13	77	29
5:45 PM	0	16	107	11	0	66	177	32	0	36	164	40	0	12	54	32
2024 Peak Hour Traffic	**0**	**69**	**445**	**42**	**0**	**323**	**782**	**139**	**0**	**113**	**533**	**114**	**0**	**45**	**269**	**123**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**60**	**400**	**40**	**0**	**290**	**705**	**125**	**0**	**100**	**480**	**105**	**0**	**40**	**240**	**110**
PHF		0.92				0.94				0.79				0.92		
Heavy Vehicle Count	0	1	6	1	0	0	10	2	0	1	2	1	0	1	8	1
Heavy Vehicle % of Total		1%				1%				1%				2%		
Heavy Vehicle %	0.0%	1.4%	1.3%	2.4%	0.0%	0.0%	1.3%	1.4%	0.0%	0.9%	0.4%	0.9%	0.0%	2.2%	3.0%	0.8%
ARC ABM Shift (E+C vs. Build)	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-28.0%*	*-28.0%*	*-28.0%*	*-28.0%*	*-1.0%*	*-1.0%*	*-1.0%*	*-1.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*
2024 Projected Traffic	**0**	**40**	**255**	**25**	**0**	**210**	**510**	**90**	**0**	**100**	**475**	**105**	**0**	**40**	**250**	**115**
Traffic Adjustments							*-20*					*-25*		*-10*		
2024 Build II: Volume Shift	**0**	**40**	**255**	**25**	**0**	**210**	**490**	**90**	**0**	**100**	**475**	**80**	**0**	**30**	**250**	**115**

Kimley-Horn and Associates, Inc.

VOLUME DEVELOPMENT SHEET

Existing	*2024*			
Base	*2025*			
Design	*2040*			
Monthly Factor	*0.99*	*0.98*		
Daily Factor	*0.93*	*0.94*		
	NB	*SB*	EB	WB
AM Volume Shift	*-36%*	*-36%*	*0%*	*0%*
PM Volume Shift	*-36%*	*-36%*	*0%*	*0%*

Count Date 9/19/2024
AM Peak Hour 8:00
PM Peak Hour 17:00

		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
Peachtree Pl	Local	0.98	0.94
	Local	0.97	0.93

Peachtree St at Peachtree Pl

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South)				Peachtree St NE (North)				Peachtree Pl NE (West)				Peachtree Pl NE (East)			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	0	94	3	0	0	70	5	0	3	18	2	0	0	11	4
8:15 AM	0	1	101	2	0	1	91	3	0	4	17	1	0	2	4	9
8:30 AM	0	0	108	10	0	2	84	5	0	5	7	2	0	0	8	10
8:45 AM	0	0	98	5	0	1	111	10	0	10	14	4	0	2	3	12
2024 Peak Hour Traffic	**0**	**1**	**401**	**20**	**0**	**4**	**356**	**23**	**0**	**22**	**56**	**9**	**0**	**4**	**26**	**35**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**0**	**360**	**20**	**0**	**5**	**320**	**20**	**0**	**20**	**50**	**10**	**0**	**5**	**25**	**30**
PHF			0.89				0.78				0.78				0.90	
Heavy Vehicle Count	0	0	6	0	0	0	13	0	0	0	0	0	0	0	1	0
Heavy Vehicle % of Total			1%				3%				0%				2%	
Heavy Vehicle %	2.0%	0.0%	1.5%	0.0%	2.0%	0.0%	2.0%	0.0%	2.0%	0.0%	0.0%	0.0%	2.0%	0.0%	2.0%	0.0%
ARC ABM Shift (E+C vs. Build)	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Projected Traffic	**0**	**0**	**230**	**15**	**0**	**5**	**205**	**15**	**0**	**20**	**50**	**10**	**0**	**5**	**25**	**30**
Traffic Adjustments																
2024 Build II: Volume Shift	**0**	**0**	**230**	**15**	**0**	**5**	**205**	**15**	**0**	**20**	**50**	**10**	**0**	**5**	**25**	**30**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South)				Peachtree St NE (North)				Peachtree Pl NE (West)				Peachtree Pl NE (East)			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	2	105	6	0	1	220	20	0	12	11	4	0	5	10	25
5:15 PM	0	1	114	3	0	2	214	9	0	9	11	6	0	4	11	11
5:30 PM	0	1	122	4	0	4	230	13	0	2	11	8	0	3	13	14
5:45 PM	0	1	109	8	0	1	214	15	0	4	7	6	0	4	9	26
2024 Peak Hour Traffic	**0**	**5**	**450**	**21**	**0**	**8**	**878**	**57**	**0**	**27**	**40**	**24**	**0**	**16**	**43**	**76**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**5**	**405**	**20**	**0**	**5**	**790**	**50**	**0**	**25**	**35**	**20**	**0**	**15**	**40**	**70**
PHF			0.94				0.95				0.84				0.84	
Heavy Vehicle Count	0	0	7	0	0	0	11	1	0	1	0	0	0	0	0	0
Heavy Vehicle % of Total			1%				1%				1%				0%	
Heavy Vehicle %	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	1.3%	1.8%	0.0%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ARC ABM Shift (E+C vs. Build)	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Projected Traffic	**0**	**5**	**260**	**15**	**0**	**5**	**505**	**30**	**0**	**25**	**35**	**20**	**0**	**15**	**40**	**70**
Traffic Adjustments							*25*									
2024 Build II: Volume Shift	**0**	**5**	**260**	**15**	**0**	**5**	**530**	**30**	**0**	**25**	**35**	**20**	**0**	**15**	**40**	**70**

Kimley-Horn and Associates, Inc.

VOLUME DEVELOPMENT SHEET

Existing	*2024*
Base	*2025*
Design	*2040*
Monthly Factor	*0.99*
Daily Factor	*0.93*

	NB	*SB*	EB	WB
AM Volume Shift	*-36%*	*-36%*	*0%*	*0%*
PM Volume Shift	*-36%*	*-36%*	*0%*	*0%*

		Monthly	Daily
Count Date	9/19/2024		
AM Peak Hour	8:00		
PM Peak Hour	17:00		
Peachtree St	Minor Arterial	0.99	0.93
8th St	Local	0.98	0.94
	Local	0.97	0.93

Peachtree St at 8th St

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				8th St NE (West) Eastbound				8th St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	3	95	3	0	3	64	1	0	1	5	4	0	0	1	10
8:15 AM	0	4	92	5	0	6	92	3	0	2	6	4	0	1	12	6
8:30 AM	0	2	109	5	0	5	77	1	0	1	8	2	0	5	12	10
8:45 AM	0	4	96	2	0	6	100	5	0	2	17	0	0	2	13	7
2024 Peak Hour Traffic	**0**	**13**	**392**	**15**	**0**	**20**	**333**	**10**	**0**	**6**	**36**	**10**	**0**	**8**	**38**	**33**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**10**	**355**	**15**	**0**	**20**	**300**	**10**	**0**	**5**	**30**	**10**	**0**	**5**	**35**	**30**
PHF			0.91				0.82				0.68				0.73	
Heavy Vehicle Count	0	0	6	0	0	3	10	0	0	0	3	0	0	0	2	0
Heavy Vehicle % of Total			1%				4%				6%				3%	
Heavy Vehicle %	2.0%	0.0%	1.5%	0.0%	2.0%	2.0%	2.0%	0.0%	2.0%	0.0%	2.0%	0.0%	2.0%	0.0%	2.0%	0.0%
ARC ABM Shift (E+C vs. Build)	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Build II: Volume Shift	**0**	**5**	**225**	**10**	**0**	**15**	**190**	**5**	**0**	**5**	**30**	**10**	**0**	**5**	**35**	**30**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				8th St NE (West) Eastbound				8th St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	6	93	7	0	22	170	16	0	8	31	9	0	6	8	6
5:15 PM	0	2	107	8	0	27	191	9	0	8	32	4	0	2	7	4
5:30 PM	0	4	117	7	0	33	182	12	0	4	27	8	0	0	4	11
5:45 PM	0	3	107	7	0	16	206	10	0	4	31	9	0	2	6	12
2024 Peak Hour Traffic	**0**	**15**	**424**	**29**	**0**	**98**	**749**	**47**	**0**	**24**	**121**	**30**	**0**	**10**	**25**	**33**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**15**	**380**	**25**	**0**	**90**	**675**	**40**	**0**	**20**	**110**	**25**	**0**	**10**	**25**	**30**
PHF			0.91				0.96				0.91				0.85	
Heavy Vehicle Count	0	0	7	0	0	0	10	0	0	0	0	1	0	0	0	0
Heavy Vehicle % of Total			1%				1%				1%				0%	
Heavy Vehicle %	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	3.3%	0.0%	0.0%	0.0%	0.0%
ARC ABM Shift (E+C vs. Build)	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Projected Traffic	**0**	**10**	**245**	**15**	**0**	**60**	**430**	**25**	**0**	**20**	**110**	**25**	**0**	**10**	**25**	**30**
Traffic Adjustments								*15*								
2024 Build II: Volume Shift	**0**	**10**	**245**	**15**	**0**	**60**	**430**	**40**	**0**	**20**	**110**	**25**	**0**	**10**	**25**	**30**

Kimley-Horn and Associates, Inc.

VOLUME DEVELOPMENT SHEET

Existing	*2024*			
Base	*2025*			
Design	*2040*			
Monthly Factor	*0.99*	*0.98*		
Daily Factor	*0.93*	*0.94*		
	NB	*SB*	EB	WB
AM Volume Shift	*-29%*	*-36%*	*0%*	*0%*
PM Volume Shift	*-29%*	*-36%*	*0%*	*0%*

Count Date	9/19/2024
AM Peak Hour	8:00
PM Peak Hour	17:00

		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
7th St	Local	0.98	0.94
	Local	0.97	0.93

Peachtree St at 7th St

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South)				Peachtree St NE (North)				7th St NE (West)				7th St NE (East)			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	2	84	4	0	5	58	2	0	4	14	1	0	3	12	13
8:15 AM	0	1	79	7	0	3	90	2	0	4	14	4	0	4	17	12
8:30 AM	0	2	100	12	0	5	79	5	0	5	10	0	0	1	16	16
8:45 AM	0	6	89	4	0	6	90	3	0	1	6	4	0	2	18	12
2024 Peak Hour Traffic	**0**	**11**	**352**	**27**	**0**	**19**	**317**	**12**	**0**	**14**	**44**	**9**	**0**	**10**	**63**	**53**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**10**	**315**	**25**	**0**	**15**	**285**	**10**	**0**	**10**	**40**	**10**	**0**	**10**	**55**	**45**
PHF			0.86				0.88				0.76				0.95	
Heavy Vehicle Count	0	1	6	2	0	1	8	1	0	0	0	0	0	0	0	0
Heavy Vehicle % of Total			2%				3%				0%				0%	
Heavy Vehicle %	2.0%	2.0%	1.7%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%
ARC ABM Shift (E+C vs. Build)	*-29.0%*	*-29.0%*	*-29.0%*	*-29.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Build II: Volume Shift	**0**	**5**	**225**	**20**	**0**	**10**	**180**	**5**	**0**	**10**	**40**	**10**	**0**	**10**	**55**	**45**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South)				Peachtree St NE (North)				7th St NE (West)				7th St NE (East)			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	6	84	9	0	15	160	7	0	5	14	6	0	4	24	8
5:15 PM	0	5	120	21	0	18	171	17	0	1	9	6	0	1	17	8
5:30 PM	0	4	109	18	0	13	171	14	0	3	18	4	0	2	17	7
5:45 PM	0	8	100	14	0	10	196	14	0	3	17	4	0	1	17	17
2024 Peak Hour Traffic	**0**	**23**	**413**	**62**	**0**	**56**	**698**	**52**	**0**	**12**	**58**	**20**	**0**	**8**	**75**	**40**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**20**	**370**	**55**	**0**	**50**	**630**	**45**	**0**	**10**	**50**	**20**	**0**	**5**	**70**	**35**
PHF			0.85				0.92				0.90				0.85	
Heavy Vehicle Count	0	2	6	0	0	1	10	0	0	0	0	0	0	0	0	1
Heavy Vehicle % of Total			2%				1%				0%				1%	
Heavy Vehicle %	0.0%	8.7%	1.5%	0.0%	0.0%	1.8%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%
ARC ABM Shift (E+C vs. Build)	*-29.0%*	*-29.0%*	*-29.0%*	*-29.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Build II: Volume Shift	**0**	**15**	**265**	**40**	**0**	**30**	**405**	**30**	**0**	**10**	**50**	**20**	**0**	**5**	**70**	**35**

Kimley-Horn and Associates, Inc.

VOLUME DEVELOPMENT SHEET

Existing	*2024*			
Base	*2025*			
Design	*2040*			
Monthly Factor	*0.99*	*0.98*		
Daily Factor	*0.93*	*0.94*		
	NB	*SB*	EB	WB
AM Volume Shift	*-29%*	*-29%*	*0%*	*0%*
PM Volume Shift	*-29%*	*-29%*	*0%*	*0%*

Count Date 9/19/2024
AM Peak Hour 8:00
PM Peak Hour 17:00

		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
6th St	Local	0.98	0.94
	Local	0.97	0.93

Peachtree St at 6th St

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				6th St NE (West) Eastbound				6th St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	3	87	2	0	0	59	3	0	1	0	2	1	0	1	1
8:15 AM	0	2	84	0	0	0	94	2	0	2	0	2	0	1	3	1
8:30 AM	0	2	107	0	0	0	70	5	0	3	0	2	0	2	1	4
8:45 AM	0	1	90	0	0	0	90	4	0	4	1	1	0	1	6	1
2024 Peak Hour Traffic	**0**	**8**	**368**	**2**	**0**	**0**	**313**	**14**	**0**	**10**	**1**	**7**	**1**	**4**	**11**	**7**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**5**	**330**	**0**	**0**	**0**	**280**	**15**	**0**	**10**	**0**	**5**	**0**	**5**	**10**	**5**
PHF			0.87				0.85				0.75				0.72	
Heavy Vehicle Count	0	0	8	1	0	0	8	0	0	0	0	1	1	0	0	1
Heavy Vehicle % of Total			2%				2%				6%				9%	
Heavy Vehicle %	2.0%	0.0%	2.0%	2.0%	2.0%	2.0%	2.0%	0.0%	2.0%	0.0%	0.0%	2.0%	2.0%	0.0%	0.0%	2.0%
ARC ABM Shift (E+C vs. Build)	*-29.0%*	*-29.0%*	*-29.0%*	*-29.0%*	*-29.0%*	*-29.0%*	*-29.0%*	*-29.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Build II: Volume Shift	**0**	**5**	**235**	**0**	**0**	**0**	**200**	**10**	**0**	**10**	**0**	**5**	**0**	**5**	**10**	**5**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				6th St NE (West) Eastbound				6th St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	4	99	0	0	0	157	9	0	2	0	2	0	1	1	5
5:15 PM	0	5	128	2	0	0	171	4	0	3	1	10	0	3	4	7
5:30 PM	0	4	130	1	0	0	174	4	0	7	0	10	0	1	7	2
5:45 PM	0	5	104	0	0	0	189	3	0	3	1	6	0	2	2	8
2024 Peak Hour Traffic	**0**	**18**	**461**	**3**	**0**	**0**	**691**	**20**	**0**	**15**	**2**	**28**	**0**	**7**	**14**	**22**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**15**	**415**	**5**	**0**	**0**	**625**	**20**	**0**	**15**	**0**	**25**	**0**	**5**	**15**	**20**
PHF			0.89				0.93				0.66				0.77	
Heavy Vehicle Count	0	0	7	1	0	0	10	0	0	0	0	0	0	0	0	1
Heavy Vehicle % of Total			2%				1%				0%				2%	
Heavy Vehicle %	0.0%	0.0%	1.5%	33.3%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%
ARC ABM Shift (E+C vs. Build)	*-29.0%*	*-29.0%*	*-29.0%*	*-29.0%*	*-29.0%*	*-29.0%*	*-29.0%*	*-29.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Build II: Volume Shift	**0**	**10**	**295**	**5**	**0**	**0**	**445**	**15**	**0**	**15**	**0**	**25**	**0**	**5**	**15**	**20**

Kimley-Horn and Associates, Inc.

VOLUME DEVELOPMENT SHEET

Existing	*2024*			
Base	*2025*			
Design	*2040*			
Monthly Factor	*0.99*	*0.98*		
Daily Factor	*0.93*	*0.94*		
	NB	*SB*	EB	WB
AM Volume Shift	*-35%*	*-29%*	*2%*	*11%*
PM Volume Shift	*-35%*	*-29%*	*2%*	*11%*

Count Date 9/19/2024
AM Peak Hour 8:00
PM Peak Hour 17:00

		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
5th St	Local	0.98	0.94
	Local	0.97	0.93

Peachtree St at 5th St

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				5th St NE (West) Eastbound				5th St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	6	89	1	0	4	46	4	0	3	5	7	0	0	15	1
8:15 AM	0	8	87	5	0	4	79	11	0	4	11	2	0	1	15	5
8:30 AM	0	18	104	6	0	6	72	2	0	4	13	6	0	2	15	4
8:45 AM	0	12	96	6	0	4	80	10	0	1	4	8	0	1	13	10
2024 Peak Hour Traffic	**0**	**44**	**376**	**18**	**0**	**18**	**277**	**27**	**0**	**12**	**33**	**23**	**0**	**4**	**58**	**20**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**40**	**340**	**15**	**0**	**15**	**250**	**25**	**0**	**10**	**30**	**20**	**0**	**5**	**50**	**20**
PHF			0.86				0.86				0.74				0.85	
Heavy Vehicle Count	0	4	9	1	0	0	9	0	0	0	0	2	0	0	0	1
Heavy Vehicle % of Total			3%				3%				3%				1%	
Heavy Vehicle %	2.0%	2.0%	2.0%	2.0%	2.0%	0.0%	2.0%	0.0%	2.0%	0.0%	0.0%	2.0%	2.0%	0.0%	0.0%	2.0%
ARC ABM Shift (E+C vs. Build)	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*-29.0%*	*-29.0%*	*-29.0%*	*-29.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*11.0%*	*11.0%*	*11.0%*	*11.0%*
2024 Build II: Volume Shift	**0**	**25**	**220**	**10**	**0**	**10**	**180**	**20**	**0**	**10**	**30**	**20**	**0**	**5**	**55**	**20**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				5th St NE (West) Eastbound				5th St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	2	105	3	0	8	154	1	0	4	35	10	0	2	16	11
5:15 PM	0	10	120	6	0	12	167	9	0	3	41	6	0	1	26	11
5:30 PM	0	4	118	4	0	15	167	6	0	3	38	6	0	5	20	9
5:45 PM	0	6	110	4	0	13	171	5	0	5	24	9	0	6	13	7
2024 Peak Hour Traffic	**0**	**22**	**453**	**17**	**0**	**48**	**659**	**21**	**0**	**15**	**138**	**31**	**0**	**14**	**75**	**38**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**20**	**410**	**15**	**0**	**45**	**595**	**20**	**0**	**15**	**125**	**30**	**0**	**15**	**70**	**35**
PHF			0.90				0.96				0.92				0.84	
Heavy Vehicle Count	0	0	8	0	0	0	10	0	0	0	1	0	0	0	0	1
Heavy Vehicle % of Total			2%				1%				1%				1%	
Heavy Vehicle %	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	2.6%
ARC ABM Shift (E+C vs. Build)	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*-29.0%*	*-29.0%*	*-29.0%*	*-29.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*11.0%*	*11.0%*	*11.0%*	*11.0%*
2024 Build II: Volume Shift	**0**	**15**	**265**	**10**	**0**	**30**	**420**	**15**	**0**	**15**	**130**	**30**	**0**	**15**	**80**	**40**

Kimley-Horn and Associates, Inc.

VOLUME DEVELOPMENT SHEET

Existing	*2024*
Base	*2025*
Design	*2040*
Monthly Factor	*0.99*
Daily Factor	*0.93*

	NB	SB	EB	WB
AM Volume Shift	*-36%*	*-35%*	*0%*	*0%*
PM Volume Shift	*-36%*	*-35%*	*0%*	*0%*

Count Date 9/19/2024
AM Peak Hour 8:00
PM Peak Hour 17:00

		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
4th St	Local	0.98	0.94
	Local	0.97	0.93

Peachtree St at 4th St

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				4th St NE (West) Eastbound				4th St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	4	95	3	0	1	54	1	0	0	0	0	0	0	5	1
8:15 AM	0	2	95	3	0	0	74	0	0	0	0	0	0	2	6	4
8:30 AM	0	0	118	1	0	3	79	1	0	1	0	0	0	4	0	7
8:45 AM	0	1	112	6	0	2	84	0	0	0	0	0	0	1	1	7
2024 Peak Hour Traffic	**0**	**7**	**420**	**13**	**0**	**6**	**291**	**2**	**0**	**1**	**0**	**0**	**0**	**7**	**12**	**19**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**5**	**380**	**10**	**0**	**5**	**260**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**10**	**15**
PHF			0.92				0.87				0.25				0.79	
Heavy Vehicle Count	0	0	13	1	0	0	11	0	0	0	0	0	0	0	0	1
Heavy Vehicle % of Total			3%				4%				0%				3%	
Heavy Vehicle %	2.0%	0.0%	2.0%	2.0%	2.0%	0.0%	2.0%	0.0%	2.0%	0.0%	2.0%	2.0%	2.0%	0.0%	0.0%	2.0%
ARC ABM Shift (E+C vs. Build)	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Projected Traffic	**0**	**5**	**245**	**5**	**0**	**5**	**170**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**10**	**15**
Traffic Adjustments																
2024 Build II: Volume Shift	**0**	**5**	**245**	**5**	**0**	**5**	**170**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**10**	**15**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				4th St NE (West) Eastbound				4th St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	1	114	3	0	1	158	0	0	0	1	0	0	3	4	6
5:15 PM	0	3	123	3	0	6	175	1	0	0	0	0	0	4	4	4
5:30 PM	0	1	119	4	0	2	167	3	0	0	1	0	0	5	4	1
5:45 PM	0	5	128	2	0	2	193	1	0	0	0	0	0	5	6	4
2024 Peak Hour Traffic	**0**	**10**	**484**	**12**	**0**	**11**	**693**	**5**	**0**	**0**	**2**	**0**	**0**	**17**	**18**	**15**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**10**	**435**	**10**	**0**	**10**	**625**	**5**	**0**	**0**	**0**	**0**	**0**	**15**	**15**	**15**
PHF			0.94				0.90				0.50				0.83	
Heavy Vehicle Count	0	1	8	0	0	0	10	0	0	0	0	0	0	0	0	0
Heavy Vehicle % of Total			2%				1%				0%				0%	
Heavy Vehicle %	0.0%	10.0%	1.7%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ARC ABM Shift (E+C vs. Build)	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*-35.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Projected Traffic	**0**	**5**	**280**	**5**	**0**	**5**	**405**	**5**	**0**	**0**	**0**	**0**	**0**	**15**	**15**	**15**
Traffic Adjustments								*15*								
2024 Build II: Volume Shift	**0**	**5**	**280**	**5**	**0**	**5**	**405**	**20**	**0**	**0**	**0**	**0**	**0**	**15**	**15**	**15**

Kimley-Horn and Associates, Inc.

VOLUME DEVELOPMENT SHEET

Existing	*2024*			
Base	*2025*			
Design	*2040*			
Monthly Factor	*0.99*	*0.98*		
Daily Factor	*0.93*	*0.94*		
	NB	*SB*	EB	WB
AM Volume Shift	*-36%*	*-36%*	*0%*	*0%*
PM Volume Shift	*-36%*	*-36%*	*0%*	*0%*

Peachtree St at 3rd St

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				3rd St NE (West) Eastbound				3rd St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	16	98	13	0	6	46	4	0	2	3	3	0	1	2	0
8:15 AM	0	12	107	10	0	6	57	5	0	3	6	7	0	2	3	0
8:30 AM	0	20	112	6	0	2	77	8	0	5	9	8	0	1	5	1
8:45 AM	0	15	115	7	0	4	65	11	0	9	4	8	0	2	4	0
2024 Peak Hour Traffic	**0**	**63**	**432**	**36**	**0**	**18**	**245**	**28**	**0**	**19**	**22**	**26**	**0**	**6**	**14**	**1**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**55**	**390**	**30**	**0**	**15**	**220**	**25**	**0**	**15**	**20**	**25**	**0**	**5**	**10**	**0**
PHF			0.96				0.84				0.76				0.75	
Heavy Vehicle Count	0	2	12	0	0	0	11	0	0	2	0	0	0	0	0	0
Heavy Vehicle % of Total			3%				4%				3%				0%	
Heavy Vehicle %	2.0%	2.0%	2.0%	0.0%	2.0%	0.0%	2.0%	0.0%	2.0%	2.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%
ARC ABM Shift (E+C vs. Build)	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Build II: Volume Shift	**0**	**35**	**250**	**20**	**0**	**10**	**140**	**15**	**0**	**15**	**20**	**25**	**0**	**5**	**10**	**0**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South) Northbound				Peachtree St NE (North) Southbound				3rd St NE (West) Eastbound				3rd St NE (East) Westbound			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	17	105	12	0	3	148	3	0	5	14	30	0	2	5	3
5:15 PM	0	23	131	7	0	3	173	7	0	2	31	29	0	1	5	2
5:30 PM	0	15	108	12	0	2	159	4	0	5	34	31	0	2	5	4
5:45 PM	0	14	134	12	0	6	178	6	0	4	21	23	0	2	2	2
2024 Peak Hour Traffic	**0**	**69**	**478**	**43**	**0**	**14**	**658**	**20**	**0**	**16**	**100**	**113**	**0**	**7**	**17**	**11**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**60**	**430**	**40**	**0**	**15**	**595**	**20**	**0**	**15**	**90**	**100**	**0**	**5**	**15**	**10**
PHF			0.92				0.91				0.82				0.80	
Heavy Vehicle Count	0	0	9	0	0	0	10	0	0	0	0	0	0	0	0	0
Heavy Vehicle % of Total			2%				1%				0%				0%	
Heavy Vehicle %	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ARC ABM Shift (E+C vs. Build)	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*-36.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
2024 Build II: Volume Shift	**0**	**40**	**275**	**25**	**0**	**10**	**380**	**15**	**0**	**15**	**90**	**100**	**0**	**5**	**15**	**10**

Count Date	9/19/2024		
AM Peak Hour	8:00		
PM Peak Hour	17:00		
		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
3rd St	Local	0.98	0.94
	Local	0.97	0.93

Kimley-Horn and Associates, Inc.

VOLUME DEVELOPMENT SHEET

Existing	*2024*			
Base	*2025*			
Design	*2040*			
Monthly Factor	*0.99*	*0.98*		
Daily Factor	*0.93*	*0.94*		
	NB	*SB*	EB	WB
AM Volume Shift	*-34%*	*-28%*	*-14%*	*-3%*
PM Volume Shift	*-34%*	*-28%*	*-14%*	*-3%*

Peachtree St at Ponce De Leon Ave

Count Date 9/19/2024
AM Peak Hour 8:00
PM Peak Hour 17:00

		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
Ponce De Leon Av	Local	0.98	0.94
	Local	0.97	0.93

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South)				Peachtree St NE (North)				Ponce De Leon Ave NE (West)				Ponce De Leon Ave NE (East)			
		Northbound				**Southbound**				**Eastbound**				**Westbound**		
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	4	93	7	0	11	35	2	0	1	16	6	0	15	61	34
8:15 AM	0	5	97	4	0	13	64	1	0	0	9	5	0	29	59	33
8:30 AM	0	10	100	6	0	11	63	5	0	0	15	7	0	31	63	36
8:45 AM	0	10	101	6	0	10	68	2	0	0	15	8	0	28	77	40
2024 Peak Hour Traffic	**0**	**29**	**391**	**23**	**0**	**45**	**230**	**10**	**0**	**1**	**55**	**26**	**0**	**103**	**260**	**143**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*	*0.98*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**25**	**350**	**20**	**0**	**40**	**205**	**10**	**0**	**0**	**50**	**25**	**0**	**90**	**230**	**130**
PHF		0.95				0.89				0.89				0.87		
Heavy Vehicle Count	0	2	13	0	0	1	9	1	0	0	15	0	0	1	6	1
Heavy Vehicle % of Total		3%				4%				18%				2%		
Heavy Vehicle %	2.0%	2.0%	2.0%	0.0%	2.0%	2.0%	2.0%	2.0%	2.0%	0.0%	2.0%	0.0%	2.0%	1.0%	2.0%	0.7%
ARC ABM Shift (E+C vs. Build)	*-34.0%*	*-34.0%*	*-34.0%*	*-34.0%*	*-28.0%*	*-28.0%*	*-28.0%*	*-28.0%*	*-14.0%*	*-14.0%*	*-14.0%*	*-14.0%*	*-3.0%*	*-3.0%*	*-3.0%*	*-3.0%*
2024 Projected Traffic	**0**	**15**	**230**	**15**	**0**	**30**	**150**	**5**	**0**	**0**	**45**	**20**	**0**	**85**	**225**	**125**
Traffic Adjustments		*15*		*15*												
2024 Build II: Volume Shift	**0**	**30**	**230**	**30**	**0**	**30**	**150**	**5**	**0**	**0**	**45**	**20**	**0**	**85**	**225**	**125**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South)				Peachtree St NE (North)				Ponce De Leon Ave NE (West)				Ponce De Leon Ave NE (East)			
		Northbound				**Southbound**				**Eastbound**				**Westbound**		
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	3	104	11	0	31	133	10	0	0	35	2	0	16	80	28
5:15 PM	0	2	140	28	0	38	153	12	0	0	31	6	0	11	63	23
5:30 PM	0	6	114	17	0	41	137	14	0	0	26	8	0	25	72	23
5:45 PM	0	3	135	21	0	33	140	13	0	0	31	2	0	13	70	22
2024 Peak Hour Traffic	**0**	**14**	**493**	**77**	**0**	**143**	**563**	**49**	**0**	**0**	**123**	**18**	**0**	**65**	**285**	**96**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**15**	**445**	**70**	**0**	**130**	**505**	**45**	**0**	**0**	**110**	**15**	**0**	**60**	**255**	**85**
PHF		0.86				0.93				0.95				0.90		
Heavy Vehicle Count	0	0	8	0	0	1	9	0	0	0	14	1	0	1	4	1
Heavy Vehicle % of Total		1%				1%				11%				1%		
Heavy Vehicle %	0.0%	0.0%	1.6%	0.0%	0.0%	0.7%	1.6%	0.0%	0.0%	0.0%	11.4%	5.6%	0.0%	1.5%	1.4%	1.0%
ARC ABM Shift (E+C vs. Build)	*-34.0%*	*-34.0%*	*-34.0%*	*-34.0%*	*-28.0%*	*-28.0%*	*-28.0%*	*-28.0%*	*-14.0%*	*-14.0%*	*-14.0%*	*-14.0%*	*-3.0%*	*-3.0%*	*-3.0%*	*-3.0%*
2024 Projected Traffic	**0**	**10**	**295**	**45**	**0**	**95**	**365**	**30**	**0**	**0**	**95**	**15**	**0**	**60**	**245**	**80**
Traffic Adjustments		*10*	*25*	*10*												
2024 Build II: Volume Shift	**0**	**20**	**320**	**55**	**0**	**95**	**365**	**30**	**0**	**0**	**95**	**15**	**0**	**60**	**245**	**80**

VOLUME DEVELOPMENT SHEET

Existing	*2024*			
Base	*2025*			
Design	*2040*			
Monthly Factor	*0.99*	*0.99*		
Daily Factor	*0.93*	*0.93*		
	NB	*SB*	EB	WB
AM Volume Shift	*-12%*	*-34%*	*2%*	*-7%*
PM Volume Shift	*-12%*	*-34%*	*2%*	*-7%*

Count Date 9/19/2024
AM Peak Hour 8:00
PM Peak Hour 17:00

		Monthly	Daily
Peachtree St	Minor Arterial	0.99	0.93
North Ave (SR 8)	Principal Arterial	0.99	0.93
	Local	0.97	0.93

Peachtree St at North Ave (SR 8)

AM PEAK HOUR (8:00 AM - 9:00 AM)

	Peachtree St NE (South)				Peachtree St NE (North)				GA-8 North Avenue NE (West)				GA-8 North Avenue NE (East)			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
8:00 AM	0	0	70	21	0	1	42	22	0	2	177	49	0	3	227	33
8:15 AM	0	1	76	26	0	7	74	13	0	0	179	58	0	0	249	29
8:30 AM	0	0	86	14	0	9	73	17	0	0	179	54	0	1	256	33
8:45 AM	0	1	88	18	0	9	65	30	0	0	197	51	0	3	249	26
2024 Peak Hour Traffic	**0**	**2**	**320**	**79**	**0**	**26**	**254**	**82**	**0**	**2**	**732**	**212**	**0**	**7**	**981**	**121**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**0**	**290**	**70**	**0**	**25**	**230**	**75**	**0**	**0**	**660**	**190**	**0**	**5**	**885**	**110**
PHF			0.94				0.87				0.95				0.96	
Heavy Vehicle Count	0	0	12	5	0	1	9	0	0	0	23	1	0	1	28	3
Heavy Vehicle % of Total			4%				3%				3%				3%	
Heavy Vehicle %	2.0%	0.0%	2.0%	2.0%	2.0%	2.0%	2.0%	0.0%	2.0%	0.0%	2.0%	0.5%	2.0%	2.0%	2.0%	2.0%
ARC ABM Shift (E+C vs. Build)	*-12.0%*	*-12.0%*	*-12.0%*	*-12.0%*	*-34.0%*	*-34.0%*	*-34.0%*	*-34.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*-7.0%*	*-7.0%*	*-7.0%*	*-7.0%*
2024 Projected Traffic	**0**	**0**	**255**	**60**	**0**	**15**	**150**	**50**	**0**	**0**	**675**	**195**	**0**	**5**	**825**	**100**
Traffic Adjustments							*40*									*-40*
2024 Build II: Volume Shift	**0**	**0**	**255**	**60**	**0**	**15**	**190**	**50**	**0**	**0**	**675**	**195**	**0**	**5**	**825**	**60**

PM Peak Hour (5:00 PM - 6:00 PM)

	Peachtree St NE (South)				Peachtree St NE (North)				GA-8 North Avenue NE (West)				GA-8 North Avenue NE (East)			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
5:00 PM	0	0	109	32	0	13	107	29	0	0	286	15	0	0	236	19
5:15 PM	0	0	147	28	0	12	143	22	0	0	231	19	0	0	198	22
5:30 PM	0	1	120	29	0	17	113	36	0	0	249	28	0	2	217	22
5:45 PM	0	0	133	44	0	23	109	23	0	0	252	22	0	0	204	19
2024 Peak Hour Traffic	**0**	**1**	**509**	**133**	**0**	**65**	**472**	**110**	**0**	**0**	**1,018**	**84**	**0**	**2**	**855**	**82**
Monthly Factor	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*	*0.99*
Daily Factor	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
2024 Existing Volumes	**0**	**0**	**460**	**120**	**0**	**60**	**425**	**100**	**0**	**0**	**915**	**75**	**0**	**0**	**770**	**75**
PHF			0.91				0.91				0.92				0.92	
Heavy Vehicle Count	0	0	7	2	0	0	9	2	0	0	3	3	0	0	18	1
Heavy Vehicle % of Total			1%				2%				1%				2%	
Heavy Vehicle %	0.0%	0.0%	1.4%	1.5%	0.0%	0.0%	1.9%	1.8%	0.0%	0.0%	0.3%	3.6%	0.0%	0.0%	2.1%	1.2%
ARC ABM Shift (E+C vs. Build)	*-12.0%*	*-12.0%*	*-12.0%*	*-12.0%*	*-34.0%*	*-34.0%*	*-34.0%*	*-34.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*-7.0%*	*-7.0%*	*-7.0%*	*-7.0%*
2024 Projected Traffic	**0**	**0**	**405**	**105**	**0**	**40**	**280**	**65**	**0**	**0**	**935**	**75**	**0**	**0**	**715**	**70**
Traffic Adjustments																*-20*
2024 Build II: Volume Shift	**0**	**0**	**405**	**105**	**0**	**40**	**280**	**65**	**0**	**0**	**935**	**75**	**0**	**0**	**715**	**50**

Kimley-Horn and Associates, Inc.

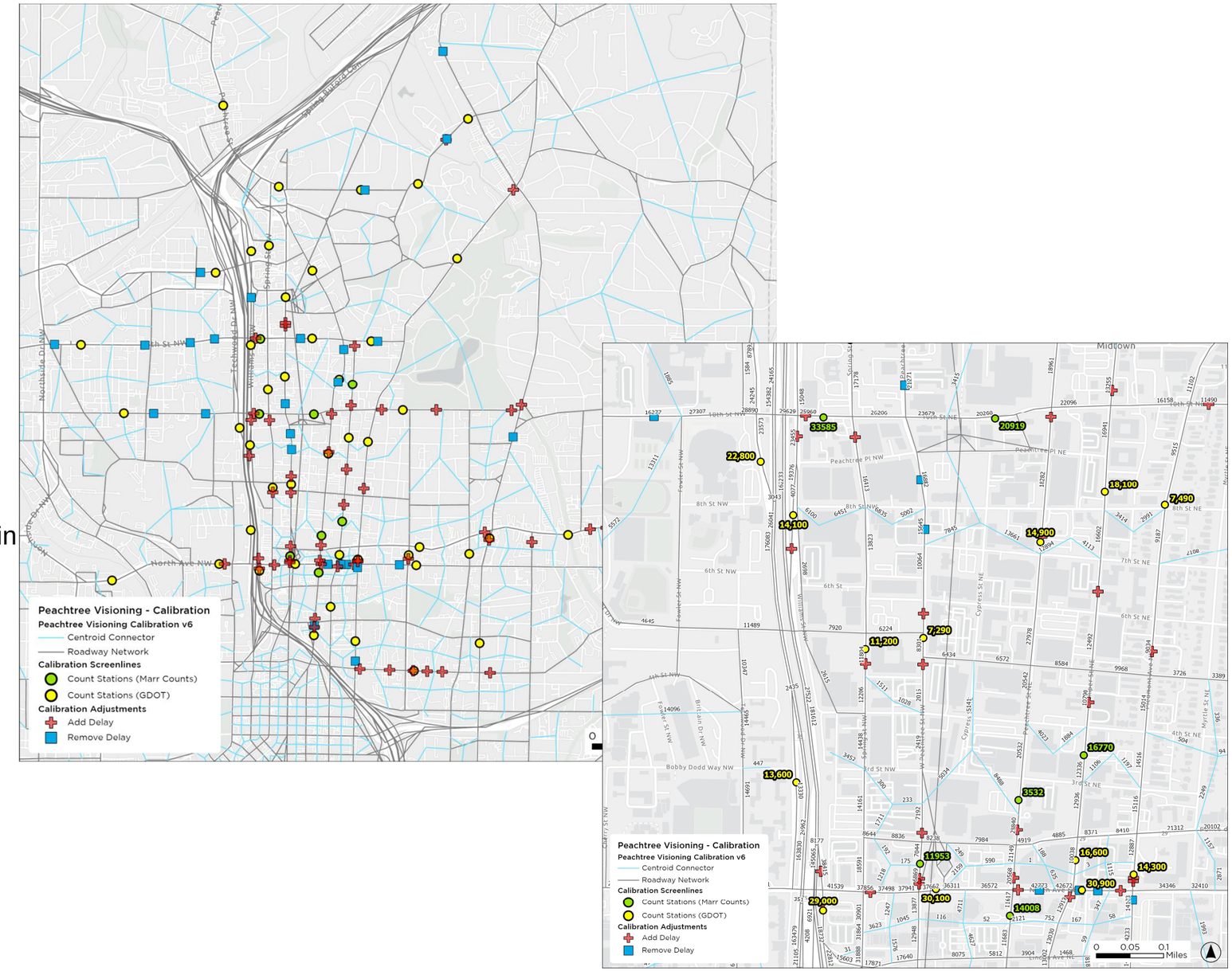
Attachment D:

Midtown District Activity

Based Model Summary Slides

ARC ABM – Validation, Calibration

- Validation
  - Confirmation of Roadway Conditions, Programmed Projects
    - Confirmed for Appropriate Laneage, Speeds, Functional Class
    - Confirmed for Applicable Programmed Projects
- Calibration
  - Comparison of Model Volumes to Observed GDOT Counts (2023)
  - Six Rounds of Model Adjustments
    - Adding or Removing Delay to Induce Changes in Roadway Volumes in Model Toward Observed AADTs



ARC ABM – Validation

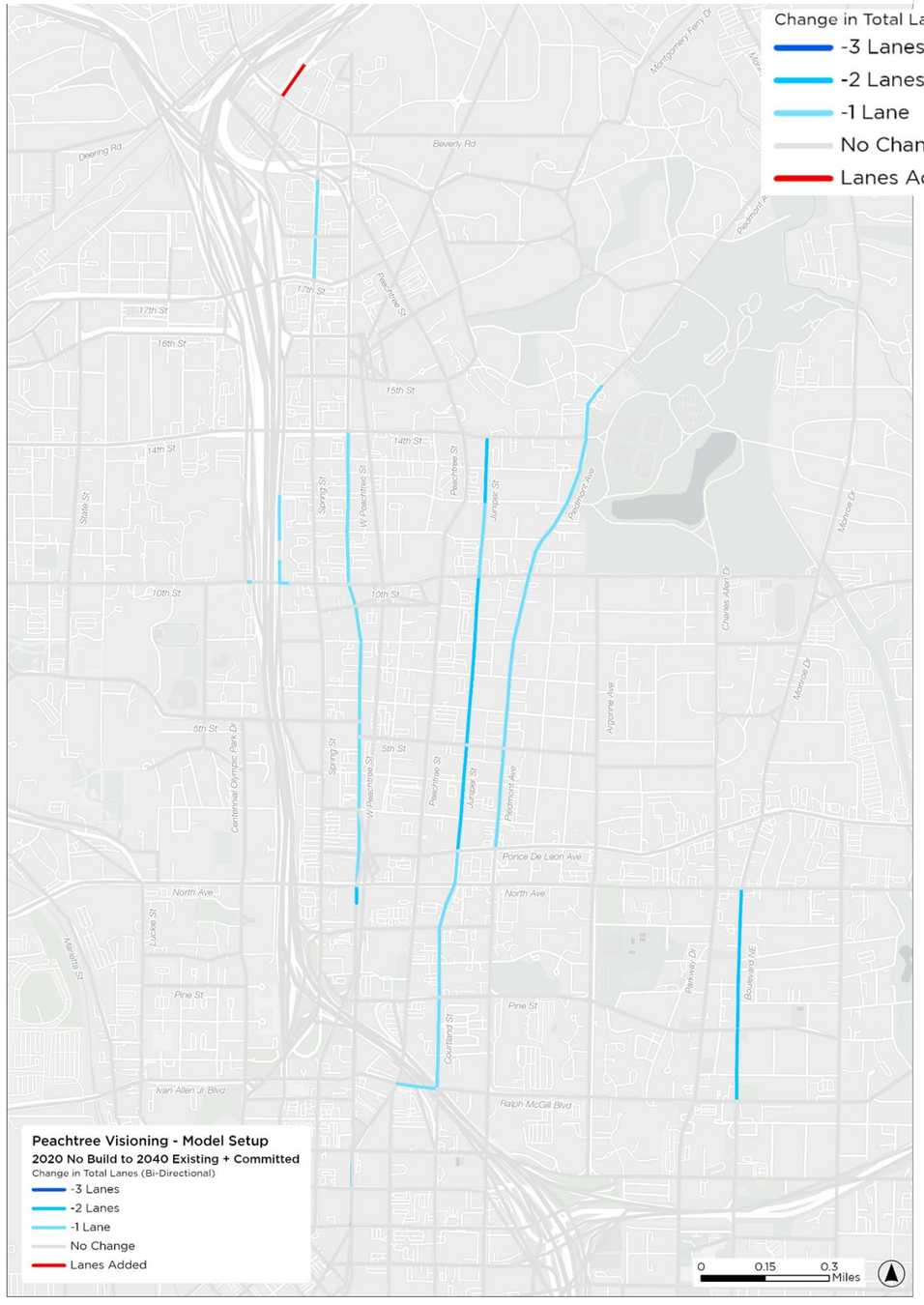
- District Area Programmed Projects – Already in Model
    - Buford Spring Connector Roundabout – Completed
    - Cycle Atlanta Phase 1.0 (Ralph McGill Blvd) – 2024

- Midtown District Programmed Projects – Added to Model
    - 5th Street Complete St (Myrtle St to Williams St) – 2025
    - Juniper Street Complete St (14th Street to Ponce) – 2025
    - 15th Street Extension (West Peachtree to Williams) –2025
    - Piedmont Complete Street (Ponce to 15th Street) – 2026
    - Spring St Enhancements (Peachtree to 17th St) – 2026
    - West Peachtree/Spring St “quick build” (W Ptree from Linden to 17th St and on Spring from 17th St to 3rd St) – 2026
    - 10th Street Bridge Enhancements (Techwood Dr to Spring and Williams St from Peachtree Pl to 12th St) – 2026
    - 15th Street Safe Street (West Peachtree St to Piedmont Ave) – 2027
    - Central Midtown Safe Street (10th Street from Myrtle St to Crescent Ave and on Peachtree Pl from Crescent Ave to Williams St) – 2028

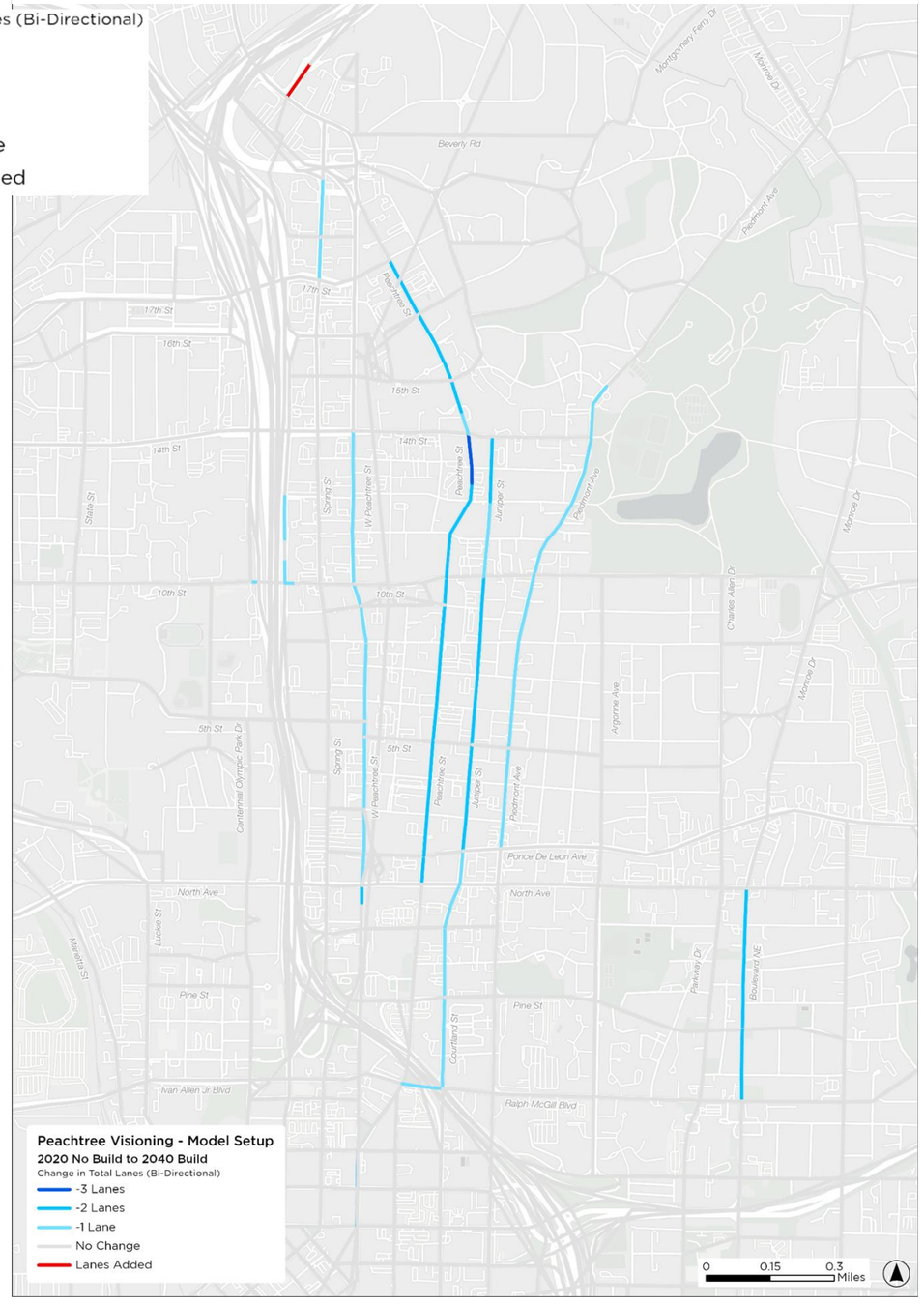
ARC ABM Validation

Change in Laneage

2020 No-Build to 2040 E+C



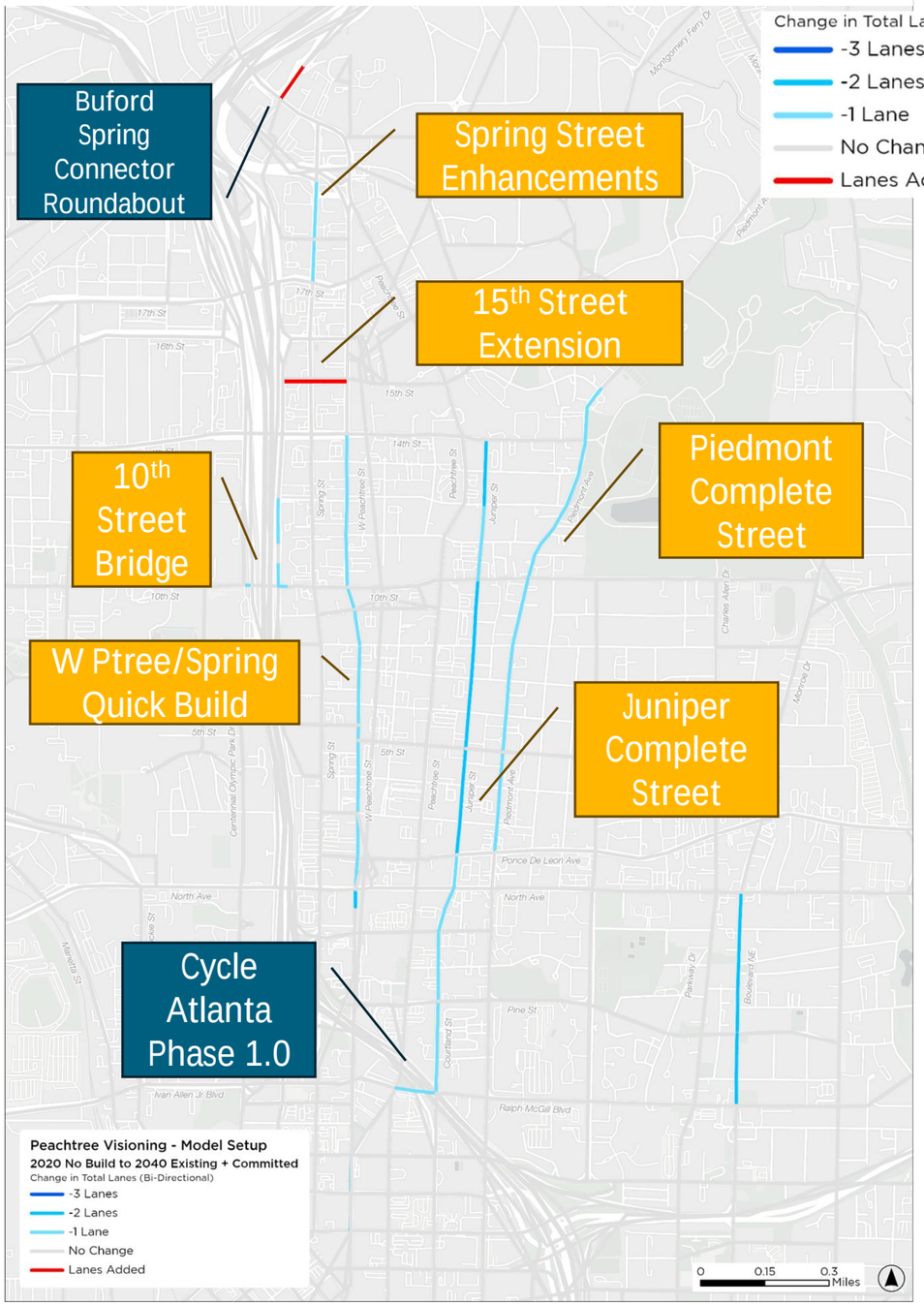
2020 No-Build to 2040 Build



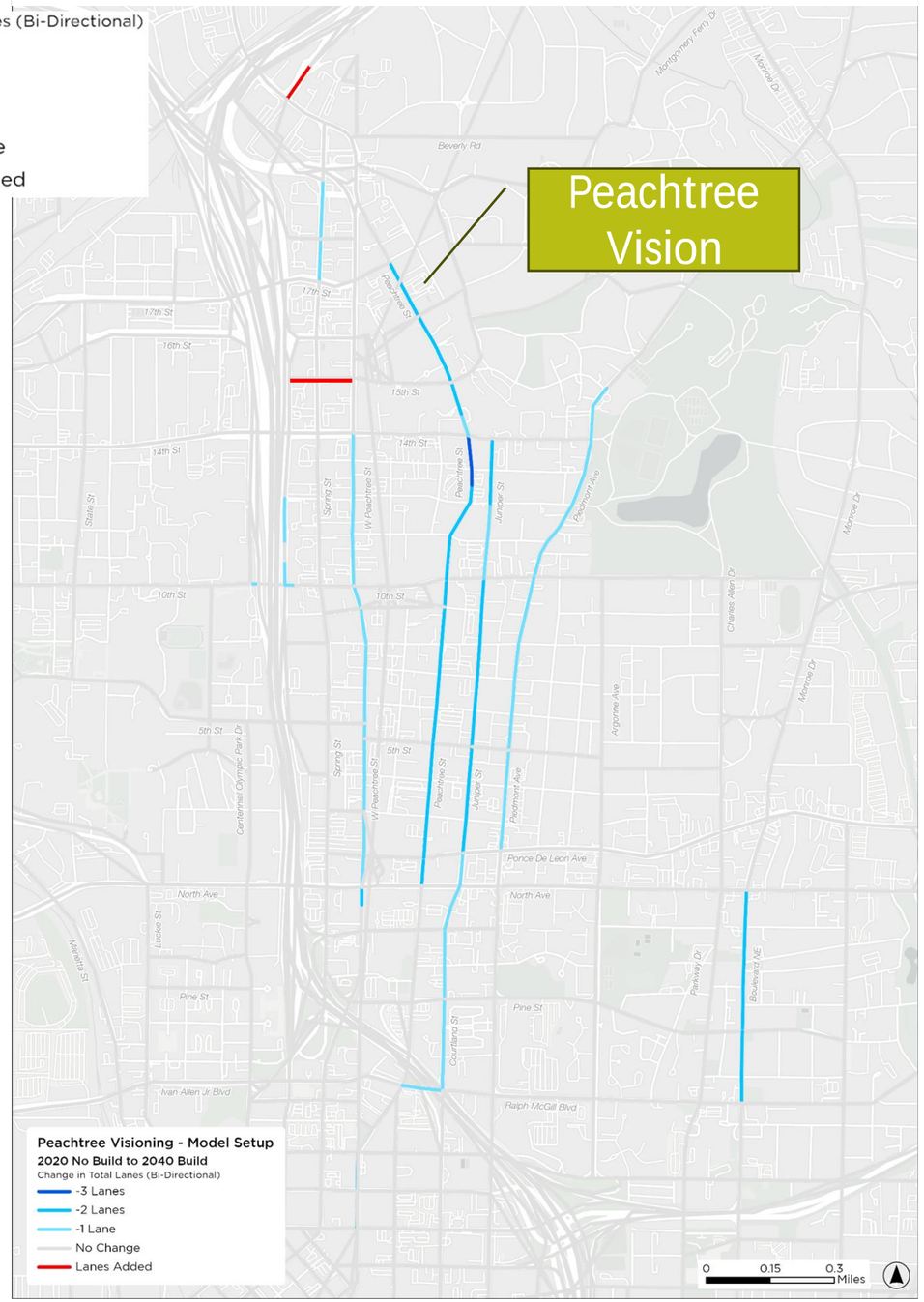
ARC ABM Validation

Change in Laneage

2020 No-Build to 2040 E+C



2020 No-Build to 2040 Build



ARC ABM – Calibration

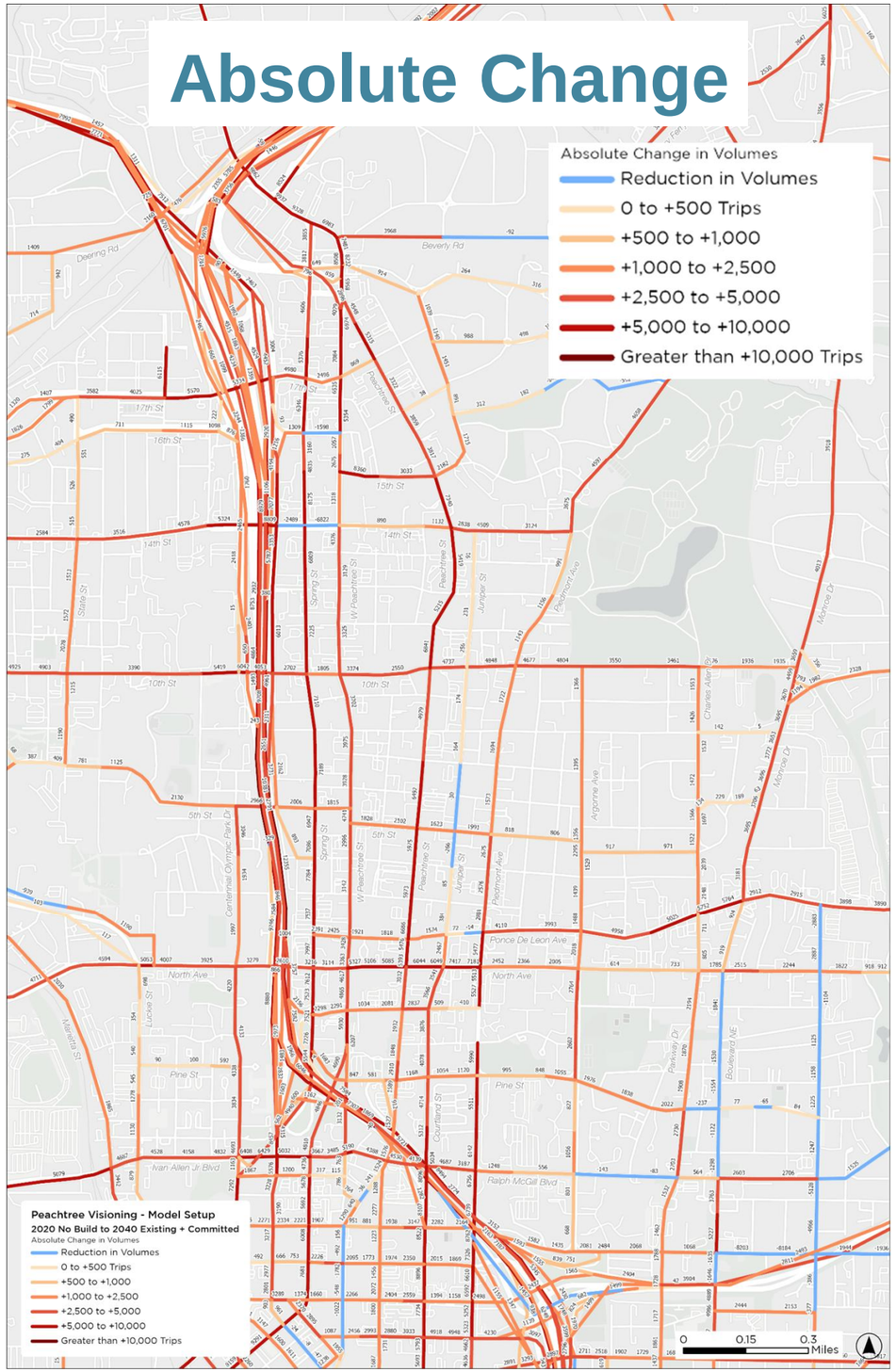
GDOT ID	Road Name	2023 AADTS	MTP 2024 TDM		CAL2		CAL3		CAL4		CAL5		CAL6	
			Volume	Deviation	Volume	Deviation	Volume	Deviation	Volume	Deviation	Volume	Deviation	Volume	Deviiation
121-0262	17TH ST NW	**26200**	21805	-17%	20480	-22%	22587	-14%	22576	-14%	22765	-13%	22201	-15%
121-5012	GA-8 / US-29 / US-78 / US-278 (NORTH AVE NW)	**23200**	28645	23%	30103	30%	21001	-9%	22065	-5%	27310	18%	25857	11%
121-5014	GA-8 / US-29 / US-78 / US-278 (NORTH AVE NW)	**18500**	18175	-2%	18750	1%	14523	-21%	14736	-20%	16894	-9%	16010	-13%
121-5080	GA-8 / US-29 / US-78 / US-278 (NORTH AVE NE)	**30100**	33697	12%	37821	26%	7819	-74%	12132	-60%	42010	40%	37662	25%
121-5081	GA-8 / US-29 / US-78 / US-278 (JUNIPER ST NE)	**16600**	24974	50%	6089	-63%	6841	-59%	21413	29%	23168	40%	10038	-40%
121-5082	GA-8 / US-29 / US-78 / US-278 (NORTH AVE NE)	**30900**	18872	-39%	48517	57%	13497	-56%	24228	-22%	49031	59%	45316	47%
121-5083	GA-8 / US-29 / US-78 / US-278 (PIEDMONT AVE NE)	**14300**	10865	-24%	22058	54%	11177	-22%	12460	-13%	15999	12%	12887	-10%
121-5084	GA-8 / US-29 / US-78 / US-278 (PONCE DE LEON AVE NE)	**23400**	34157	46%	24614	5%	29524	26%	30047	28%	33900	45%	26785	14%
121-5098	SPRING ST NW	**11200**	16790	50%	22438	100%	15861	42%	8952	-20%	11308	1%	11804	5%
121-5100	SPRING ST NW	**15100**	16810	11%	16559	10%	11998	-21%	10148	-33%	16981	12%	17178	14%
121-5101	GA-9 / US-19 (W PEACHTREE ST NW)	**17300**	21725	26%	24487	42%	23864	38%	19321	12%	21491	24%	20099	16%
121-5102	GA-9 / US-19 (SPRING ST NW)	**23900**	20803	-13%	21299	-11%	20043	-16%	19141	-20%	21163	-11%	21040	-12%
121-5103	W PEACHTREE ST NW	**26900**	11569	-57%	26891	0%	26995	0%	23013	-14%	23641	-12%	21271	-21%
121-5104	GA-9 / US-19 (PEACHTREE ST NE)	**30500**	35122	15%	35141	15%	35825	17%	35680	17%	34995	15%	34884	14%
121-5105	W PEACHTREE ST NW	**7290**	19051	161%	26795	268%	23210	218%	15192	108%	11784	62%	8301	14%
121-5106	GA-9 / US-19 (PEACHTREE ST NE)	**41800**	46487	11%	46169	10%	46004	10%	45453	9%	45232	8%	44947	8%
121-5154	JUNIPER ST NE	**18100**	17545	-3%	16446	-9%	17733	-2%	21087	17%	19741	9%	16941	-6%
121-5156	PIEDMONT AVE NE	**7490**	10837	45%	14731	97%	13105	75%	11056	48%	8929	19%	9515	27%
121-5596	BOULEVARD NE	**21000**	18835	-10%	21378	2%	22275	6%	18959	-10%	20310	-3%	21941	4%
121-5597	BOULEVARD NE	**18500**	14324	-23%	22063	19%	30357	64%	12485	-33%	15109	-18%	16218	-12%
121-5608	PIEDMONT AVE NE	**18500**	13039	-30%	19156	4%	17118	-7%	15788	-15%	14900	-19%	14462	-22%
121-5623	PEACHTREE ST NE	**14900**	25487	71%	5572	-63%	12524	-16%	16630	12%	15884	7%	18282	23%
121-5625	PEACHTREE ST NE	**20500**	14249	-30%	33409	63%	32356	58%	31210	52%	8050	-61%	10148	-50%
121-5626	PEACHTREE ST NE	**17400**	21706	25%	20302	17%	22966	32%	24965	43%	17328	0%	17512	1%
121-5630	COURTLAND ST NE	**14400**	22770	58%	17694	23%	19574	36%	23441	63%	21916	52%	13573	-6%
121-5633	GA-9 / US-19 (14TH ST NW)	**15000**	8237	-45%	16963	13%	17913	19%	17658	18%	17695	18%	15614	4%
121-5635	14TH ST NE	**18500**	13829	-25%	23798	29%	19391	5%	17015	-8%	17349	-6%	17257	-7%
121-5638	14TH ST NE	**16100**	12258	-24%	16428	2%	14728	-9%	13932	-13%	13024	-19%	12820	-20%
121-5951	NORTH AVE NE	**17300**	14417	-17%	29213	69%	18463	7%	18911	9%	20224	17%	23721	37%
121-6102	BEVERLY RD NE	**5370**	2814	-48%	3691	-31%	4030	-25%	4199	-22%	4764	-11%	5753	7%
121-6114	10TH ST NE	**9790**	17784	82%	12300	26%	13529	38%	14134	44%	14104	44%	11664	19%
121-6210	RALPH MCGILL BLVD NE	**3690**	14139	283%	1925	-48%	3414	-7%	3626	-2%	3064	-17%	3719	1%
121-7242	BEVERLY RD NE	**6930**	5520	-20%	6606	-5%	6680	-4%	6833	-1%	7407	7%	9019	30%
121-r038	I-75 / I-85 / GA-401 / GA-403 NORTHBOUND ENTRANCE 249C-D	**29000**	41604	43%	38738	34%	37219	28%	38579	33%	39199	35%	38415	32%
121-r039	I-75 / I-85 / GA-401 / GA-403 NORTHBOUND EXIT 250	**14100**	21092	50%	17020	21%	17156	22%	18270	30%	19111	36%	19376	37%
121-r040	I-75 / I-85 / GA-401 / GA-403 NORTHBOUND EXIT 251A	**11500**	13439	17%	13590	18%	13775	20%	14459	26%	14666	28%	14913	30%
121-r042	I-75 / I-85 / GA-401 / GA-403 NORTHBOUND ENTRANCE 251A	**16800**	21271	27%	21269	27%	20960	25%	20587	23%	20489	22%	20338	21%
121-r639	I-75 / I-85 / GA-401 / GA-403 SOUTHBOUND EXIT 249D	**13600**	13008	-4%	13221	-3%	12093	-11%	12494	-8%	13709	1%	13330	-2%
121-r640	I-75 / I-85 / GA-401 / GA-403 SOUTHBOUND ENTRANCE 250	**22800**	22361	-2%	22812	0%	23030	1%	22983	1%	22972	1%	23573	3%
	Average	**17334**	***18785***	***8%***	***19812***	***15%***	***17832***	***3%***	***17786***	***3%***	***18147***	***10%***	***18123***	***5%***

Legend
> "Acceptable"
> "Preferable"
< "Preferable"
< "Acceptable"
Bold = Actual Counts
Grey = Count for Comparission

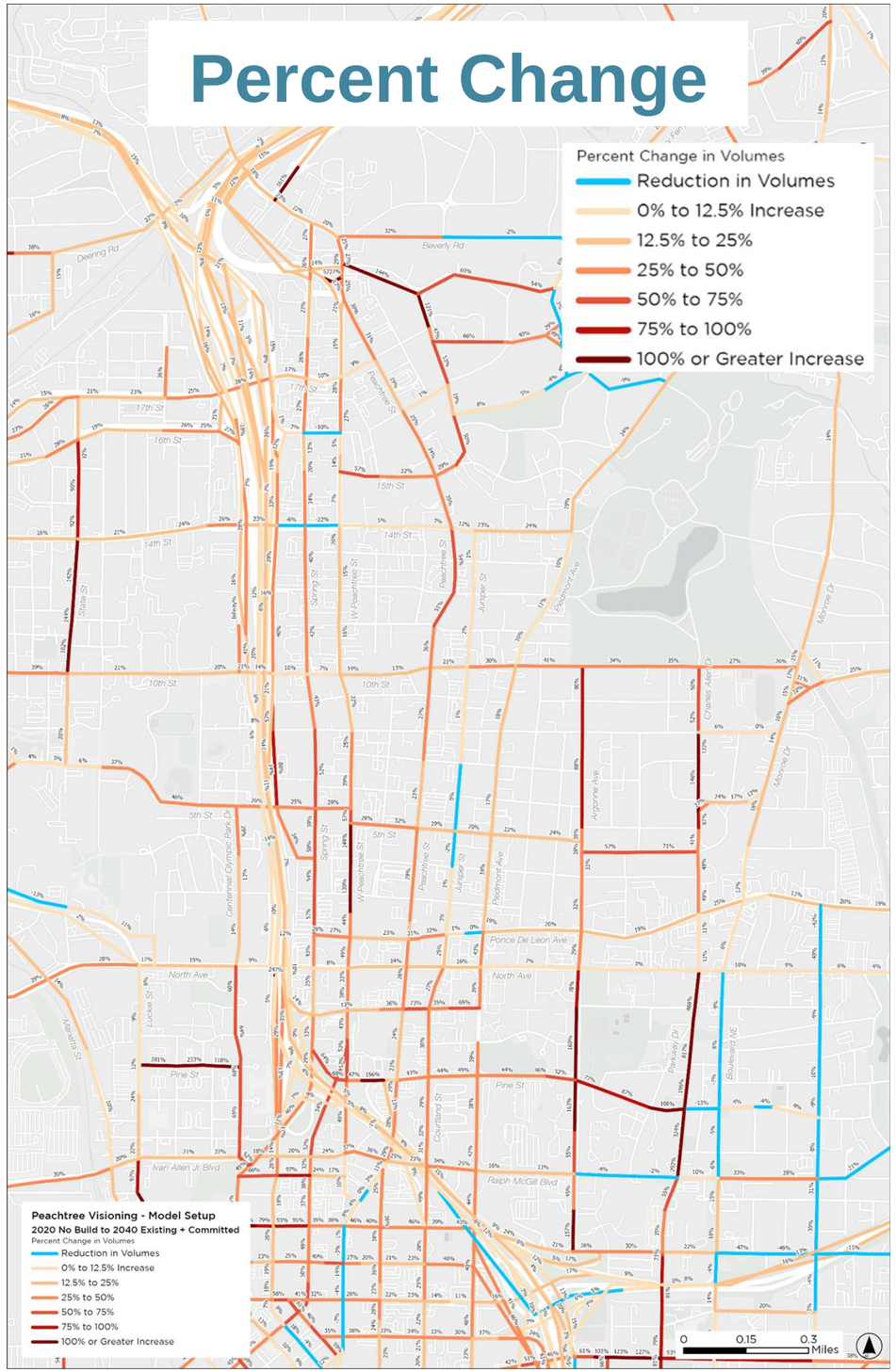
ARC ABM Results

2020 No-Build vs. 2040 E+C

Absolute Change



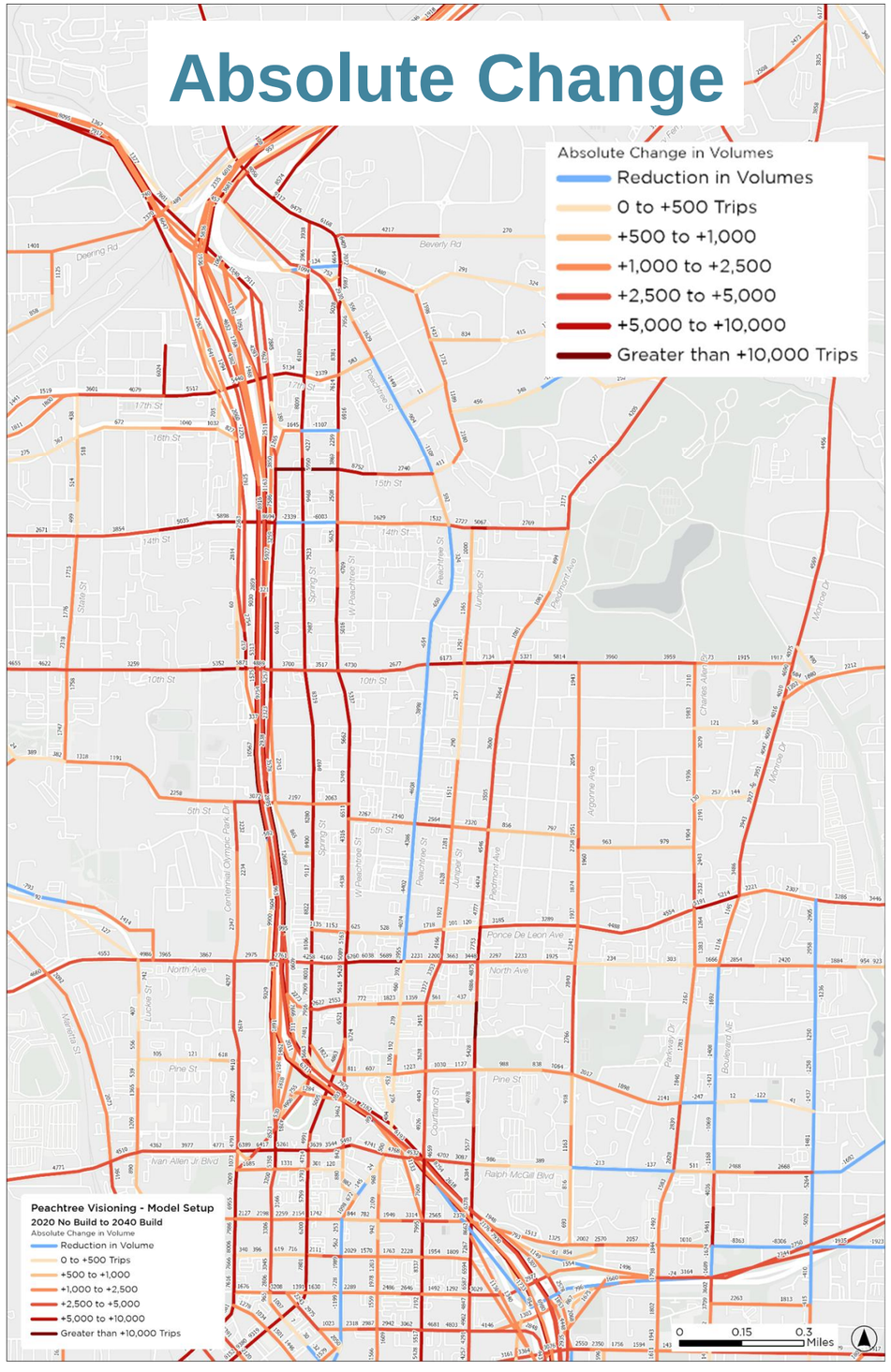
Percent Change



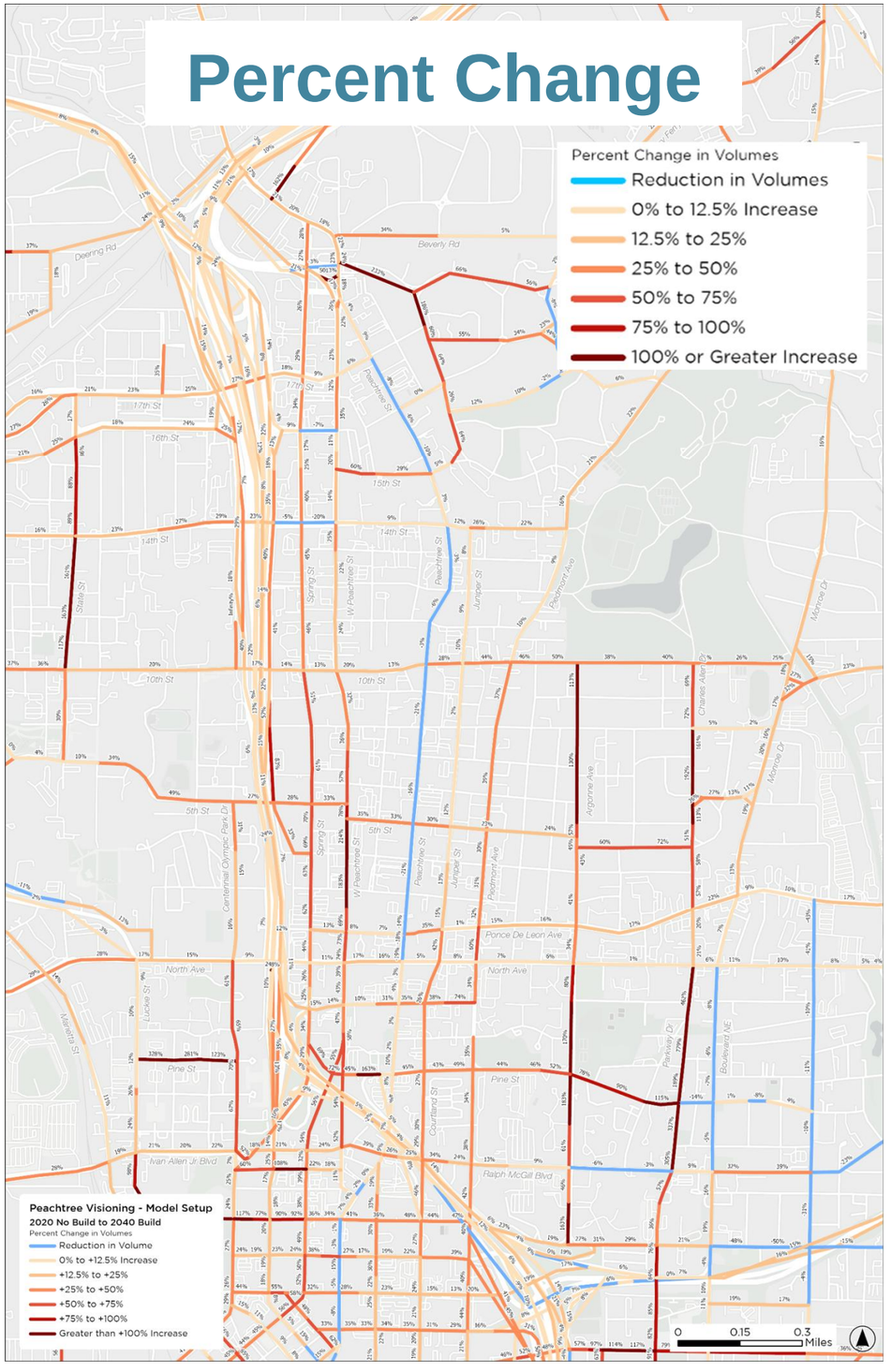
ARC ABM Results

2020 No-Build vs. 2040 Build

Absolute Change



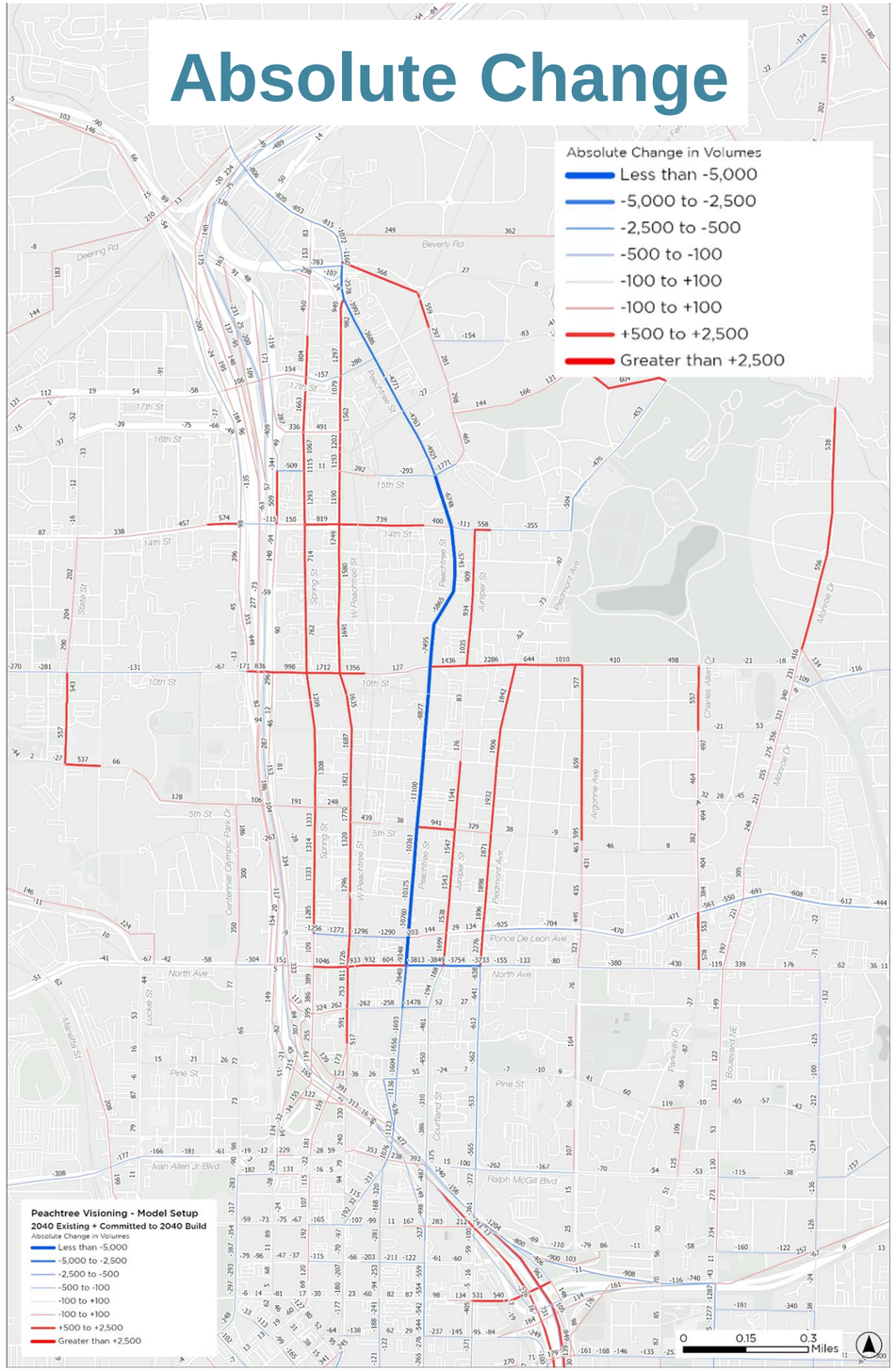
Percent Change



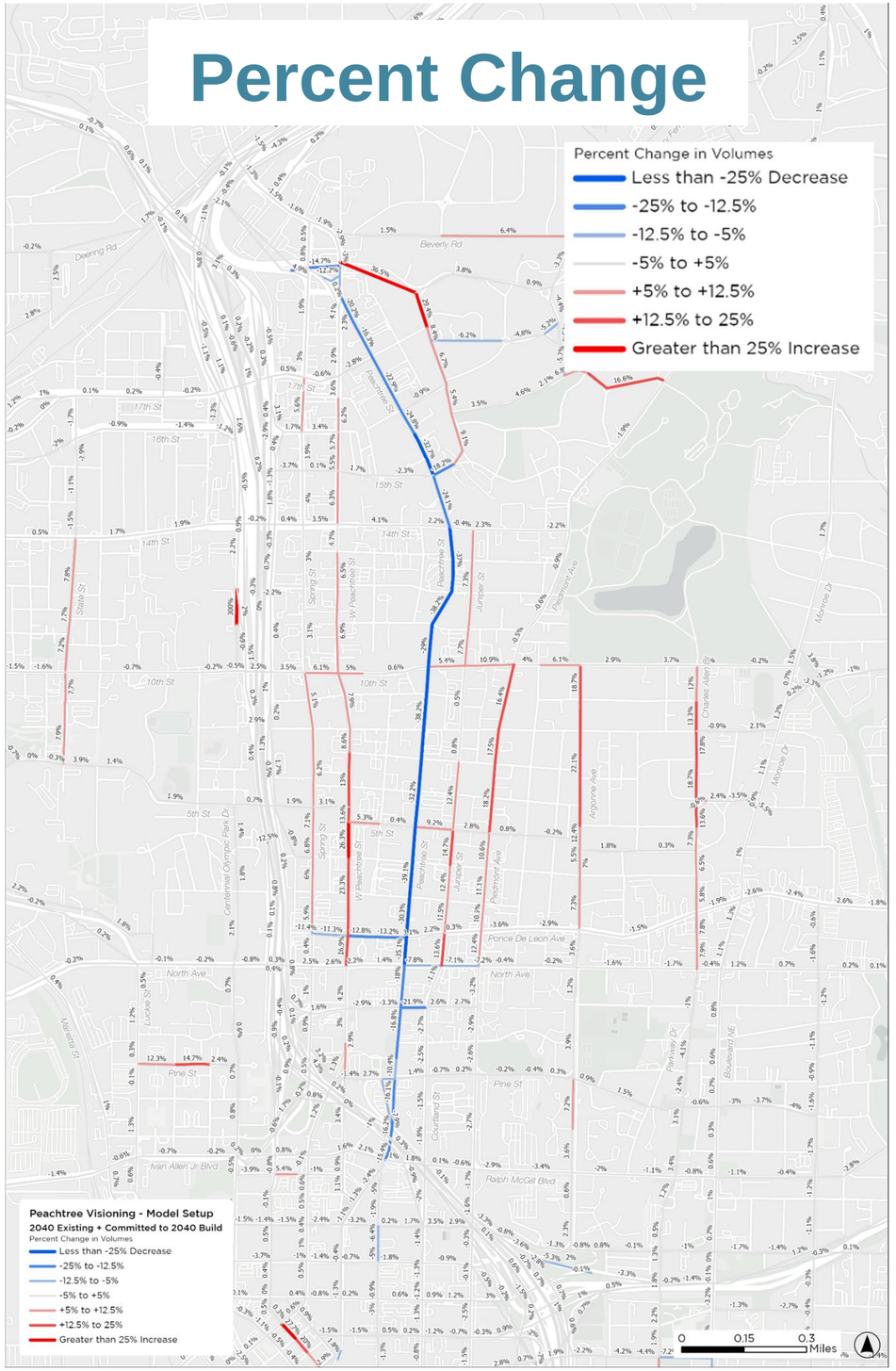
ARC ABM Results

2040 E+C vs. 2040 Build

Absolute Change



Percent Change



Attachment E:

Synchro 12.0 Worksheets

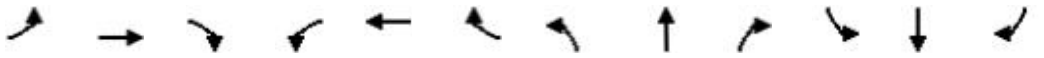
Existing/No-Build

Results: AM



Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	895	1042	309	74	379
v/c Ratio	0.36	0.63	0.26	0.14	0.37
Control Delay (s/veh)	24.2	34.8	33.9	19.3	38.7
Queue Delay	0.0	1.6	0.0	0.0	0.0
Total Delay (s/veh)	24.2	36.3	33.9	19.3	38.7
Queue Length 50th (ft)	190	338	110	15	99
Queue Length 95th (ft)	232	390	155	62	128
Internal Link Dist (ft)	687	429	482		263
Turn Bay Length (ft)				215	
Base Capacity (vph)	2497	1658	1185	519	1021
Starvation Cap Reductn	0	409	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.36	0.83	0.26	0.14	0.37

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	660	190	5	885	110	0	290	70	25	230	75
Future Volume (veh/h)	0	660	190	5	885	110	0	290	70	25	230	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.92	0.98		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1856	1900	1693	1856	1870	1900	1841	1811	1841	1841	1900
Adj Flow Rate, veh/h	0	695	200	5	922	115	0	309	74	29	264	86
Peak Hour Factor	0.95	0.95	0.95	0.96	0.96	0.96	0.94	0.94	0.94	0.87	0.87	0.87
Percent Heavy Veh, %	0	3	0	14	3	2	0	4	6	4	4	0
Cap, veh/h	0	1988	563	32	1566	195	0	1195	483	92	778	244
Arrive On Green	0.00	0.51	0.51	0.68	0.68	0.68	0.00	0.34	0.34	0.11	0.11	0.11
Sat Flow, veh/h	0	4066	1104	4	3071	381	0	3589	1415	169	2278	715
Grp Volume(v), veh/h	0	601	294	557	0	485	0	309	74	202	0	177
Grp Sat Flow(s),veh/h/ln	0	1689	1625	1847	0	1609	0	1749	1415	1687	0	1475
Q Serve(g_s), s	0.0	12.7	13.0	0.0	0.0	19.4	0.0	7.7	4.4	0.8	0.0	13.3
Cycle Q Clear(g_c), s	0.0	12.7	13.0	19.3	0.0	19.4	0.0	7.7	4.4	12.2	0.0	13.3
Prop In Lane	0.00		0.68	0.01		0.24	0.00		1.00	0.14		0.48
Lane Grp Cap(c), veh/h	0	1722	829	972	0	821	0	1195	483	611	0	504
V/C Ratio(X)	0.00	0.35	0.36	0.57	0.00	0.59	0.00	0.26	0.15	0.33	0.00	0.35
Avail Cap(c_a), veh/h	0	1722	829	972	0	821	0	1195	483	611	0	504
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.5	17.6	12.6	0.0	12.6	0.0	28.5	27.4	40.4	0.0	41.0
Incr Delay (d2), s/veh	0.0	0.6	1.2	2.5	0.0	3.1	0.0	0.5	0.7	1.4	0.0	1.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.0	5.0	6.8	0.0	6.0	0.0	3.4	1.6	6.2	0.0	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	18.1	18.8	15.0	0.0	15.7	0.0	29.0	28.1	41.9	0.0	42.9
LnGrp LOS		B	B	B		B		C	C	D		D
Approach Vol, veh/h		895			1042			383			379	
Approach Delay, s/veh		18.3			15.3			28.9			42.3	
Approach LOS		B			B			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		70.0		50.0		70.0		50.0				
Change Period (Y+Rc), s		8.8		9.0		8.8		9.0				
Max Green Setting (Gmax), s		61.2		41.0		61.2		41.0				
Max Q Clear Time (g_c+I1), s		21.4		15.3		15.0		9.7				
Green Ext Time (p_c), s		17.0		2.6		14.5		2.5				

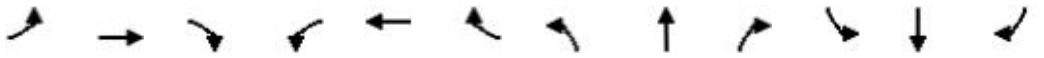
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			22.0									
HCM 6th LOS			C									



Lane Group	EBT	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	84	367	149	415	286
v/c Ratio	0.22	0.66	0.22	0.46	0.21
Control Delay (s/veh)	30.5	28.8	5.7	48.0	27.7
Queue Delay	0.0	0.4	0.0	1.1	0.0
Total Delay (s/veh)	30.5	29.1	5.7	49.1	27.7
Queue Length 50th (ft)	45	227	22	158	71
Queue Length 95th (ft)	89	m304	m69	208	97
Internal Link Dist (ft)	703	436		263	452
Turn Bay Length (ft)					
Base Capacity (vph)	379	553	665	896	1382
Starvation Cap Reductn	0	25	0	260	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.22	0.70	0.22	0.65	0.21

Intersection Summary

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



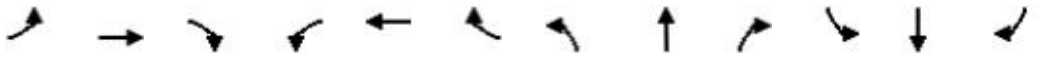
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	50	25	90	230	130	25	350	20	40	205	10
Future Volume (vph)	0	50	25	90	230	130	25	350	20	40	205	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.9			8.9	8.9		5.4			8.4	
Lane Util. Factor		1.00			1.00	1.00		0.95			0.95	
Frpb, ped/bikes		0.98			1.00	0.93		0.99			0.99	
Flpb, ped/bikes		1.00			0.99	1.00		0.99			0.99	
Frt		0.96			1.00	0.85		0.99			0.99	
Flt Protected		1.00			0.99	1.00		1.00			0.99	
Satd. Flow (prot)		1502			1827	1493		3375			3346	
Flt Permitted		1.00			0.71	1.00		0.92			0.81	
Satd. Flow (perm)		1502			1319	1493		3100			2746	
Peak-hour factor, PHF	0.89	0.89	0.89	0.87	0.87	0.87	0.95	0.95	0.95	0.89	0.89	0.89
Adj. Flow (vph)	0	56	28	103	264	149	26	368	21	45	230	11
RTOR Reduction (vph)	0	15	0	0	0	92	0	3	0	0	2	0
Lane Group Flow (vph)	0	69	0	0	367	57	0	412	0	0	284	0
Confl. Peds. (#/hr)	23		29	29		23	61		79	79		61
Confl. Bikes (#/hr)							5					5
Heavy Vehicles (%)	0%	27%	0%	1%	2%	1%	7%	3%	0%	2%	4%	10%
Turn Type		NA		pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		8		7	4			6		5	2	
Permitted Phases	8			4		4	6			2		
Actuated Green, G (s)		29.1			46.1	46.1		34.6			56.6	
Effective Green, g (s)		29.1			46.1	46.1		34.6			56.6	
Actuated g/C Ratio		0.24			0.38	0.38		0.29			0.47	
Clearance Time (s)		5.9			8.9	8.9		5.4			8.4	
Lane Grp Cap (vph)		364			565	573		893			1394	
v/s Ratio Prot		0.05			c0.08						c0.03	
v/s Ratio Perm					c0.17	0.04		c0.13			0.06	
v/c Ratio		0.19			0.65	0.10		0.46			0.20	
Uniform Delay, d1		36.1			30.3	23.7		35.1			18.5	
Progression Factor		1.04			0.76	1.27		1.32			1.51	
Incremental Delay, d2		1.1			5.5	0.3		1.6			0.3	
Delay (s)		38.7			28.6	30.4		48.0			28.3	
Level of Service		D			C	C		D			C	
Approach Delay (s/veh)		38.7			29.1			48.0			28.3	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	35.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	22.4
Intersection Capacity Utilization	68.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	79	20	494	310
v/c Ratio	0.17	0.08	0.36	0.22
Control Delay (s/veh)	7.4	45.6	5.0	20.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.4	45.6	5.0	20.6
Queue Length 50th (ft)	2	14	33	86
Queue Length 95th (ft)	13	31	46	103
Internal Link Dist (ft)	730	415	452	358
Turn Bay Length (ft)				
Base Capacity (vph)	455	240	1370	1441
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.17	0.08	0.36	0.22

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	20	25	5	10	0	55	390	30	15	220	25
Future Volume (vph)	15	20	25	5	10	0	55	390	30	15	220	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7			5.7			5.2			5.2	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		0.95			1.00			0.97			0.96	
Flpb, ped/bikes		0.97			0.97			0.97			0.99	
Frt		0.94			1.00			0.99			0.99	
Flt Protected		0.99			0.98			0.99			1.00	
Satd. Flow (prot)		1584			1809			3268			3267	
Flt Permitted		0.94			0.91			0.87			0.91	
Satd. Flow (perm)		1507			1671			2845			2992	
Peak-hour factor, PHF	0.76	0.76	0.76	0.75	0.75	0.75	0.96	0.96	0.96	0.84	0.84	0.84
Adj. Flow (vph)	20	26	33	7	13	0	57	406	31	18	262	30
RTOR Reduction (vph)	0	21	0	0	0	0	0	4	0	0	7	0
Lane Group Flow (vph)	0	58	0	0	20	0	0	490	0	0	303	0
Confl. Peds. (#/hr)	53		41	41		53	82		89	89		82
Confl. Bikes (#/hr)							6		1	1		6
Heavy Vehicles (%)	11%	0%	0%	0%	0%	0%	3%	3%	0%	0%	4%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8 16			8			6 14			2 10	
Permitted Phases	8 16			8			6 14			2 10		
Actuated Green, G (s)		34.6			17.3			57.6			57.6	
Effective Green, g (s)		34.6			17.3			57.6			57.6	
Actuated g/C Ratio		0.29			0.14			0.48			0.48	
Clearance Time (s)					5.7							
Lane Grp Cap (vph)		434			240			1365			1436	
v/s Ratio Prot												
v/s Ratio Perm		c0.04			0.01			c0.17			0.10	
v/c Ratio		0.13			0.08			0.36			0.21	
Uniform Delay, d1		31.6			44.5			19.6			18.1	
Progression Factor		0.57			1.00			0.44			2.33	
Incremental Delay, d2		0.6			0.7			0.7			0.3	
Delay (s)		18.6			45.2			9.4			42.4	
Level of Service		B			D			A			D	
Approach Delay (s/veh)		18.6			45.2			9.4			42.4	
Approach LOS		B			D			A			D	

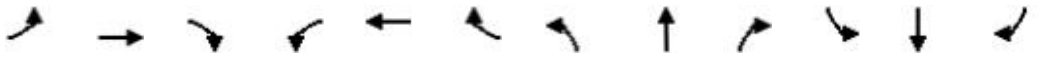
Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.8
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	WBT	NBT	SBT
Lane Group Flow (vph)	38	429	305
v/c Ratio	0.09	0.27	0.19
Control Delay (s/veh)	11.7	2.0	6.3
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	11.7	2.0	6.3
Queue Length 50th (ft)	7	8	28
Queue Length 95th (ft)	20	11	47
Internal Link Dist (ft)	299	358	376
Turn Bay Length (ft)			
Base Capacity (vph)	403	1571	1572
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.09	0.27	0.19

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	5	10	15	5	380	10	5	260	0
Future Volume (vph)	0	0	0	5	10	15	5	380	10	5	260	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.3			4.7			4.7	
Lane Util. Factor					1.00			0.95			0.95	
Frpb, ped/bikes					0.93			0.99			1.00	
Flpb, ped/bikes					0.98			1.00			1.00	
Frt					0.93			1.00			1.00	
Flt Protected					0.99			1.00			1.00	
Satd. Flow (prot)					1565			3434			3457	
Flt Permitted					0.98			0.95			0.95	
Satd. Flow (perm)					1538			3270			3279	
Peak-hour factor, PHF	0.25	0.25	0.25	0.79	0.79	0.79	0.92	0.92	0.92	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	6	13	19	5	413	11	6	299	0
RTOR Reduction (vph)	0	0	0	0	14	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	24	0	0	427	0	0	305	0
Confl. Peds. (#/hr)	42		44	44		42	128		78	78		128
Confl. Bikes (#/hr)	1					1	6					6
Heavy Vehicles (%)	0%	0%	0%	0%	0%	5%	0%	3%	8%	0%	4%	0%
Turn Type				Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4 12			6 14			2 10	
Permitted Phases	4			4 12			6 14			2 10		
Actuated Green, G (s)					30.4			57.6			57.6	
Effective Green, g (s)					30.4			57.6			57.6	
Actuated g/C Ratio					0.25			0.48			0.48	
Clearance Time (s)												
Lane Grp Cap (vph)					389			1569			1573	
v/s Ratio Prot												
v/s Ratio Perm					c0.02			c0.13			0.09	
v/c Ratio					0.06			0.27			0.19	
Uniform Delay, d1					34.0			18.7			17.9	
Progression Factor					1.00			0.17			0.66	
Incremental Delay, d2					0.3			0.4			0.3	
Delay (s)					34.3			3.6			12.1	
Level of Service					C			A			B	
Approach Delay (s/veh)		0.0			34.3			3.6			12.1	
Approach LOS		A			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	8.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.19		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	32.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	82	89	459	337
v/c Ratio	0.14	0.14	0.31	0.22
Control Delay (s/veh)	13.0	19.1	32.8	8.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.0	19.1	32.8	8.4
Queue Length 50th (ft)	7	36	118	32
Queue Length 95th (ft)	28	65	192	53
Internal Link Dist (ft)	791	417	376	368
Turn Bay Length (ft)				
Base Capacity (vph)	597	635	1473	1539
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.14	0.14	0.31	0.22

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	30	20	5	50	20	40	340	15	15	250	25
Future Volume (veh/h)	10	30	20	5	50	20	40	340	15	15	250	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.94	0.98		0.94	0.94		0.88	0.99		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1767	1900	1900	1826	1767	1870	1811	1900	1856	1900
Adj Flow Rate, veh/h	14	41	27	6	59	24	47	395	17	17	291	29
Peak Hour Factor	0.74	0.74	0.74	0.85	0.85	0.85	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	9	0	0	5	9	2	6	0	3	0
Cap, veh/h	115	327	200	54	446	173	177	1444	62	91	1472	144
Arrive On Green	0.36	0.36	0.36	0.12	0.12	0.12	0.50	0.50	0.50	1.00	1.00	1.00
Sat Flow, veh/h	219	897	547	59	1222	473	280	2878	124	115	2934	288
Grp Volume(v), veh/h	82	0	0	89	0	0	231	0	228	177	0	160
Grp Sat Flow(s),veh/h/ln	1663	0	0	1754	0	0	1623	0	1660	1747	0	1590
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	9.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.7	0.0	0.0	5.4	0.0	0.0	8.6	0.0	9.5	0.0	0.0	0.0
Prop In Lane	0.17		0.33	0.07		0.27	0.20		0.07	0.10		0.18
Lane Grp Cap(c), veh/h	642	0	0	672	0	0	850	0	833	909	0	798
V/C Ratio(X)	0.13	0.00	0.00	0.13	0.00	0.00	0.27	0.00	0.27	0.19	0.00	0.20
Avail Cap(c_a), veh/h	642	0	0	672	0	0	850	0	833	909	0	798
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.4	0.0	0.0	35.9	0.0	0.0	17.0	0.0	17.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.4	0.0	0.0	0.8	0.0	0.8	0.5	0.0	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	2.5	0.0	0.0	3.9	0.0	3.9	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.8	0.0	0.0	36.3	0.0	0.0	17.8	0.0	18.1	0.5	0.0	0.6
LnGrp LOS	C			D			B		B	A		A
Approach Vol, veh/h		82			89			459			337	
Approach Delay, s/veh		25.8			36.3			17.9			0.5	
Approach LOS		C			D			B			A	

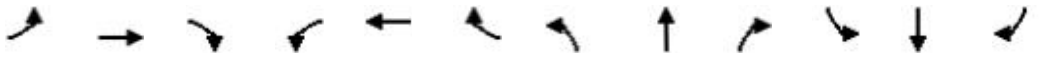
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		68.0		52.0		68.0		52.0				
Change Period (Y+Rc), s		7.8		8.2		7.8		8.2				
Max Green Setting (Gmax), s		60.2		43.8		60.2		43.8				
Max Q Clear Time (g_c+I1), s		2.0		7.4		11.5		5.7				
Green Ext Time (p_c), s		4.8		0.5		6.8		0.5				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			14.2									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	20	28	385	347
v/c Ratio	0.04	0.05	0.27	0.24
Control Delay (s/veh)	2.1	12.4	21.0	9.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.1	12.4	21.0	9.8
Queue Length 50th (ft)	0	5	116	93
Queue Length 95th (ft)	0	16	160	98
Internal Link Dist (ft)	820	418	368	345
Turn Bay Length (ft)				
Base Capacity (vph)	495	518	1405	1443
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.04	0.05	0.27	0.24

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	5	5	10	5	5	330	0	0	280	15
Future Volume (veh/h)	10	0	5	5	10	5	5	330	0	0	280	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.94	0.94		0.94	0.93		1.00	1.00		0.80
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1693	1900	1900	1693	1900	1870	1159	1900	1856	1900
Adj Flow Rate, veh/h	13	0	7	7	14	7	6	379	0	0	329	18
Peak Hour Factor	0.75	0.75	0.75	0.72	0.72	0.72	0.87	0.87	0.87	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	14	0	0	14	0	2	50	0	3	0
Cap, veh/h	367	20	155	165	305	132	67	1454	0	0	1407	76
Arrive On Green	0.31	0.00	0.31	0.31	0.31	0.31	0.42	0.42	0.00	0.00	0.14	0.14
Sat Flow, veh/h	851	65	493	286	969	419	12	3548	0	0	3443	181
Grp Volume(v), veh/h	20	0	0	28	0	0	206	179	0	0	172	175
Grp Sat Flow(s),veh/h/ln	1409	0	0	1674	0	0	1859	1617	0	0	1763	1769
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	5.2	5.3
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.7	0.0	0.0	4.3	4.3	0.0	0.0	5.2	5.3
Prop In Lane	0.65		0.35	0.25		0.25	0.03		0.00	0.00		0.10
Lane Grp Cap(c), veh/h	543	0	0	602	0	0	842	679	0	0	740	743
V/C Ratio(X)	0.04	0.00	0.00	0.05	0.00	0.00	0.24	0.26	0.00	0.00	0.23	0.24
Avail Cap(c_a), veh/h	543	0	0	602	0	0	842	679	0	0	740	743
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	14.2	0.0	0.0	14.3	0.0	0.0	11.3	11.3	0.0	0.0	17.2	17.3
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.7	0.9	0.0	0.0	0.7	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.3	0.0	0.0	1.8	1.6	0.0	0.0	2.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.4	0.0	0.0	14.4	0.0	0.0	12.0	12.3	0.0	0.0	18.0	18.0
LnGrp LOS	B			B			B	B			B	B
Approach Vol, veh/h		20			28			385			347	
Approach Delay, s/veh		14.4			14.4			12.2			18.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		33.0		27.0		33.0		27.0				
Change Period (Y+Rc), s		7.8		8.1		7.8		8.1				
Max Green Setting (Gmax), s		25.2		18.9		25.2		18.9				
Max Q Clear Time (g_c+I1), s		7.3		2.7		6.3		2.5				
Green Ext Time (p_c), s		3.5		0.1		4.0		0.0				

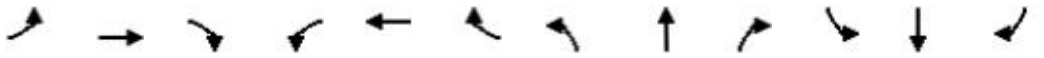
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			14.9									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	79	116	407	352
v/c Ratio	0.12	0.18	0.27	0.23
Control Delay (s/veh)	21.8	19.6	7.2	6.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.8	19.6	7.2	6.4
Queue Length 50th (ft)	34	37	55	15
Queue Length 95th (ft)	57	m71	71	27
Internal Link Dist (ft)	632	423	345	286
Turn Bay Length (ft)				
Base Capacity (vph)	648	641	1514	1507
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.12	0.18	0.27	0.23

Intersection Summary

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



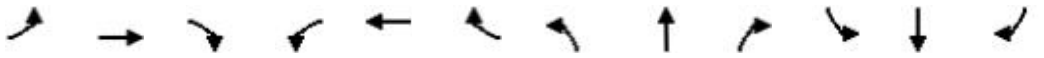
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	40	10	10	55	45	10	315	25	15	285	10
Future Volume (veh/h)	10	40	10	10	55	45	10	315	25	15	285	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.94	0.97		0.94	0.93		0.86	0.98		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1767	1870	1796	1826	1856	1781
Adj Flow Rate, veh/h	13	53	13	11	58	47	12	366	29	17	324	11
Peak Hour Factor	0.76	0.76	0.76	0.95	0.95	0.95	0.86	0.86	0.86	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	9	2	7	5	3	8
Cap, veh/h	117	463	107	70	343	259	57	1512	117	85	1536	52
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.48	0.48	0.48	0.96	0.96	0.96
Sat Flow, veh/h	218	1222	283	98	904	682	52	3139	244	108	3188	107
Grp Volume(v), veh/h	79	0	0	116	0	0	215	0	192	183	0	169
Grp Sat Flow(s),veh/h/ln	1723	0	0	1684	0	0	1822	0	1613	1755	0	1649
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	0.0	0.0	0.6
Cycle Q Clear(g_c), s	3.4	0.0	0.0	5.4	0.0	0.0	8.1	0.0	8.4	0.5	0.0	0.6
Prop In Lane	0.16		0.16	0.09		0.41	0.06		0.15	0.09		0.07
Lane Grp Cap(c), veh/h	688	0	0	671	0	0	909	0	777	878	0	794
V/C Ratio(X)	0.11	0.00	0.00	0.17	0.00	0.00	0.24	0.00	0.25	0.21	0.00	0.21
Avail Cap(c_a), veh/h	688	0	0	671	0	0	909	0	777	878	0	794
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.2	0.0	0.0	24.8	0.0	0.0	18.2	0.0	18.3	1.2	0.0	1.2
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.6	0.0	0.0	0.6	0.0	0.8	0.5	0.0	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.0	2.3	0.0	0.0	3.7	0.0	3.3	0.3	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.5	0.0	0.0	25.4	0.0	0.0	18.8	0.0	19.1	1.7	0.0	1.8
LnGrp LOS	C			C			B		B	A		A
Approach Vol, veh/h		79			116			407			352	
Approach Delay, s/veh		24.5			25.4			18.9			1.7	
Approach LOS		C			C			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		66.0		54.0		66.0		54.0				
Change Period (Y+Rc), s		8.2		8.5		8.2		8.5				
Max Green Setting (Gmax), s		57.8		45.5		57.8		45.5				
Max Q Clear Time (g_c+I1), s		2.6		7.4		10.4		5.4				
Green Ext Time (p_c), s		4.9		0.8		5.8		0.5				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			13.8									
HCM 6th LOS			B									

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	66	96	417	402
v/c Ratio	0.14	0.20	0.22	0.22
Control Delay (s/veh)	38.3	26.8	18.8	3.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.3	26.8	18.8	3.4
Queue Length 50th (ft)	38	55	78	15
Queue Length 95th (ft)	58	83	117	18
Internal Link Dist (ft)	879	412	286	375
Turn Bay Length (ft)				
Base Capacity (vph)	466	477	1896	1800
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.14	0.20	0.22	0.22

Intersection Summary



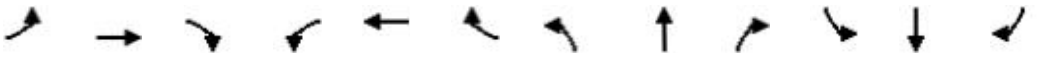
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	30	10	5	35	30	10	355	15	20	300	10
Future Volume (veh/h)	5	30	10	5	35	30	10	355	15	20	300	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.96	0.94		0.88	0.97		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1781	1900	1900	1826	1900	1900	1870	1900	1678	1856	1900
Adj Flow Rate, veh/h	7	44	15	7	48	41	11	390	16	24	366	12
Peak Hour Factor	0.68	0.68	0.68	0.73	0.73	0.73	0.91	0.91	0.91	0.82	0.82	0.82
Percent Heavy Veh, %	0	8	0	0	5	0	0	2	0	15	3	0
Cap, veh/h	60	325	104	47	245	194	60	1930	78	123	1821	60
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.59	0.59	0.59	1.00	1.00	1.00
Sat Flow, veh/h	98	1176	375	53	886	700	49	3295	134	152	3109	102
Grp Volume(v), veh/h	66	0	0	96	0	0	219	0	198	207	0	195
Grp Sat Flow(s),veh/h/ln	1649	0	0	1640	0	0	1822	0	1656	1709	0	1653
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.5	0.0	0.0	5.3	0.0	0.0	6.6	0.0	6.8	0.0	0.0	0.0
Prop In Lane	0.11		0.23	0.07		0.43	0.05		0.08	0.12		0.06
Lane Grp Cap(c), veh/h	489	0	0	486	0	0	1099	0	970	1035	0	969
V/C Ratio(X)	0.13	0.00	0.00	0.20	0.00	0.00	0.20	0.00	0.20	0.20	0.00	0.20
Avail Cap(c_a), veh/h	489	0	0	486	0	0	1099	0	970	1035	0	969
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.7	0.0	0.0	33.3	0.0	0.0	11.7	0.0	11.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.9	0.0	0.0	0.4	0.0	0.5	0.4	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	2.3	0.0	0.0	2.9	0.0	2.6	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.2	0.0	0.0	34.2	0.0	0.0	12.1	0.0	12.2	0.4	0.0	0.5
LnGrp LOS	C			C			B		B	A		A
Approach Vol, veh/h		66			96			417			402	
Approach Delay, s/veh		33.2			34.2			12.1			0.5	
Approach LOS		C			C			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		78.0		42.0		78.0		42.0				
Change Period (Y+Rc), s		7.7		8.8		7.7		8.8				
Max Green Setting (Gmax), s		70.3		33.2		70.3		33.2				
Max Q Clear Time (g_c+I1), s		2.0		7.3		8.8		5.5				
Green Ext Time (p_c), s		5.9		0.5		6.0		0.3				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			10.9									
HCM 6th LOS			B									

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	103	67	426	442
v/c Ratio	0.21	0.13	0.22	0.25
Control Delay (s/veh)	38.5	18.0	11.7	10.2
Queue Delay	0.0	0.0	0.0	0.9
Total Delay (s/veh)	38.5	18.0	11.7	11.1
Queue Length 50th (ft)	69	19	51	125
Queue Length 95th (ft)	106	54	54	116
Internal Link Dist (ft)	989	252	375	264
Turn Bay Length (ft)				
Base Capacity (vph)	499	499	1933	1769
Starvation Cap Reductn	0	0	0	1021
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.21	0.13	0.22	0.59

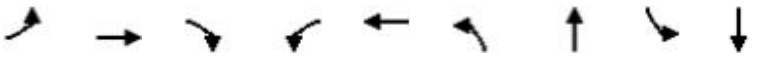
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	50	10	5	25	30	0	360	20	5	320	20
Future Volume (veh/h)	20	50	10	5	25	30	0	360	20	5	320	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.93	0.96		0.93	1.00		0.89	0.98		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1841	1900	1900	1885	1900	1900	1841	1900
Adj Flow Rate, veh/h	26	64	13	6	28	33	0	404	22	6	410	26
Peak Hour Factor	0.78	0.78	0.78	0.90	0.90	0.90	0.89	0.89	0.89	0.78	0.78	0.78
Percent Heavy Veh, %	0	0	0	0	4	0	0	1	0	0	4	0
Cap, veh/h	144	342	65	56	223	239	0	1906	103	39	1788	112
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.00	0.56	0.56	1.00	1.00	1.00
Sat Flow, veh/h	350	1120	212	76	731	783	0	3523	186	16	3217	201
Grp Volume(v), veh/h	103	0	0	67	0	0	0	210	216	234	0	208
Grp Sat Flow(s),veh/h/ln	1682	0	0	1590	0	0	0	1791	1824	1825	0	1609
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	7.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.0	0.0	0.0	3.6	0.0	0.0	0.0	7.1	7.2	0.0	0.0	0.0
Prop In Lane	0.25		0.13	0.09		0.49	0.00		0.10	0.03		0.12
Lane Grp Cap(c), veh/h	551	0	0	518	0	0	0	995	1014	1045	0	894
V/C Ratio(X)	0.19	0.00	0.00	0.13	0.00	0.00	0.00	0.21	0.21	0.22	0.00	0.23
Avail Cap(c_a), veh/h	551	0	0	518	0	0	0	995	1014	1045	0	894
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.7	0.0	0.0	30.2	0.0	0.0	0.0	13.4	13.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.5	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	1.5	0.0	0.0	0.0	3.0	3.1	0.1	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.5	0.0	0.0	30.7	0.0	0.0	0.0	13.9	13.9	0.5	0.0	0.6
LnGrp LOS	C			C				B	B	A		A
Approach Vol, veh/h		103			67			426			442	
Approach Delay, s/veh		31.5			30.7			13.9			0.5	
Approach LOS		C			C			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		75.0		45.0		75.0		45.0				
Change Period (Y+Rc), s		8.3		8.4		8.3		8.4				
Max Green Setting (Gmax), s		66.7		36.6		66.7		36.6				
Max Q Clear Time (g_c+I1), s		2.0		5.6		9.2		7.0				
Green Ext Time (p_c), s		6.5		0.2		6.1		0.4				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			11.0									
HCM 6th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	177	516	97	23	564	47	390	98	373
v/c Ratio	0.40	0.36	0.16	0.06	0.44	0.15	0.47	0.33	0.46
Control Delay (s/veh)	6.9	14.6	4.7	9.5	12.0	42.6	58.6	52.2	61.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	6.9	14.6	4.7	9.5	12.0	42.6	58.6	52.2	61.7
Queue Length 50th (ft)	13	141	18	5	51	29	142	70	133
Queue Length 95th (ft)	28	190	51	m7	m66	66	196	108	177
Internal Link Dist (ft)		1129			389		264		487
Turn Bay Length (ft)	170		85	110		95		225	
Base Capacity (vph)	438	1448	615	381	1290	318	832	296	817
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.36	0.16	0.06	0.44	0.15	0.47	0.33	0.46

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	480	90	20	325	165	45	340	30	85	230	95
Future Volume (veh/h)	165	480	90	20	325	165	45	340	30	85	230	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	0.99		0.91	0.90		0.76	0.91		0.76
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1841	1752	1870	1885	1870	1885	1811	1870	1856	1885
Adj Flow Rate, veh/h	177	516	97	23	374	190	47	358	32	98	264	109
Peak Hour Factor	0.93	0.93	0.93	0.87	0.87	0.87	0.95	0.95	0.95	0.87	0.87	0.87
Percent Heavy Veh, %	2	3	4	10	2	1	2	1	6	2	3	1
Cap, veh/h	470	1457	591	395	844	418	304	779	68	326	547	208
Arrive On Green	0.04	0.14	0.14	0.08	0.38	0.38	0.08	0.24	0.24	0.03	0.08	0.08
Sat Flow, veh/h	1781	3526	1430	1668	2221	1100	1781	3233	284	1781	2270	865
Grp Volume(v), veh/h	177	516	97	23	297	267	47	196	194	98	200	173
Grp Sat Flow(s),veh/h/ln	1781	1763	1430	1668	1777	1544	1781	1791	1727	1781	1763	1373
Q Serve(g_s), s	6.8	15.9	7.2	0.9	15.0	15.5	2.2	11.2	11.6	4.8	13.0	14.5
Cycle Q Clear(g_c), s	6.8	15.9	7.2	0.9	15.0	15.5	2.2	11.2	11.6	4.8	13.0	14.5
Prop In Lane	1.00		1.00	1.00		0.71	1.00		0.16	1.00		0.63
Lane Grp Cap(c), veh/h	470	1457	591	395	675	587	304	431	416	326	425	331
V/C Ratio(X)	0.38	0.35	0.16	0.06	0.44	0.45	0.15	0.45	0.47	0.30	0.47	0.52
Avail Cap(c_a), veh/h	470	1457	591	395	675	587	304	431	416	326	425	331
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.9	37.3	33.5	18.7	27.7	27.9	29.7	38.8	39.0	32.0	47.9	48.6
Incr Delay (d2), s/veh	2.3	0.7	0.6	0.3	2.1	2.5	1.1	3.4	3.7	2.4	3.7	5.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	7.7	2.7	0.4	6.7	6.1	1.1	5.4	5.4	2.4	6.6	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.2	38.0	34.1	19.0	29.8	30.4	30.8	42.2	42.7	34.3	51.6	54.4
LnGrp LOS	C	D	C	B	C	C	C	D	D	C	D	D
Approach Vol, veh/h		790			587			437			471	
Approach Delay, s/veh		34.0			29.6			41.2			49.1	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	35.0	19.0	51.0	15.0	35.0	15.0	55.0
Change Period (Y+Rc), s	* 5.9	6.1	5.6	* 5.4	* 5.9	6.1	6.0	* 5.4
Max Green Setting (Gmax), s	* 9.1	28.9	13.4	* 46	* 9.1	28.9	9.0	* 50
Max Q Clear Time (g_c+I1), s	4.2	16.5	8.8	17.5	6.8	13.6	2.9	17.9
Green Ext Time (p_c), s	0.0	3.2	0.1	3.9	0.1	3.7	0.0	4.2

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	37.3
HCM 6th LOS	D

Notes

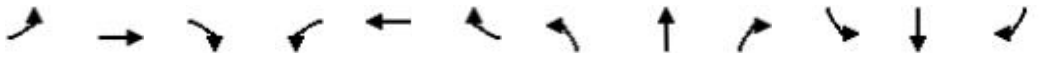
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	49	104	28	85	81	698	27	362
v/c Ratio	0.09	0.19	0.07	0.16	0.19	0.40	0.09	0.20
Control Delay (s/veh)	44.8	20.3	27.1	16.7	12.4	13.7	27.3	27.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.8	20.3	27.1	16.7	12.4	13.7	27.3	27.8
Queue Length 50th (ft)	27	26	16	29	24	184	14	94
Queue Length 95th (ft)	55	64	41	70	53	222	m29	107
Internal Link Dist (ft)	1144			417		487		393
Turn Bay Length (ft)		180	60		60		170	
Base Capacity (vph)	528	556	420	528	422	1764	290	1766
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.19	0.07	0.16	0.19	0.40	0.09	0.20

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	30	85	25	40	35	70	550	50	25	305	25
Future Volume (veh/h)	10	30	85	25	40	35	70	550	50	25	305	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.92	0.94		0.92	0.92		0.86	1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1678	1900	1900	1900	1870	1826	1900	1885	1900	1900	1856	1841
Adj Flow Rate, veh/h	12	37	104	28	45	40	81	640	58	27	335	27
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.86	0.86	0.86	0.91	0.91	0.91
Percent Heavy Veh, %	15	0	0	0	2	5	0	1	0	0	3	4
Cap, veh/h	150	444	478	424	282	251	558	1708	154	368	1702	136
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.52	0.52	0.52	1.00	1.00	1.00
Sat Flow, veh/h	349	1376	1483	1195	874	777	954	3269	295	759	3258	260
Grp Volume(v), veh/h	49	0	104	28	0	85	81	350	348	27	179	183
Grp Sat Flow(s),veh/h/ln	1725	0	1483	1195	0	1652	954	1791	1773	759	1763	1754
Q Serve(g_s), s	0.0	0.0	6.1	2.0	0.0	4.4	5.3	13.9	14.0	1.0	0.0	0.0
Cycle Q Clear(g_c), s	2.2	0.0	6.1	4.2	0.0	4.4	5.3	13.9	14.0	15.0	0.0	0.0
Prop In Lane	0.24		1.00	1.00		0.47	1.00		0.17	1.00		0.15
Lane Grp Cap(c), veh/h	594	0	478	424	0	533	558	936	926	368	921	917
V/C Ratio(X)	0.08	0.00	0.22	0.07	0.00	0.16	0.15	0.37	0.38	0.07	0.19	0.20
Avail Cap(c_a), veh/h	594	0	478	424	0	533	558	936	926	368	921	917
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	29.6	29.7	0.0	29.0	15.0	17.0	17.0	1.7	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	1.0	0.3	0.0	0.6	0.5	1.1	1.2	0.4	0.5	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	2.4	0.6	0.0	1.9	1.3	6.1	6.0	0.1	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.5	0.0	30.7	30.0	0.0	29.7	15.5	18.1	18.2	2.1	0.5	0.5
LnGrp LOS	C		C	C		C	B	B	B	A	A	A
Approach Vol, veh/h		153			113			779			389	
Approach Delay, s/veh		30.0			29.8			17.9			0.6	
Approach LOS		C			C			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		72.0		48.0		72.0		48.0				
Change Period (Y+Rc), s		9.3		9.3		9.3		9.3				
Max Green Setting (Gmax), s		62.7		38.7		62.7		38.7				
Max Q Clear Time (g_c+I1), s		17.0		6.4		16.0		8.1				
Green Ext Time (p_c), s		5.4		0.6		12.4		0.7				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			15.4									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	86	198	22	625	92	370
v/c Ratio	0.22	0.48	0.05	0.32	0.25	0.19
Control Delay (s/veh)	23.5	29.3	6.6	6.5	11.6	8.0
Queue Delay	0.0	4.8	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.5	34.0	6.6	6.5	11.6	8.0
Queue Length 50th (ft)	31	89	3	42	17	34
Queue Length 95th (ft)	46	118	m8	54	56	82
Internal Link Dist (ft)	1407	172		393		368
Turn Bay Length (ft)			135		100	
Base Capacity (vph)	400	415	452	1948	366	1993
Starvation Cap Reductn	0	152	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.75	0.05	0.32	0.25	0.19

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	20	25	25	55	65	20	505	70	85	310	30
Future Volume (veh/h)	10	20	25	25	55	65	20	505	70	85	310	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.89	0.94		0.89	0.97		0.88	0.99		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1841	1856	1870	1900	1900	1870	1856	1900	1856	1900
Adj Flow Rate, veh/h	16	31	39	34	75	89	22	549	76	92	337	33
Peak Hour Factor	0.64	0.64	0.64	0.73	0.73	0.73	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	4	3	2	0	0	2	3	0	3	0
Cap, veh/h	91	170	187	83	173	180	606	1835	253	469	1909	185
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	214	659	725	184	670	698	998	3080	424	807	3204	310
Grp Volume(v), veh/h	86	0	0	198	0	0	22	315	310	92	184	186
Grp Sat Flow(s),veh/h/ln	1598	0	0	1552	0	0	998	1777	1727	807	1763	1751
Q Serve(g_s), s	0.0	0.0	0.0	3.4	0.0	0.0	1.2	10.5	10.6	7.6	5.6	5.8
Cycle Q Clear(g_c), s	4.9	0.0	0.0	12.6	0.0	0.0	7.0	10.5	10.6	18.2	5.6	5.8
Prop In Lane	0.19		0.45	0.17		0.45	1.00		0.25	1.00		0.18
Lane Grp Cap(c), veh/h	448	0	0	436	0	0	606	1059	1029	469	1050	1043
V/C Ratio(X)	0.19	0.00	0.00	0.45	0.00	0.00	0.04	0.30	0.30	0.20	0.17	0.18
Avail Cap(c_a), veh/h	448	0	0	436	0	0	606	1059	1029	469	1050	1043
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.8	0.0	0.0	37.6	0.0	0.0	12.6	11.9	11.9	16.4	10.9	11.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	3.4	0.0	0.0	0.1	0.7	0.8	0.9	0.4	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	5.4	0.0	0.0	0.3	4.3	4.3	1.5	2.3	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.8	0.0	0.0	41.0	0.0	0.0	12.7	12.6	12.7	17.4	11.3	11.3
LnGrp LOS	D			D			B	B	B	B	B	B
Approach Vol, veh/h		86			198			647			462	
Approach Delay, s/veh		35.8			41.0			12.7			12.5	
Approach LOS		D			D			B			B	

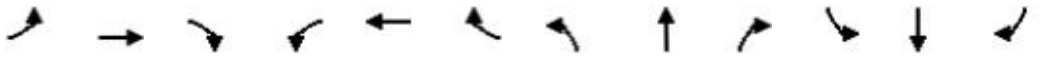
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0				
Change Period (Y+Rc), s		8.5		9.0		8.5		9.0				
Max Green Setting (Gmax), s		71.5		31.0		71.5		31.0				
Max Q Clear Time (g_c+I1), s		20.2		14.6		12.6		6.9				
Green Ext Time (p_c), s		6.7		1.1		10.3		0.5				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			18.1									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	5	64	587	538
v/c Ratio	0.04	0.48	0.14	0.20
Control Delay (s/veh)	48.4	63.3	1.0	0.3
Queue Delay	0.0	0.0	0.0	0.1
Total Delay (s/veh)	48.4	63.3	1.0	0.5
Queue Length 50th (ft)	4	48	10	2
Queue Length 95th (ft)	16	70	15	2
Internal Link Dist (ft)	99	226	368	304
Turn Bay Length (ft)				
Base Capacity (vph)	287	274	4301	2721
Starvation Cap Reductn	0	0	0	1202
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.23	0.14	0.35

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	5	10	0	35	0	530	5	20	465	5
Future Volume (veh/h)	0	0	5	10	0	35	0	530	5	20	465	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	0.95		0.93	1.00		0.91	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1796	1900	1900	1900	1870	1900	1900	1870	1900
Adj Flow Rate, veh/h	0	0	5	14	0	50	0	582	5	22	511	5
Peak Hour Factor	1.00	1.00	1.00	0.70	0.70	0.70	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	7	0	0	0	2	0	0	2	0
Cap, veh/h	0	0	172	57	17	133	0	4142	36	115	2614	25
Arrive On Green	0.00	0.00	0.11	0.11	0.00	0.11	0.00	0.79	0.79	1.00	1.00	1.00
Sat Flow, veh/h	0	0	1524	184	148	1184	0	5385	45	104	3292	32
Grp Volume(v), veh/h	0	0	5	64	0	0	0	379	208	274	0	264
Grp Sat Flow(s),veh/h/ln	0	0	1524	1515	0	0	0	1702	1857	1735	0	1693
Q Serve(g_s), s	0.0	0.0	0.4	0.0	0.0	0.0	0.0	3.1	3.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.4	4.5	0.0	0.0	0.0	3.1	3.1	0.0	0.0	0.0
Prop In Lane	0.00		1.00	0.22		0.78	0.00		0.02	0.08		0.02
Lane Grp Cap(c), veh/h	0	0	172	207	0	0	0	2703	1475	1410	0	1344
V/C Ratio(X)	0.00	0.00	0.03	0.31	0.00	0.00	0.00	0.14	0.14	0.19	0.00	0.20
Avail Cap(c_a), veh/h	0	0	279	311	0	0	0	2703	1475	1410	0	1344
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.96	0.96	0.90	0.00	0.90
Uniform Delay (d), s/veh	0.0	0.0	47.4	49.2	0.0	0.0	0.0	2.9	2.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.8	0.0	0.0	0.0	0.1	0.2	0.3	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	1.8	0.0	0.0	0.0	0.9	1.1	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	47.5	50.1	0.0	0.0	0.0	3.0	3.1	0.3	0.0	0.3
LnGrp LOS			D	D				A	A	A		A
Approach Vol, veh/h		5			64			587			538	
Approach Delay, s/veh		47.5			50.1			3.0			0.3	
Approach LOS		D			D			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		100.5		19.5		100.5		19.5				
Change Period (Y+Rc), s		5.2		6.0		5.2		6.0				
Max Green Setting (Gmax), s		86.8		22.0		86.8		22.0				
Max Q Clear Time (g_c+I1), s		5.1		2.4		2.0		6.5				
Green Ext Time (p_c), s		9.5		0.0		8.4		0.2				

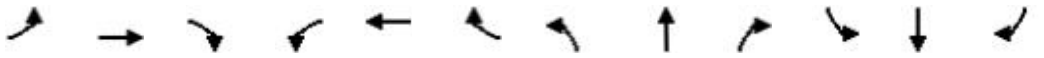
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			4.5									
HCM 6th LOS			A									



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	161	405	553	131	494	78	466
v/c Ratio	0.43	0.54	0.64	0.32	0.48	0.20	0.44
Control Delay (s/veh)	30.3	25.7	35.7	16.2	26.3	17.2	27.2
Queue Delay	0.0	1.7	1.9	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.3	27.4	37.6	16.2	26.3	17.2	27.2
Queue Length 50th (ft)	54	124	128	38	113	26	134
Queue Length 95th (ft)	m92	217	221	59	135	43	163
Internal Link Dist (ft)		261	274		304		616
Turn Bay Length (ft)						330	
Base Capacity (vph)	378	744	865	412	1036	383	1050
Starvation Cap Reductn	0	188	171	0	0	0	0
Spillback Cap Reductn	0	14	107	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.73	0.80	0.32	0.48	0.20	0.44

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	235	130	0	420	100	115	410	25	70	355	65
Future Volume (veh/h)	145	235	130	0	420	100	115	410	25	70	355	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.87	0.96		0.87	0.96		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1856	1900	0	1885	1870	1885	1870	1900	1826	1870	1885
Adj Flow Rate, veh/h	161	261	144	0	447	106	131	466	28	78	394	72
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.88	0.88	0.88	0.90	0.90	0.90
Percent Heavy Veh, %	1	3	0	0	1	2	1	2	0	5	2	1
Cap, veh/h	272	464	256	0	726	170	402	1000	60	364	894	161
Arrive On Green	0.12	0.43	0.43	0.00	0.09	0.09	0.03	0.10	0.10	0.13	0.41	0.41
Sat Flow, veh/h	1795	1088	600	0	2888	653	1795	3372	202	1739	2932	527
Grp Volume(v), veh/h	161	0	405	0	284	269	131	244	250	78	236	230
Grp Sat Flow(s),veh/h/ln	1795	0	1688	0	1791	1656	1795	1777	1797	1739	1777	1682
Q Serve(g_s), s	10.4	0.0	21.7	0.0	18.4	18.8	5.9	15.6	15.8	3.4	11.5	11.9
Cycle Q Clear(g_c), s	10.4	0.0	21.7	0.0	18.4	18.8	5.9	15.6	15.8	3.4	11.5	11.9
Prop In Lane	1.00		0.36	0.00		0.39	1.00		0.11	1.00		0.31
Lane Grp Cap(c), veh/h	0	0	720	0	466	430	402	527	533	364	542	513
V/C Ratio(X)	0.00	0.00	0.56	0.00	0.61	0.62	0.33	0.46	0.47	0.21	0.44	0.45
Avail Cap(c_a), veh/h	0	0	720	0	466	430	402	527	533	364	542	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	25.9	0.0	49.0	49.2	26.8	45.1	45.2	23.5	28.2	28.3
Incr Delay (d2), s/veh	0.0	0.0	3.2	0.0	5.9	6.7	2.2	2.9	2.9	1.3	2.5	2.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	9.1	0.0	9.6	9.2	2.9	7.9	8.1	1.5	5.1	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	29.1	0.0	54.8	55.9	28.9	48.0	48.1	24.9	30.7	31.1
LnGrp LOS			C		D	E	C	D	D	C	C	C
Approach Vol, veh/h		566			553			625			544	
Approach Delay, s/veh		20.8			55.3			44.1			30.1	
Approach LOS		C			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	46.0	20.0	37.0	18.0	45.0		57.0				
Change Period (Y+Rc), s	6.5	9.4	5.8	5.8	6.6	9.4		5.8				
Max Green Setting (Gmax), s	10.5	36.6	14.2	31.2	11.4	35.6		51.2				
Max Q Clear Time (g_c+I1), s	7.9	13.9	12.4	20.8	5.4	17.8		23.7				
Green Ext Time (p_c), s	0.1	5.5	0.1	2.4	0.1	5.1		2.7				

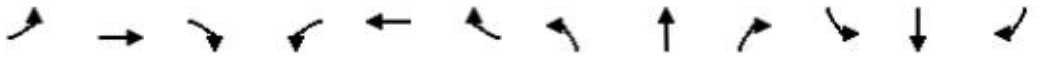
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			37.7									
HCM 6th LOS			D									



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	17	84	94	130	96	484	66	671
v/c Ratio	0.09	0.22	0.35	0.33	0.18	0.26	0.12	0.41
Control Delay (s/veh)	33.5	11.7	44.3	41.3	6.6	13.9	12.7	30.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.5	11.7	44.3	41.3	6.6	13.9	12.7	30.6
Queue Length 50th (ft)	7	12	62	83	19	82	25	162
Queue Length 95th (ft)	m19	32	108	133	m35	124	37	149
Internal Link Dist (ft)		1162		364		616		402
Turn Bay Length (ft)	40		140		75		150	
Base Capacity (vph)	200	381	271	399	526	1843	545	1645
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.22	0.35	0.33	0.18	0.26	0.12	0.41

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	15	60	80	100	10	90	405	50	50	425	85
Future Volume (veh/h)	15	15	60	80	100	10	90	405	50	50	425	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.93	0.96		0.93	0.97		0.92	0.97		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1500	1900	1841	1900	1900	1781	1870	1885	1826	1870	1856	1796
Adj Flow Rate, veh/h	17	17	67	94	118	12	96	431	53	66	559	112
Peak Hour Factor	0.89	0.89	0.89	0.85	0.85	0.85	0.94	0.94	0.94	0.76	0.76	0.76
Percent Heavy Veh, %	27	0	4	0	0	8	2	1	5	2	3	7
Cap, veh/h	211	68	268	277	361	37	631	1705	208	604	1423	284
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.11	0.54	0.54	0.15	0.99	0.99
Sat Flow, veh/h	972	318	1253	1279	1684	171	1781	3177	387	1781	2875	573
Grp Volume(v), veh/h	17	0	84	94	0	130	96	241	243	66	342	329
Grp Sat Flow(s),veh/h/ln	972	0	1571	1279	0	1855	1781	1791	1773	1781	1763	1685
Q Serve(g_s), s	1.8	0.0	5.3	7.9	0.0	7.1	2.6	8.7	8.8	1.9	0.4	0.4
Cycle Q Clear(g_c), s	8.9	0.0	5.3	13.2	0.0	7.1	2.6	8.7	8.8	1.9	0.4	0.4
Prop In Lane	1.00		0.80	1.00		0.09	1.00		0.22	1.00		0.34
Lane Grp Cap(c), veh/h	211	0	337	277	0	397	631	961	952	604	873	834
V/C Ratio(X)	0.08	0.00	0.25	0.34	0.00	0.33	0.15	0.25	0.25	0.11	0.39	0.39
Avail Cap(c_a), veh/h	211	0	337	277	0	397	631	961	952	604	873	834
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.6	0.0	39.1	44.6	0.0	39.8	9.4	14.9	14.9	10.6	0.3	0.3
Incr Delay (d2), s/veh	0.7	0.0	1.8	3.3	0.0	2.2	0.5	0.6	0.6	0.4	1.3	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	2.3	2.8	0.0	3.5	1.1	3.7	3.8	0.8	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.4	0.0	40.9	47.9	0.0	42.0	9.9	15.5	15.6	11.0	1.6	1.7
LnGrp LOS	D		D	D		D	A	B	B	B	A	A
Approach Vol, veh/h		101			224			580			737	
Approach Delay, s/veh		41.5			44.5			14.6			2.5	
Approach LOS		D			D			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.0	68.0		32.0	15.0	73.0		32.0				
Change Period (Y+Rc), s	6.3	8.6		6.3	6.0	8.6		6.3				
Max Green Setting (Gmax), s	13.7	59.4		25.7	9.0	64.4		25.7				
Max Q Clear Time (g_c+I1), s	4.6	2.4		15.2	3.9	10.8		10.9				
Green Ext Time (p_c), s	0.1	11.0		0.7	0.0	7.1		0.4				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			14.9									
HCM 6th LOS			B									



Lane Group	WBR	NBT	SBT
Lane Group Flow (vph)	10	453	737
v/c Ratio	0.02	0.18	0.31
Control Delay (s/veh)	0.0	12.6	4.7
Queue Delay	0.0	0.0	0.8
Total Delay (s/veh)	0.0	12.6	5.5
Queue Length 50th (ft)	0	80	62
Queue Length 95th (ft)	0	122	70
Internal Link Dist (ft)		402	352
Turn Bay Length (ft)			
Base Capacity (vph)	616	2499	2373
Starvation Cap Reductn	0	0	1231
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.02	0.18	0.65

Intersection Summary



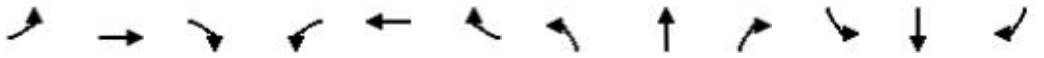
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	5	420	10	5	570
Future Volume (veh/h)	0	5	420	10	5	570
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.93	0.98	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1900	1900	1856
Adj Flow Rate, veh/h	0	10	442	11	6	731
Peak Hour Factor	0.50	0.50	0.95	0.95	0.78	0.78
Percent Heavy Veh, %	0	0	2	0	0	3
Cap, veh/h	354	315	2517	63	36	2451
Arrive On Green	0.00	0.20	0.71	0.71	0.23	0.23
Sat Flow, veh/h	1810	1610	3630	88	8	3529
Grp Volume(v), veh/h	0	10	222	231	395	342
Grp Sat Flow(s),veh/h/ln	1810	1610	1777	1847	1848	1604
Q Serve(g_s), s	0.0	0.6	4.9	5.0	0.0	21.1
Cycle Q Clear(g_c), s	0.0	0.6	4.9	5.0	21.0	21.1
Prop In Lane	1.00	1.00		0.05	0.02	
Lane Grp Cap(c), veh/h	354	315	1265	1315	1345	1142
V/C Ratio(X)	0.00	0.03	0.18	0.18	0.29	0.30
Avail Cap(c_a), veh/h	354	315	1265	1315	1345	1142
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	39.0	5.7	5.7	21.3	21.3
Incr Delay (d2), s/veh	0.0	0.2	0.3	0.3	0.6	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	1.9	1.9	10.7	9.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	39.2	6.0	6.0	21.8	22.0
LnGrp LOS		D	A	A	C	C
Approach Vol, veh/h	10		453			737
Approach Delay, s/veh	39.2		6.0			21.9
Approach LOS	D		A			C

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		91.0		29.0		91.0
Change Period (Y+Rc), s		5.6		5.5		5.6
Max Green Setting (Gmax), s		85.4		23.5		85.4
Max Q Clear Time (g_c+I1), s		23.1		2.6		7.0
Green Ext Time (p_c), s		12.4		0.0		6.6

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		16.0
HCM 6th LOS		B

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	35	135	457	876
v/c Ratio	0.11	0.39	0.22	0.43
Control Delay (s/veh)	22.5	45.4	17.6	5.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.5	45.4	17.6	5.0
Queue Length 50th (ft)	9	91	110	37
Queue Length 95th (ft)	26	84	157	107
Internal Link Dist (ft)	365	478	352	685
Turn Bay Length (ft)				
Base Capacity (vph)	330	350	2090	2036
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.11	0.39	0.22	0.43

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	5	15	5	50	15	15	400	10	25	565	50
Future Volume (veh/h)	5	5	15	5	50	15	15	400	10	25	565	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.97		0.95	1.00		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1870	1900	1900	1870	1900	1900	1856	1707
Adj Flow Rate, veh/h	7	7	21	10	96	29	16	430	11	34	774	68
Peak Hour Factor	0.70	0.70	0.70	0.52	0.52	0.52	0.93	0.93	0.93	0.73	0.73	0.73
Percent Heavy Veh, %	0	0	0	0	2	0	0	2	0	0	3	13
Cap, veh/h	78	83	188	43	265	75	82	2131	54	91	1990	173
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	211	417	941	55	1323	377	77	3249	83	90	3035	263
Grp Volume(v), veh/h	35	0	0	135	0	0	234	0	223	457	0	419
Grp Sat Flow(s),veh/h/ln	1569	0	0	1756	0	0	1727	0	1681	1766	0	1622
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0	14.4
Cycle Q Clear(g_c), s	2.1	0.0	0.0	7.9	0.0	0.0	5.9	0.0	6.3	13.5	0.0	14.4
Prop In Lane	0.20		0.60	0.07		0.21	0.07		0.05	0.07		0.16
Lane Grp Cap(c), veh/h	350	0	0	383	0	0	1165	0	1102	1191	0	1064
V/C Ratio(X)	0.10	0.00	0.00	0.35	0.00	0.00	0.20	0.00	0.20	0.38	0.00	0.39
Avail Cap(c_a), veh/h	350	0	0	383	0	0	1165	0	1102	1191	0	1064
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.2	0.0	0.0	41.6	0.0	0.0	8.1	0.0	8.2	9.4	0.0	9.6
Incr Delay (d2), s/veh	0.6	0.0	0.0	2.5	0.0	0.0	0.4	0.0	0.4	0.9	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	3.8	0.0	0.0	2.5	0.0	2.4	5.7	0.0	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.8	0.0	0.0	44.1	0.0	0.0	8.5	0.0	8.6	10.4	0.0	10.7
LnGrp LOS	D			D			A		A	B		B
Approach Vol, veh/h		35			135			457			876	
Approach Delay, s/veh		39.8			44.1			8.6			10.5	
Approach LOS		D			D			A			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		87.0		33.0		87.0		33.0				
Change Period (Y+Rc), s		* 8.3		9.0		* 8.3		9.0				
Max Green Setting (Gmax), s		* 79		24.0		* 79		24.0				
Max Q Clear Time (g_c+I1), s		16.4		9.9		8.3		4.1				
Green Ext Time (p_c), s		16.4		0.6		6.9		0.1				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			13.6									
HCM 6th LOS			B									

Notes

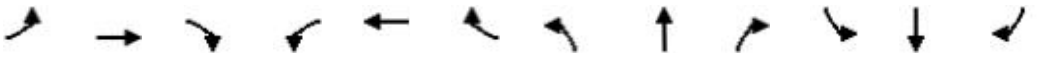
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	63	291	159	93	348	26	792
v/c Ratio	0.13	0.57	0.24	0.48	0.23	0.09	0.69
Control Delay (s/veh)	13.3	15.0	25.5	40.9	23.4	28.1	43.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.3	15.0	25.5	40.9	23.4	28.1	43.7
Queue Length 50th (ft)	8	36	80	53	104	17	330
Queue Length 95th (ft)	m17	m74	87	91	121	37	335
Internal Link Dist (ft)		429	286		685		737
Turn Bay Length (ft)				145		110	
Base Capacity (vph)	486	515	658	193	1483	289	1154
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.57	0.24	0.48	0.23	0.09	0.69

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	30	200	5	85	10	80	285	15	20	540	70
Future Volume (veh/h)	50	30	200	5	85	10	80	285	15	20	540	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1011	1752	1900	1900	863	1455	1752	863	1159	1159	1900
Adj Flow Rate, veh/h	63	38	253	8	135	16	93	331	17	26	701	91
Peak Hour Factor	0.79	0.79	0.79	0.63	0.63	0.63	0.86	0.86	0.86	0.77	0.77	0.77
Percent Heavy Veh, %	0	60	10	0	0	70	30	10	70	50	50	0
Cap, veh/h	200	43	284	37	462	52	151	1511	77	319	915	119
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.47	0.47	0.47	0.47	0.47	0.47
Sat Flow, veh/h	1256	111	739	15	1204	136	533	3209	164	633	1943	252
Grp Volume(v), veh/h	63	0	291	159	0	0	93	171	177	26	397	395
Grp Sat Flow(s),veh/h/ln	1256	0	850	1355	0	0	533	1664	1709	633	1101	1094
Q Serve(g_s), s	0.0	0.0	38.5	1.2	0.0	0.0	20.6	7.3	7.3	3.0	35.8	35.9
Cycle Q Clear(g_c), s	29.6	0.0	38.5	39.7	0.0	0.0	56.5	7.3	7.3	10.4	35.8	35.9
Prop In Lane	1.00		0.87	0.05		0.10	1.00		0.10	1.00		0.23
Lane Grp Cap(c), veh/h	200	0	326	552	0	0	151	784	805	319	518	515
V/C Ratio(X)	0.32	0.00	0.89	0.29	0.00	0.00	0.61	0.22	0.22	0.08	0.77	0.77
Avail Cap(c_a), veh/h	200	0	326	552	0	0	151	784	805	319	518	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.9	0.0	34.6	25.6	0.0	0.0	49.9	18.7	18.7	21.8	26.3	26.3
Incr Delay (d2), s/veh	4.1	0.0	28.6	1.3	0.0	0.0	17.2	0.6	0.6	0.5	10.3	10.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	10.3	3.2	0.0	0.0	3.5	3.0	3.1	0.5	10.8	10.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.0	0.0	63.2	26.9	0.0	0.0	67.1	19.4	19.4	22.3	36.6	36.8
LnGrp LOS	D		E	C			E	B	B	C	D	D
Approach Vol, veh/h		354			159			441			818	
Approach Delay, s/veh		58.4			26.9			29.4			36.2	
Approach LOS		E			C			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		55.0		65.0		55.0				
Change Period (Y+Rc), s		8.5		8.9		8.5		8.9				
Max Green Setting (Gmax), s		56.5		46.1		56.5		46.1				
Max Q Clear Time (g_c+I1), s		37.9		41.7		58.5		40.5				
Green Ext Time (p_c), s		9.4		0.3		0.0		1.0				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			38.1									
HCM 6th LOS			D									



Lane Group	NBL	SET	NWT
Lane Group Flow (vph)	364	744	337
v/c Ratio	0.25	0.37	0.16
Control Delay (s/veh)	9.4	11.3	24.6
Queue Delay	0.0	0.2	0.0
Total Delay (s/veh)	9.4	11.5	24.6
Queue Length 50th (ft)	11	109	124
Queue Length 95th (ft)	13	113	153
Internal Link Dist (ft)	94	395	737
Turn Bay Length (ft)			
Base Capacity (vph)	1480	1990	2049
Starvation Cap Reductn	0	520	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.25	0.51	0.16

Intersection Summary



Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	315	20	580	0	0	280
Future Volume (vph)	315	20	580	0	0	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7		8.2			8.2
Lane Util. Factor	0.94		0.95			0.95
Frpb, ped/bikes	1.00		1.00			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		1.00			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	4873		3471			3574
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	4873		3471			3574
Peak-hour factor, PHF	0.92	0.92	0.78	0.78	0.83	0.83
Adj. Flow (vph)	342	22	744	0	0	337
RTOR Reduction (vph)	6	0	0	0	0	0
Lane Group Flow (vph)	358	0	744	0	0	337
Confl. Peds. (#/hr)	14				16	
Heavy Vehicles (%)	4%	5%	4%	2%	2%	1%
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	36.3		68.8			68.8
Effective Green, g (s)	36.3		68.8			68.8
Actuated g/C Ratio	0.30		0.57			0.57
Clearance Time (s)	6.7		8.2			8.2
Lane Grp Cap (vph)	1474		1990			2049
v/s Ratio Prot	c0.07		c0.21			0.09
v/s Ratio Perm						
v/c Ratio	0.24		0.37			0.16
Uniform Delay, d1	31.5		13.9			12.1
Progression Factor	0.29		0.77			2.01
Incremental Delay, d2	0.4		0.5			0.2
Delay (s)	9.6		11.2			24.4
Level of Service	A		B			C
Approach Delay (s/veh)	9.6		11.2			24.4
Approach LOS	A		B			C

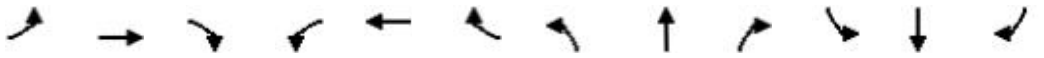
Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.9
Intersection Capacity Utilization	35.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Existing/No-Build

Results: PM

Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	1077	919	505	132	643
v/c Ratio	0.47	0.59	0.35	0.23	0.60
Control Delay (s/veh)	26.9	44.8	45.3	34.8	37.8
Queue Delay	0.0	1.4	0.1	0.0	2.7
Total Delay (s/veh)	26.9	46.2	45.4	34.8	40.6
Queue Length 50th (ft)	189	335	203	72	210
Queue Length 95th (ft)	238	407	255	139	271
Internal Link Dist (ft)	687	429	482		263
Turn Bay Length (ft)				215	
Base Capacity (vph)	2294	1564	1429	563	1065
Starvation Cap Reductn	0	420	0	0	299
Spillback Cap Reductn	0	65	251	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.47	0.80	0.43	0.23	0.84

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	915	75	0	770	75	0	460	120	60	425	100
Future Volume (veh/h)	0	915	75	0	770	75	0	460	120	60	425	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.90	0.99		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1841	1900	1870	1885	1900	1885	1870	1900	1870	1870
Adj Flow Rate, veh/h	0	995	82	0	837	82	0	505	132	66	467	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	4	0	2	1	0	1	2	0	2	2
Cap, veh/h	0	2198	181	0	1471	144	0	1433	573	126	875	211
Arrive On Green	0.00	0.45	0.45	0.00	0.30	0.30	0.00	0.40	0.40	0.13	0.13	0.13
Sat Flow, veh/h	0	5038	400	0	3350	319	0	3676	1432	225	2186	527
Grp Volume(v), veh/h	0	706	371	0	457	462	0	505	132	322	0	321
Grp Sat Flow(s),veh/h/ln	0	1729	1809	0	1777	1798	0	1791	1432	1398	0	1541
Q Serve(g_s), s	0.0	16.9	17.0	0.0	26.0	26.0	0.0	11.8	7.3	15.1	0.0	23.3
Cycle Q Clear(g_c), s	0.0	16.9	17.0	0.0	26.0	26.0	0.0	11.8	7.3	26.9	0.0	23.3
Prop In Lane	0.00		0.22	0.00		0.18	0.00		1.00	0.21		0.34
Lane Grp Cap(c), veh/h	0	1562	817	0	803	812	0	1433	573	595	0	616
V/C Ratio(X)	0.00	0.45	0.45	0.00	0.57	0.57	0.00	0.35	0.23	0.54	0.00	0.52
Avail Cap(c_a), veh/h	0	1562	817	0	803	812	0	1433	573	595	0	616
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	22.7	22.7	0.0	32.0	32.0	0.0	25.1	23.8	42.7	0.0	41.4
Incr Delay (d2), s/veh	0.0	0.9	1.8	0.0	2.9	2.9	0.0	0.7	0.9	3.5	0.0	3.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.9	7.5	0.0	12.3	12.5	0.0	5.2	2.7	10.4	0.0	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	23.6	24.5	0.0	34.9	34.9	0.0	25.8	24.7	46.2	0.0	44.5
LnGrp LOS		C	C		C	C		C	C	D		D
Approach Vol, veh/h		1077			919			637			643	
Approach Delay, s/veh		23.9			34.9			25.6			45.3	
Approach LOS		C			C			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		63.0		57.0		63.0		57.0				
Change Period (Y+Rc), s		8.8		9.0		8.8		9.0				
Max Green Setting (Gmax), s		54.2		48.0		54.2		48.0				
Max Q Clear Time (g_c+I1), s		28.0		28.9		19.0		13.8				
Green Ext Time (p_c), s		11.8		4.5		16.2		4.5				

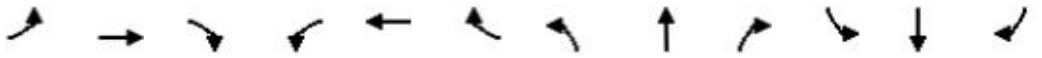
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			31.5									
HCM 6th LOS			C									



Lane Group	EBT	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	132	350	94	615	731
v/c Ratio	0.39	0.72	0.18	0.59	0.61
Control Delay (s/veh)	32.2	26.7	1.0	44.8	27.1
Queue Delay	0.9	4.0	0.0	8.3	0.0
Total Delay (s/veh)	33.2	30.8	1.0	53.1	27.1
Queue Length 50th (ft)	57	86	0	237	172
Queue Length 95th (ft)	96	m316	m3	286	213
Internal Link Dist (ft)	703	436		263	452
Turn Bay Length (ft)					
Base Capacity (vph)	337	486	526	1046	1207
Starvation Cap Reductn	0	0	0	388	0
Spillback Cap Reductn	70	75	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.49	0.85	0.18	0.93	0.61

Intersection Summary

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



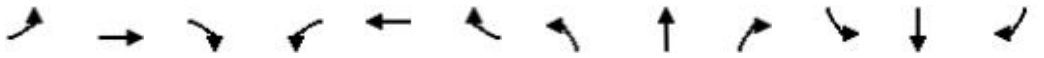
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	110	15	60	255	85	15	445	70	130	505	45
Future Volume (vph)	0	110	15	60	255	85	15	445	70	130	505	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.9			8.9	8.9		5.4			8.4	
Lane Util. Factor		1.00			1.00	1.00		0.95			0.95	
Frpb, ped/bikes		0.98			1.00	0.85		0.96			0.97	
Flpb, ped/bikes		1.00			0.99	1.00		1.00			1.00	
Frt		0.98			1.00	0.85		0.98			0.99	
Flt Protected		1.00			0.99	1.00		1.00			0.99	
Satd. Flow (prot)		1661			1838	1354		3322			3372	
Flt Permitted		1.00			0.68	1.00		0.92			0.59	
Satd. Flow (perm)		1661			1263	1354		3066			1993	
Peak-hour factor, PHF	0.95	0.95	0.95	0.90	0.90	0.90	0.86	0.86	0.86	0.93	0.93	0.93
Adj. Flow (vph)	0	116	16	67	283	94	17	517	81	140	543	48
RTOR Reduction (vph)	0	4	0	0	0	62	0	10	0	0	4	0
Lane Group Flow (vph)	0	128	0	0	350	32	0	605	0	0	727	0
Confl. Peds. (#/hr)	60		72	72		60	110		81	81		110
Confl. Bikes (#/hr)			1	1			2					2
Heavy Vehicles (%)	0%	11%	6%	2%	1%	1%	0%	2%	0%	1%	2%	0%
Turn Type		NA		pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		8		7	4			6		5	2	
Permitted Phases	8			4		4	6			2		
Actuated Green, G (s)		24.1			41.1	41.1		40.6			61.6	
Effective Green, g (s)		24.1			41.1	41.1		40.6			61.6	
Actuated g/C Ratio		0.20			0.34	0.34		0.34			0.51	
Clearance Time (s)		5.9			8.9	8.9		5.4			8.4	
Lane Grp Cap (vph)		333			499	463		1037			1240	
v/s Ratio Prot		0.08			c0.08						c0.09	
v/s Ratio Perm					c0.16	0.02		c0.20			0.21	
v/c Ratio		0.38			0.70	0.07		0.58			0.59	
Uniform Delay, d1		41.5			34.1	26.6		32.7			20.3	
Progression Factor		0.71			0.54	0.05		1.32			1.37	
Incremental Delay, d2		3.3			7.8	0.3		2.3			1.9	
Delay (s)		32.8			26.1	1.5		45.4			29.8	
Level of Service		C			C	A		D			C	
Approach Delay (s/veh)		32.8			20.9			45.4			29.8	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	22.4
Intersection Capacity Utilization	90.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	250	38	575	692
v/c Ratio	0.55	0.09	0.37	0.36
Control Delay (s/veh)	69.2	25.2	3.9	4.8
Queue Delay	0.0	0.0	0.0	0.1
Total Delay (s/veh)	69.2	25.2	3.9	4.9
Queue Length 50th (ft)	175	15	27	31
Queue Length 95th (ft)	235	37	34	38
Internal Link Dist (ft)	730	415	452	358
Turn Bay Length (ft)				
Base Capacity (vph)	452	437	1553	1941
Starvation Cap Reductn	0	0	0	338
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.55	0.09	0.37	0.43

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	90	100	5	15	10	60	430	40	15	595	20
Future Volume (veh/h)	15	90	100	5	15	10	60	430	40	15	595	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.93	1.00		0.93	0.96		0.87	0.99		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1870	1900	1900	1870	1900
Adj Flow Rate, veh/h	18	110	122	6	19	12	65	467	43	16	654	22
Peak Hour Factor	0.82	0.82	0.82	0.80	0.80	0.80	0.92	0.92	0.92	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	2	0	0	2	0
Cap, veh/h	48	205	211	83	246	141	214	1498	138	56	1996	66
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.60	0.60	0.60	1.00	1.00	1.00
Sat Flow, veh/h	62	785	807	183	944	541	295	2503	231	41	3335	111
Grp Volume(v), veh/h	250	0	0	37	0	0	274	0	301	362	0	330
Grp Sat Flow(s),veh/h/ln	1655	0	0	1668	0	0	1409	0	1621	1825	0	1662
Q Serve(g_s), s	0.8	0.0	0.0	0.0	0.0	0.0	2.7	0.0	11.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	15.5	0.0	0.0	1.9	0.0	0.0	9.1	0.0	11.0	0.0	0.0	0.0
Prop In Lane	0.07		0.49	0.16		0.32	0.24		0.14	0.04		0.07
Lane Grp Cap(c), veh/h	464	0	0	470	0	0	880	0	970	1123	0	994
V/C Ratio(X)	0.54	0.00	0.00	0.08	0.00	0.00	0.31	0.00	0.31	0.32	0.00	0.33
Avail Cap(c_a), veh/h	464	0	0	470	0	0	880	0	970	1123	0	994
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.5	0.0	0.0	33.5	0.0	0.0	11.4	0.0	11.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	4.4	0.0	0.0	0.3	0.0	0.0	0.9	0.0	0.8	0.8	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	0.0	0.0	0.9	0.0	0.0	3.7	0.0	4.2	0.2	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.0	0.0	0.0	33.8	0.0	0.0	12.3	0.0	12.7	0.8	0.0	0.9
LnGrp LOS	D			C			B		B	A		A
Approach Vol, veh/h		250			37			575			692	
Approach Delay, s/veh		43.0			33.8			12.5			0.8	
Approach LOS		D			C			B			A	

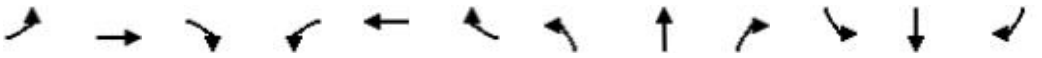
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0				
Change Period (Y+Rc), s		8.2		8.7		8.2		8.7				
Max Green Setting (Gmax), s		71.8		31.3		71.8		31.3				
Max Q Clear Time (g_c+I1), s		2.0		3.9		13.0		17.5				
Green Ext Time (p_c), s		11.6		0.1		9.6		1.3				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			12.7									
HCM 6th LOS			B									



Lane Group	WBT	NBT	SBT
Lane Group Flow (vph)	54	485	711
v/c Ratio	0.13	0.25	0.35
Control Delay (s/veh)	25.2	3.4	6.7
Queue Delay	0.0	0.0	0.1
Total Delay (s/veh)	25.2	3.4	6.8
Queue Length 50th (ft)	21	21	54
Queue Length 95th (ft)	50	32	76
Internal Link Dist (ft)	299	358	376
Turn Bay Length (ft)			
Base Capacity (vph)	422	1956	2019
Starvation Cap Reductn	0	0	387
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.13	0.25	0.44

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	15	15	15	10	435	10	10	625	5
Future Volume (veh/h)	0	0	0	15	15	15	10	435	10	10	625	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.95		0.95	0.96		0.88	0.98		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1752	1870	1900	1900	1885	1900
Adj Flow Rate, veh/h	0	0	0	18	18	18	11	463	11	11	694	6
Peak Hour Factor	0.50	0.50	0.50	0.83	0.83	0.83	0.94	0.94	0.94	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	10	2	0	0	1	0
Cap, veh/h	0	502	0	160	159	140	55	2027	48	44	2118	18
Arrive On Green	0.00	0.00	0.00	0.26	0.26	0.26	0.60	0.60	0.60	1.00	1.00	1.00
Sat Flow, veh/h	0	1900	0	456	603	529	39	3364	79	22	3515	30
Grp Volume(v), veh/h	0	0	0	54	0	0	252	0	233	371	0	340
Grp Sat Flow(s),veh/h/ln	0	1900	0	1588	0	0	1807	0	1675	1862	0	1705
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	2.8	0.0	0.0	7.4	0.0	7.7	0.0	0.0	0.0
Prop In Lane	0.00		0.00	0.33		0.33	0.04		0.05	0.03		0.02
Lane Grp Cap(c), veh/h	0	502	0	460	0	0	1120	0	1009	1153	0	1027
V/C Ratio(X)	0.00	0.00	0.00	0.12	0.00	0.00	0.23	0.00	0.23	0.32	0.00	0.33
Avail Cap(c_a), veh/h	0	502	0	460	0	0	1120	0	1009	1153	0	1027
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	33.5	0.0	0.0	11.0	0.0	11.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.5	0.7	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	1.3	0.0	0.0	3.2	0.0	3.0	0.2	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	0.0	34.0	0.0	0.0	11.4	0.0	11.5	0.7	0.0	0.9
LnGrp LOS				C			B		B	A		A
Approach Vol, veh/h		0			54			485			711	
Approach Delay, s/veh		0.0			34.0			11.5			0.8	
Approach LOS					C			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	80.0	40.0	80.0	40.0
Change Period (Y+Rc), s	7.7	* 8.3	7.7	* 8.3
Max Green Setting (Gmax), s	72.3	* 32	72.3	* 32
Max Q Clear Time (g_c+I1), s	2.0	4.8	9.7	0.0
Green Ext Time (p_c), s	10.1	0.2	6.2	0.0

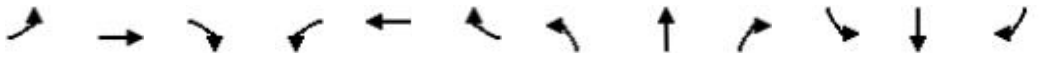
Intersection Summary	
HCM 6th Ctrl Delay, s/veh	6.4
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	185	143	495	688
v/c Ratio	0.37	0.29	0.28	0.40
Control Delay (s/veh)	24.4	32.2	12.4	6.1
Queue Delay	0.0	0.0	0.0	0.1
Total Delay (s/veh)	24.4	32.2	12.4	6.2
Queue Length 50th (ft)	94	91	57	36
Queue Length 95th (ft)	155	143	95	56
Internal Link Dist (ft)	791	417	376	368
Turn Bay Length (ft)				
Base Capacity (vph)	505	485	1800	1731
Starvation Cap Reductn	0	0	0	249
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.37	0.29	0.28	0.46

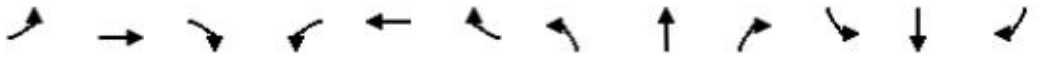
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	125	30	15	70	35	20	410	15	45	595	20
Future Volume (veh/h)	15	125	30	15	70	35	20	410	15	45	595	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.91	0.99		0.91	0.96		0.88	0.98		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1900	1900	1856	1900	1870	1900	1900	1870	1900
Adj Flow Rate, veh/h	16	136	33	18	83	42	22	456	17	47	620	21
Peak Hour Factor	0.92	0.92	0.92	0.84	0.84	0.84	0.90	0.90	0.90	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	0	0	0	3	0	2	0	0	2	0
Cap, veh/h	55	396	91	72	306	143	91	1824	68	138	1766	59
Arrive On Green	0.29	0.29	0.29	0.10	0.10	0.10	0.58	0.58	0.58	1.00	1.00	1.00
Sat Flow, veh/h	77	1365	313	132	1056	494	102	3163	117	181	3062	103
Grp Volume(v), veh/h	185	0	0	143	0	0	254	0	241	347	0	341
Grp Sat Flow(s),veh/h/ln	1755	0	0	1682	0	0	1720	0	1662	1678	0	1667
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.8	0.0	0.0	9.1	0.0	0.0	8.0	0.0	8.6	0.0	0.0	0.0
Prop In Lane	0.09		0.18	0.13		0.29	0.09		0.07	0.14		0.06
Lane Grp Cap(c), veh/h	542	0	0	521	0	0	1025	0	958	1002	0	961
V/C Ratio(X)	0.34	0.00	0.00	0.27	0.00	0.00	0.25	0.00	0.25	0.35	0.00	0.35
Avail Cap(c_a), veh/h	542	0	0	521	0	0	1025	0	958	1002	0	961
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	0.0	42.6	0.0	0.0	12.4	0.0	12.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.0	1.3	0.0	0.0	0.6	0.0	0.6	0.9	0.0	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	0.0	4.5	0.0	0.0	3.5	0.0	3.4	0.3	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.4	0.0	0.0	43.9	0.0	0.0	13.0	0.0	13.2	0.9	0.0	1.0
LnGrp LOS	D			D			B		B	A		A
Approach Vol, veh/h		185			143			495			688	
Approach Delay, s/veh		35.4			43.9			13.1			1.0	
Approach LOS		D			D			B			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		77.0		43.0		77.0		43.0				
Change Period (Y+Rc), s		7.8		8.2		7.8		8.2				
Max Green Setting (Gmax), s		69.2		34.8		69.2		34.8				
Max Q Clear Time (g_c+I1), s		2.0		11.1		10.6		11.8				
Green Ext Time (p_c), s		11.7		0.8		7.5		1.1				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			13.2									
HCM 6th LOS			B									

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	61	51	489	694
v/c Ratio	0.16	0.13	0.25	0.33
Control Delay (s/veh)	21.0	20.5	18.5	3.0
Queue Delay	0.0	0.0	0.0	0.1
Total Delay (s/veh)	21.0	20.5	18.5	3.1
Queue Length 50th (ft)	8	15	98	16
Queue Length 95th (ft)	22	38	102	46
Internal Link Dist (ft)	820	418	368	345
Turn Bay Length (ft)				
Base Capacity (vph)	389	396	1922	2106
Starvation Cap Reductn	0	0	0	530
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.13	0.25	0.44

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	25	5	15	20	15	415	5	0	625	20
Future Volume (veh/h)	15	0	25	5	15	20	15	415	5	0	625	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.90		0.85	0.90		0.85	0.96		0.88	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1826	1900	1870	1411	1900	1885	1900
Adj Flow Rate, veh/h	23	0	38	6	19	26	17	466	6	0	672	22
Peak Hour Factor	0.66	0.66	0.66	0.77	0.77	0.77	0.89	0.89	0.89	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	5	0	2	33	0	1	0
Cap, veh/h	160	16	223	62	173	210	77	1999	26	0	2118	69
Arrive On Green	0.27	0.00	0.27	0.27	0.27	0.27	0.60	0.60	0.60	0.00	1.00	1.00
Sat Flow, veh/h	447	60	837	106	652	788	74	3323	43	0	3615	115
Grp Volume(v), veh/h	61	0	0	51	0	0	251	0	238	0	342	352
Grp Sat Flow(s),veh/h/ln	1344	0	0	1546	0	0	1752	0	1687	0	1791	1845
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.7	0.0	0.0	2.9	0.0	0.0	7.4	0.0	7.9	0.0	0.0	0.0
Prop In Lane	0.38		0.62	0.12		0.51	0.07		0.03	0.00		0.06
Lane Grp Cap(c), veh/h	399	0	0	444	0	0	1086	0	1015	0	1078	1110
V/C Ratio(X)	0.15	0.00	0.00	0.11	0.00	0.00	0.23	0.00	0.23	0.00	0.32	0.32
Avail Cap(c_a), veh/h	399	0	0	444	0	0	1086	0	1015	0	1078	1110
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	0.0	33.4	0.0	0.0	11.0	0.0	11.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.5	0.0	0.8	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	1.2	0.0	0.0	3.2	0.0	3.1	0.0	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.5	0.0	0.0	33.9	0.0	0.0	11.5	0.0	11.6	0.0	0.8	0.8
LnGrp LOS	C			C			B		B		A	A
Approach Vol, veh/h		61			51			489			694	
Approach Delay, s/veh		34.5			33.9			11.6			0.8	
Approach LOS		C			C			B			A	

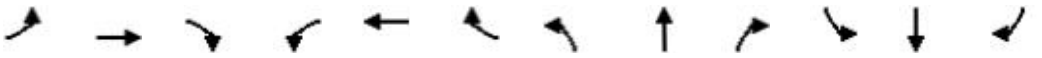
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0				
Change Period (Y+Rc), s		7.8		8.1		7.8		8.1				
Max Green Setting (Gmax), s		72.2		31.9		72.2		31.9				
Max Q Clear Time (g_c+I1), s		2.0		4.9		9.9		5.7				
Green Ext Time (p_c), s		11.5		0.2		7.4		0.3				

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		7.7
HCM 6th LOS		A

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	89	129	524	788
v/c Ratio	0.24	0.34	0.28	0.42
Control Delay (s/veh)	34.7	36.8	4.2	2.6
Queue Delay	0.0	0.0	0.0	0.1
Total Delay (s/veh)	34.7	36.8	4.2	2.7
Queue Length 50th (ft)	48	80	26	25
Queue Length 95th (ft)	96	m120	36	33
Internal Link Dist (ft)	744	423	345	286
Turn Bay Length (ft)				
Base Capacity (vph)	373	381	1852	1861
Starvation Cap Reductn	0	0	0	237
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.24	0.34	0.28	0.49

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	50	20	5	70	35	20	370	55	50	630	45
Future Volume (veh/h)	10	50	20	5	70	35	20	370	55	50	630	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.89	0.94		0.89	0.96		0.88	0.98		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1856	1767	1885	1900	1870	1885	1900
Adj Flow Rate, veh/h	11	56	22	6	82	41	24	435	65	54	685	49
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.85	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	3	9	1	0	2	1	0
Cap, veh/h	59	257	93	37	251	120	101	1770	261	152	1875	133
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.64	0.64	0.64	1.00	1.00	1.00
Sat Flow, veh/h	114	1166	420	27	1138	543	106	2766	408	185	2930	207
Grp Volume(v), veh/h	89	0	0	129	0	0	273	0	251	399	0	389
Grp Sat Flow(s),veh/h/ln	1700	0	0	1708	0	0	1706	0	1574	1679	0	1644
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.0	0.0	0.0	7.6	0.0	0.0	7.3	0.0	8.2	0.0	0.0	0.0
Prop In Lane	0.12		0.25	0.05		0.32	0.09		0.26	0.14		0.13
Lane Grp Cap(c), veh/h	409	0	0	409	0	0	1124	0	1007	1108	0	1052
V/C Ratio(X)	0.22	0.00	0.00	0.32	0.00	0.00	0.24	0.00	0.25	0.36	0.00	0.37
Avail Cap(c_a), veh/h	409	0	0	409	0	0	1124	0	1007	1108	0	1052
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.4	0.0	0.0	39.4	0.0	0.0	9.1	0.0	9.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	2.0	0.0	0.0	0.5	0.0	0.6	0.9	0.0	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	3.5	0.0	0.0	3.1	0.0	2.9	0.3	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.6	0.0	0.0	41.4	0.0	0.0	9.6	0.0	9.8	0.9	0.0	1.0
LnGrp LOS	D			D			A		A	A		A
Approach Vol, veh/h		89			129			524			788	
Approach Delay, s/veh		39.6			41.4			9.7			1.0	
Approach LOS		D			D			A			A	

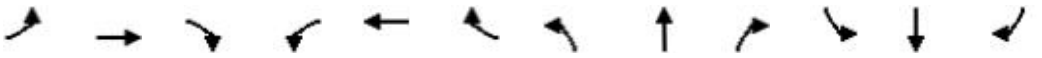
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		85.0		35.0		85.0		35.0				
Change Period (Y+Rc), s		8.2		8.5		8.2		8.5				
Max Green Setting (Gmax), s		76.8		26.5		76.8		26.5				
Max Q Clear Time (g_c+I1), s		2.0		9.6		10.2		7.0				
Green Ext Time (p_c), s		14.6		0.6		8.4		0.4				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			9.6									
HCM 6th LOS			A									

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	170	76	461	839
v/c Ratio	0.38	0.18	0.25	0.51
Control Delay (s/veh)	41.5	26.7	5.7	3.7
Queue Delay	0.0	0.0	0.2	0.0
Total Delay (s/veh)	41.5	26.7	5.9	3.7
Queue Length 50th (ft)	110	35	34	20
Queue Length 95th (ft)	m155	77	43	25
Internal Link Dist (ft)	879	412	286	375
Turn Bay Length (ft)				
Base Capacity (vph)	444	420	1855	1635
Starvation Cap Reductn	0	0	690	8
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.38	0.18	0.40	0.52

Intersection Summary

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



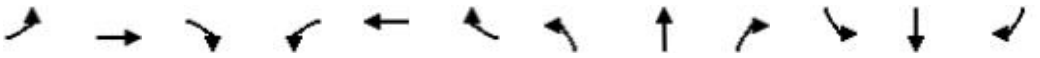
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	110	25	10	25	30	15	380	25	90	675	40
Future Volume (veh/h)	20	110	25	10	25	30	15	380	25	90	675	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.91	0.98		0.91	0.96		0.87	0.98		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1856	1900	1900	1900	1900	1870	1900	1900	1885	1900
Adj Flow Rate, veh/h	22	121	27	12	29	35	16	418	27	94	703	42
Peak Hour Factor	0.91	0.91	0.91	0.85	0.85	0.85	0.91	0.91	0.91	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	3	0	0	0	0	2	0	0	1	0
Cap, veh/h	70	348	72	78	180	191	76	1871	120	226	1641	98
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.60	0.60	0.60	1.00	1.00	1.00
Sat Flow, veh/h	137	1338	279	168	692	734	72	3105	199	314	2723	162
Grp Volume(v), veh/h	170	0	0	76	0	0	239	0	222	409	0	430
Grp Sat Flow(s),veh/h/ln	1754	0	0	1594	0	0	1746	0	1630	1542	0	1657
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.6	0.0	0.0
Cycle Q Clear(g_c), s	9.2	0.0	0.0	4.2	0.0	0.0	7.0	0.0	7.5	8.1	0.0	0.0
Prop In Lane	0.13		0.16	0.16		0.46	0.07		0.12	0.23		0.10
Lane Grp Cap(c), veh/h	490	0	0	449	0	0	1084	0	982	966	0	998
V/C Ratio(X)	0.35	0.00	0.00	0.17	0.00	0.00	0.22	0.00	0.23	0.42	0.00	0.43
Avail Cap(c_a), veh/h	490	0	0	449	0	0	1084	0	982	966	0	998
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.3	0.0	0.0	34.4	0.0	0.0	10.9	0.0	11.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.9	0.0	0.0	0.8	0.0	0.0	0.5	0.0	0.5	1.4	0.0	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	0.0	1.9	0.0	0.0	3.0	0.0	2.9	0.4	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.2	0.0	0.0	35.2	0.0	0.0	11.3	0.0	11.5	1.4	0.0	1.4
LnGrp LOS	D			D			B		B	A		A
Approach Vol, veh/h		170			76			461			839	
Approach Delay, s/veh		38.2			35.2			11.4			1.4	
Approach LOS		D			D			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0				
Change Period (Y+Rc), s		7.7		8.8		7.7		8.8				
Max Green Setting (Gmax), s		72.3		31.2		72.3		31.2				
Max Q Clear Time (g_c+I1), s		10.1		6.2		9.5		11.2				
Green Ext Time (p_c), s		15.8		0.4		7.0		0.9				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			10.1									
HCM 6th LOS			B									

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	96	149	457	890
v/c Ratio	0.25	0.36	0.24	0.46
Control Delay (s/veh)	38.1	26.1	5.8	29.3
Queue Delay	0.1	0.1	0.0	40.1
Total Delay (s/veh)	38.2	26.2	5.8	69.4
Queue Length 50th (ft)	64	60	33	328
Queue Length 95th (ft)	108	110	44	392
Internal Link Dist (ft)	989	252	375	264
Turn Bay Length (ft)				
Base Capacity (vph)	377	418	1933	1944
Starvation Cap Reductn	0	0	0	1114
Spillback Cap Reductn	18	18	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.27	0.37	0.24	1.07

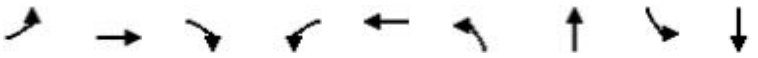
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	35	20	15	40	70	5	405	20	5	790	50
Future Volume (veh/h)	25	35	20	15	40	70	5	405	20	5	790	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.86	0.92		0.86	1.00		0.86	0.98		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1900	1900	1900	1900	1900	1900	1870	1900	1900	1885	1870
Adj Flow Rate, veh/h	30	42	24	18	48	83	5	431	21	5	832	53
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	4	0	0	0	0	0	0	2	0	0	1	2
Cap, veh/h	148	200	103	62	150	224	37	1984	96	33	1974	125
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.60	0.60	0.60	0.40	0.40	0.40
Sat Flow, veh/h	414	760	391	108	568	850	11	3320	160	5	3304	210
Grp Volume(v), veh/h	96	0	0	149	0	0	241	0	216	476	0	414
Grp Sat Flow(s),veh/h/ln	1566	0	0	1527	0	0	1848	0	1643	1880	0	1639
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.3	0.0	0.0	21.9
Cycle Q Clear(g_c), s	5.2	0.0	0.0	9.3	0.0	0.0	7.2	0.0	7.3	21.8	0.0	21.9
Prop In Lane	0.31		0.25	0.12		0.56	0.02		0.10	0.01		0.13
Lane Grp Cap(c), veh/h	452	0	0	436	0	0	1135	0	982	1154	0	979
V/C Ratio(X)	0.21	0.00	0.00	0.34	0.00	0.00	0.21	0.00	0.22	0.41	0.00	0.42
Avail Cap(c_a), veh/h	452	0	0	436	0	0	1135	0	982	1154	0	979
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.5	0.0	0.0	36.0	0.0	0.0	11.2	0.0	11.2	21.0	0.0	21.1
Incr Delay (d2), s/veh	1.1	0.0	0.0	2.1	0.0	0.0	0.4	0.0	0.5	1.1	0.0	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.0	3.9	0.0	0.0	3.1	0.0	2.8	10.8	0.0	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.5	0.0	0.0	38.1	0.0	0.0	11.6	0.0	11.7	22.1	0.0	22.4
LnGrp LOS	D			D			B		B	C		C
Approach Vol, veh/h		96			149			457			890	
Approach Delay, s/veh		35.5			38.1			11.6			22.2	
Approach LOS		D			D			B			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0				
Change Period (Y+Rc), s		8.3		8.4		8.3		8.4				
Max Green Setting (Gmax), s		71.7		31.6		71.7		31.6				
Max Q Clear Time (g_c+I1), s		23.9		11.3		9.3		7.2				
Green Ext Time (p_c), s		15.6		0.6		6.8		0.4				

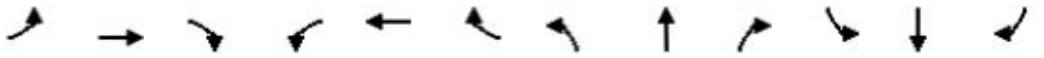
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			21.5									
HCM 6th LOS			C									



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	127	608	133	43	381	65	478	309	883
v/c Ratio	0.32	0.54	0.27	0.15	0.39	0.29	0.55	0.72	0.76
Control Delay (s/veh)	12.2	19.4	2.0	12.1	12.1	24.1	47.2	34.3	44.5
Queue Delay	0.0	0.1	0.1	1.2	0.0	0.0	1.4	0.0	50.5
Total Delay (s/veh)	12.2	19.5	2.1	13.2	12.1	24.1	48.6	34.3	95.0
Queue Length 50th (ft)	22	163	6	9	31	37	189	194	313
Queue Length 95th (ft)	32	150	8	m17	m45	73	244	279	396
Internal Link Dist (ft)		1129			389		264		487
Turn Bay Length (ft)	170		85	110		95		225	
Base Capacity (vph)	400	1131	485	279	987	228	875	430	1155
Starvation Cap Reductn	0	0	0	0	0	0	216	0	2
Spillback Cap Reductn	0	30	52	132	0	0	0	0	420
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.55	0.31	0.29	0.39	0.29	0.73	0.72	1.20

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	480	105	40	240	110	60	400	40	290	705	125
Future Volume (veh/h)	100	480	105	40	240	110	60	400	40	290	705	125
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.82	0.96		0.82	0.96		0.76	0.95		0.82
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1870	1856	1885	1885	1885	1870	1900	1885	1885
Adj Flow Rate, veh/h	127	608	133	43	261	120	65	435	43	309	750	133
Peak Hour Factor	0.79	0.79	0.79	0.92	0.92	0.92	0.92	0.92	0.92	0.94	0.94	0.94
Percent Heavy Veh, %	1	0	1	2	3	1	1	1	2	0	1	1
Cap, veh/h	422	1131	412	345	665	286	253	823	80	471	998	177
Arrive On Green	0.19	0.63	0.63	0.08	0.30	0.30	0.08	0.26	0.26	0.05	0.11	0.11
Sat Flow, veh/h	1795	3610	1313	1781	2240	963	1795	3195	312	1810	2928	519
Grp Volume(v), veh/h	127	608	133	43	202	179	65	241	237	309	459	424
Grp Sat Flow(s),veh/h/ln	1795	1805	1313	1781	1763	1440	1795	1791	1715	1810	1791	1656
Q Serve(g_s), s	5.4	11.4	5.7	1.9	10.9	12.0	3.0	13.9	14.3	13.9	29.8	29.8
Cycle Q Clear(g_c), s	5.4	11.4	5.7	1.9	10.9	12.0	3.0	13.9	14.3	13.9	29.8	29.8
Prop In Lane	1.00		1.00	1.00		0.67	1.00		0.18	1.00		0.31
Lane Grp Cap(c), veh/h	422	1131	412	345	523	427	253	461	442	471	610	564
V/C Ratio(X)	0.30	0.54	0.32	0.12	0.39	0.42	0.26	0.52	0.54	0.66	0.75	0.75
Avail Cap(c_a), veh/h	422	1131	412	345	523	427	253	461	442	471	610	564
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.9	17.5	16.4	24.7	33.5	33.9	29.5	38.2	38.4	28.2	48.3	48.3
Incr Delay (d2), s/veh	1.8	1.8	2.1	0.7	2.1	3.0	2.5	4.2	4.6	7.0	8.3	9.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	3.9	1.8	0.9	5.0	4.6	1.5	6.7	6.6	7.6	15.8	14.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.8	19.3	18.5	25.4	35.7	36.9	32.0	42.4	43.0	35.1	56.6	57.3
LnGrp LOS	C	B	B	C	D	D	C	D	D	D	E	E
Approach Vol, veh/h		868			424			543			1192	
Approach Delay, s/veh		19.9			35.2			41.4			51.3	
Approach LOS		B			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	47.0	17.0	41.0	25.0	37.0	15.0	43.0
Change Period (Y+Rc), s	* 5.9	6.1	5.6	* 5.4	* 5.9	6.1	6.0	* 5.4
Max Green Setting (Gmax), s	* 9.1	40.9	11.4	* 36	* 19	30.9	9.0	* 38
Max Q Clear Time (g_c+I1), s	5.0	31.8	7.4	14.0	15.9	16.3	3.9	13.4
Green Ext Time (p_c), s	0.0	5.8	0.1	2.4	0.5	4.5	0.0	5.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	38.2
HCM 6th LOS	D

Notes

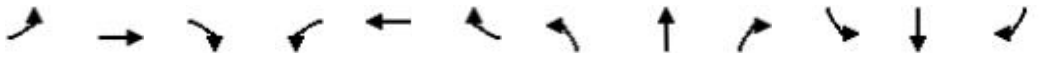
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	169	308	47	151	56	572	48	903
v/c Ratio	0.33	0.66	0.14	0.31	0.24	0.32	0.15	0.49
Control Delay (s/veh)	31.8	33.4	28.9	16.6	19.4	17.6	18.8	26.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay (s/veh)	31.8	33.4	28.9	16.6	19.4	17.6	18.8	26.3
Queue Length 50th (ft)	86	133	24	41	30	161	16	349
Queue Length 95th (ft)	129	194	50	88	m61	210	32	412
Internal Link Dist (ft)	1144			417		487		393
Turn Bay Length (ft)		180	60		60		170	
Base Capacity (vph)	518	467	343	480	236	1814	314	1852
Starvation Cap Reductn	0	0	0	0	0	0	0	275
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.66	0.14	0.31	0.24	0.32	0.15	0.57

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	120	265	40	50	80	55	525	35	45	810	30
Future Volume (veh/h)	25	120	265	40	50	80	55	525	35	45	810	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.86	0.96		0.86	0.96		0.85	0.99		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1870	1885	1900	1885	1900	1870	1885	1900
Adj Flow Rate, veh/h	29	140	308	47	58	93	56	536	36	48	871	32
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.98	0.98	0.98	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	0	0	2	1	0	1	0	2	1	0
Cap, veh/h	104	478	434	286	184	295	380	1786	119	427	1856	68
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.53	0.53	0.53	1.00	1.00	1.00
Sat Flow, veh/h	219	1522	1381	918	586	940	603	3364	225	832	3496	128
Grp Volume(v), veh/h	169	0	308	47	0	151	56	284	288	48	446	457
Grp Sat Flow(s),veh/h/ln	1741	0	1381	918	0	1526	603	1791	1798	832	1791	1834
Q Serve(g_s), s	0.0	0.0	23.6	4.9	0.0	9.0	5.8	10.6	10.7	1.3	0.0	0.0
Cycle Q Clear(g_c), s	8.2	0.0	23.6	13.1	0.0	9.0	5.8	10.6	10.7	12.0	0.0	0.0
Prop In Lane	0.17		1.00	1.00		0.62	1.00		0.13	1.00		0.07
Lane Grp Cap(c), veh/h	582	0	434	286	0	479	380	951	954	427	951	974
V/C Ratio(X)	0.29	0.00	0.71	0.16	0.00	0.32	0.15	0.30	0.30	0.11	0.47	0.47
Avail Cap(c_a), veh/h	582	0	434	286	0	479	380	951	954	427	951	974
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.0	0.0	36.3	35.9	0.0	31.3	14.6	15.7	15.7	1.0	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	9.5	1.2	0.0	1.7	0.8	0.8	0.8	0.5	1.7	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	9.1	1.2	0.0	3.6	0.9	4.6	4.7	0.1	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.3	0.0	45.8	37.2	0.0	33.0	15.4	16.5	16.5	1.5	1.7	1.6
LnGrp LOS	C		D	D		C	B	B	B	A	A	A
Approach Vol, veh/h		477			198			628			951	
Approach Delay, s/veh		41.0			34.0			16.4			1.6	
Approach LOS		D			C			B			A	

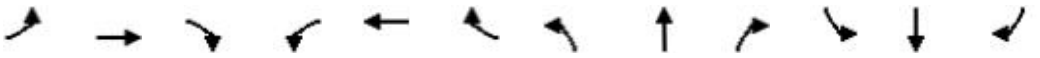
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		73.0		47.0		73.0		47.0				
Change Period (Y+Rc), s		9.3		9.3		9.3		9.3				
Max Green Setting (Gmax), s		63.7		37.7		63.7		37.7				
Max Q Clear Time (g_c+I1), s		14.0		15.1		12.7		25.6				
Green Ext Time (p_c), s		16.9		1.2		10.0		1.9				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			16.9									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	142	150	33	642	77	866
v/c Ratio	0.41	0.45	0.10	0.29	0.20	0.40
Control Delay (s/veh)	36.3	37.8	4.4	3.9	15.5	15.8
Queue Delay	0.0	3.3	0.0	0.0	0.0	0.2
Total Delay (s/veh)	36.3	41.1	4.4	3.9	15.5	16.0
Queue Length 50th (ft)	76	88	4	41	30	190
Queue Length 95th (ft)	140	141	12	61	65	255
Internal Link Dist (ft)	1407	172		393		369
Turn Bay Length (ft)			135		100	
Base Capacity (vph)	346	333	320	2187	380	2188
Starvation Cap Reductn	0	107	0	0	0	535
Spillback Cap Reductn	0	0	0	0	0	104
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.66	0.10	0.29	0.20	0.52

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	60	55	30	40	55	30	550	35	75	790	50
Future Volume (veh/h)	15	60	55	30	40	55	30	550	35	75	790	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.84	0.94		0.84	0.97		0.88	0.99		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1900	1900	1900	1885	1900	1900	1885	1870
Adj Flow Rate, veh/h	16	66	60	36	48	66	33	604	38	77	814	52
Peak Hour Factor	0.91	0.91	0.91	0.83	0.83	0.83	0.91	0.91	0.91	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	0	0	0	0	0	1	0	0	1	2
Cap, veh/h	53	176	143	97	126	146	461	2161	136	502	2159	138
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.64	0.64	0.64	1.00	1.00	1.00
Sat Flow, veh/h	89	810	658	277	583	675	629	3391	213	792	3386	216
Grp Volume(v), veh/h	142	0	0	150	0	0	33	318	324	77	430	436
Grp Sat Flow(s),veh/h/ln	1558	0	0	1535	0	0	629	1791	1812	792	1791	1811
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	2.4	9.4	9.5	1.7	0.0	0.0
Cycle Q Clear(g_c), s	9.1	0.0	0.0	9.1	0.0	0.0	2.4	9.4	9.5	11.2	0.0	0.0
Prop In Lane	0.11		0.42	0.24		0.44	1.00		0.12	1.00		0.12
Lane Grp Cap(c), veh/h	371	0	0	370	0	0	461	1142	1155	502	1142	1155
V/C Ratio(X)	0.38	0.00	0.00	0.41	0.00	0.00	0.07	0.28	0.28	0.15	0.38	0.38
Avail Cap(c_a), veh/h	371	0	0	370	0	0	461	1142	1155	502	1142	1155
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	0.0	0.0	40.5	0.0	0.0	8.3	9.6	9.6	0.7	0.0	0.0
Incr Delay (d2), s/veh	3.0	0.0	0.0	3.3	0.0	0.0	0.3	0.6	0.6	0.6	1.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	0.0	4.2	0.0	0.0	0.4	3.8	3.9	0.1	0.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.4	0.0	0.0	43.8	0.0	0.0	8.6	10.2	10.2	1.3	1.0	0.9
LnGrp LOS	D			D			A	B	B	A	A	A
Approach Vol, veh/h		142			150			675			943	
Approach Delay, s/veh		43.4			43.8			10.1			1.0	
Approach LOS		D			D			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		85.0		35.0		85.0		35.0				
Change Period (Y+Rc), s		8.5		9.0		8.5		9.0				
Max Green Setting (Gmax), s		76.5		26.0		76.5		26.0				
Max Q Clear Time (g_c+I1), s		13.2		11.1		11.5		11.1				
Green Ext Time (p_c), s		17.8		0.8		11.2		0.7				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			10.7									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	10	82	688	942
v/c Ratio	0.06	0.55	0.16	0.36
Control Delay (s/veh)	47.4	64.8	1.3	2.9
Queue Delay	0.0	0.2	0.0	0.3
Total Delay (s/veh)	47.4	64.9	1.3	3.2
Queue Length 50th (ft)	7	62	14	20
Queue Length 95th (ft)	13	105	22	102
Internal Link Dist (ft)	146	143	369	310
Turn Bay Length (ft)				
Base Capacity (vph)	291	269	4186	2589
Starvation Cap Reductn	0	17	0	915
Spillback Cap Reductn	0	0	92	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.03	0.33	0.17	0.56

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	5	30	5	35	0	615	25	40	830	15
Future Volume (veh/h)	0	0	5	30	5	35	0	615	25	40	830	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.97		0.96	1.00		0.89	0.97		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1856	1900	1900	1900	1885	1841	1900	1885	1900
Adj Flow Rate, veh/h	0	0	10	35	6	41	0	661	27	43	883	16
Peak Hour Factor	0.50	0.50	0.50	0.86	0.86	0.86	0.93	0.93	0.93	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	3	0	0	0	1	4	0	1	0
Cap, veh/h	0	0	154	92	27	76	0	4075	165	130	2600	47
Arrive On Green	0.00	0.00	0.10	0.10	0.10	0.10	0.00	0.81	0.81	1.00	1.00	1.00
Sat Flow, veh/h	0	0	1552	498	271	769	0	5215	205	120	3219	58
Grp Volume(v), veh/h	0	0	10	82	0	0	0	448	240	472	0	470
Grp Sat Flow(s),veh/h/ln	0	0	1552	1538	0	0	0	1716	1819	1700	0	1697
Q Serve(g_s), s	0.0	0.0	0.7	3.3	0.0	0.0	0.0	3.5	3.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.7	5.9	0.0	0.0	0.0	3.5	3.5	0.0	0.0	0.0
Prop In Lane	0.00		1.00	0.43		0.50	0.00		0.11	0.09		0.03
Lane Grp Cap(c), veh/h	0	0	154	195	0	0	0	2771	1469	1406	0	1370
V/C Ratio(X)	0.00	0.00	0.07	0.42	0.00	0.00	0.00	0.16	0.16	0.34	0.00	0.34
Avail Cap(c_a), veh/h	0	0	284	321	0	0	0	2771	1469	1406	0	1370
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.97	0.97	0.60	0.00	0.60
Uniform Delay (d), s/veh	0.0	0.0	49.0	51.3	0.0	0.0	0.0	2.6	2.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.2	1.4	0.0	0.0	0.0	0.1	0.2	0.4	0.0	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.3	2.4	0.0	0.0	0.0	1.0	1.1	0.2	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	49.2	52.7	0.0	0.0	0.0	2.7	2.8	0.4	0.0	0.4
LnGrp LOS			D	D				A	A	A		A
Approach Vol, veh/h		10			82			688			942	
Approach Delay, s/veh		49.2			52.7			2.7			0.4	
Approach LOS		D			D			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		102.1		17.9		102.1		17.9				
Change Period (Y+Rc), s		5.2		6.0		5.2		6.0				
Max Green Setting (Gmax), s		86.8		22.0		86.8		22.0				
Max Q Clear Time (g_c+I1), s		5.5		2.7		2.0		7.9				
Green Ext Time (p_c), s		11.7		0.0		19.6		0.3				

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		4.1
HCM 6th LOS		A



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	167	522	373	76	675	116	832
v/c Ratio	0.38	0.71	0.52	0.30	0.69	0.34	0.73
Control Delay (s/veh)	14.4	17.3	29.0	13.7	27.8	16.7	31.5
Queue Delay	0.0	0.4	1.0	0.0	1.4	0.0	0.0
Total Delay (s/veh)	14.4	17.7	30.0	13.7	29.1	16.7	31.5
Queue Length 50th (ft)	28	75	134	16	132	41	283
Queue Length 95th (ft)	48	334	176	31	185	m62	m335
Internal Link Dist (ft)		335	201		310		638
Turn Bay Length (ft)				560		330	
Base Capacity (vph)	434	735	712	250	983	338	1134
Starvation Cap Reductn	0	29	147	0	144	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.74	0.66	0.30	0.80	0.34	0.73

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	295	175	5	225	90	65	545	35	100	680	35
Future Volume (veh/h)	150	295	175	5	225	90	65	545	35	100	680	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.80	0.98		0.86	0.97		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1900	1885	1885	1900	1885	1826	1885	1885	1856
Adj Flow Rate, veh/h	167	328	194	6	262	105	76	634	41	116	791	41
Peak Hour Factor	0.90	0.90	0.90	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	1	0	1	0	1	1	0	1	5	1	1	3
Cap, veh/h	272	451	267	31	482	210	299	946	61	333	1106	57
Arrive On Green	0.12	0.43	0.43	0.52	0.52	0.52	0.02	0.09	0.09	0.22	0.64	0.64
Sat Flow, veh/h	1795	1057	625	0	1853	807	1810	3377	218	1795	3437	178
Grp Volume(v), veh/h	167	0	522	199	0	174	76	336	339	116	412	420
Grp Sat Flow(s),veh/h/ln	1795	0	1683	1322	0	1338	1810	1791	1804	1795	1791	1824
Q Serve(g_s), s	10.9	0.0	30.9	0.3	0.0	10.1	3.5	21.8	21.8	4.7	18.2	18.3
Cycle Q Clear(g_c), s	10.9	0.0	30.9	31.2	0.0	10.1	3.5	21.8	21.8	4.7	18.2	18.3
Prop In Lane	1.00		0.37	0.03		0.60	1.00		0.12	1.00		0.10
Lane Grp Cap(c), veh/h	0	0	718	375	0	348	299	501	505	333	576	587
V/C Ratio(X)	0.00	0.00	0.73	0.53	0.00	0.50	0.25	0.67	0.67	0.35	0.72	0.72
Avail Cap(c_a), veh/h	0	0	718	375	0	348	299	501	505	333	576	587
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	28.6	23.9	0.0	23.7	28.6	49.1	49.1	22.5	17.8	17.8
Incr Delay (d2), s/veh	0.0	0.0	6.3	5.3	0.0	5.1	2.0	6.9	7.0	2.9	7.4	7.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	13.4	3.5	0.0	3.1	1.8	11.5	11.6	2.1	6.2	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	34.9	29.2	0.0	28.8	30.7	56.0	56.1	25.4	25.2	25.1
LnGrp LOS			C	C		C	C	E	E	C	C	C
Approach Vol, veh/h		689			373			751			948	
Approach Delay, s/veh		26.5			29.0			53.5			25.2	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	48.0	20.0	37.0	20.0	43.0		57.0				
Change Period (Y+Rc), s	6.5	9.4	5.8	5.8	6.6	9.4		5.8				
Max Green Setting (Gmax), s	8.5	38.6	14.2	31.2	13.4	33.6		51.2				
Max Q Clear Time (g_c+I1), s	5.5	20.3	12.9	33.2	6.7	23.8		32.9				
Green Ext Time (p_c), s	0.0	9.1	0.1	0.0	0.1	4.8		3.4				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			33.7									
HCM 6th LOS			C									



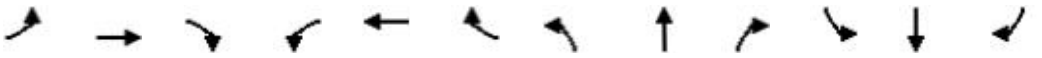
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	56	303	156	104	104	819	27	609
v/c Ratio	0.18	0.67	1.01	0.23	0.22	0.50	0.07	0.38
Control Delay (s/veh)	52.3	50.1	119.7	32.4	12.3	25.5	2.1	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.3	50.1	119.7	32.4	12.3	25.5	2.1	4.2
Queue Length 50th (ft)	40	165	~123	56	34	200	2	20
Queue Length 95th (ft)	80	260	#209	87	m60	277	4	20
Internal Link Dist (ft)		1162		364		638		402
Turn Bay Length (ft)	40		140		75		150	
Base Capacity (vph)	304	450	155	457	464	1642	386	1623
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.67	1.01	0.23	0.22	0.50	0.07	0.38

Intersection Summary

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

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

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	75	195	120	60	20	95	635	110	25	530	25
Future Volume (veh/h)	50	75	195	120	60	20	95	635	110	25	530	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.90		0.85	0.98		0.85	0.94		0.83	0.99		0.82
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1885	1870	1870	1856	1900	1856	1885	1870	1900	1885	1574
Adj Flow Rate, veh/h	56	84	219	156	78	26	104	698	121	27	582	27
Peak Hour Factor	0.89	0.89	0.89	0.77	0.77	0.77	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	1	2	2	3	0	3	1	2	0	1	22
Cap, veh/h	299	105	273	128	325	108	576	1461	253	423	1620	75
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.10	0.50	0.50	0.15	0.94	0.94
Sat Flow, veh/h	1155	410	1068	1060	1271	424	1767	2951	511	1810	3447	160
Grp Volume(v), veh/h	56	0	303	156	0	104	104	423	396	27	302	307
Grp Sat Flow(s),veh/h/ln	1155	0	1478	1060	0	1694	1767	1791	1670	1810	1791	1816
Q Serve(g_s), s	4.8	0.0	23.0	7.7	0.0	5.8	3.2	18.7	18.8	0.8	1.8	1.8
Cycle Q Clear(g_c), s	10.7	0.0	23.0	30.7	0.0	5.8	3.2	18.7	18.8	0.8	1.8	1.8
Prop In Lane	1.00		0.72	1.00		0.25	1.00		0.31	1.00		0.09
Lane Grp Cap(c), veh/h	299	0	378	128	0	433	576	887	827	423	842	853
V/C Ratio(X)	0.19	0.00	0.80	1.22	0.00	0.24	0.18	0.48	0.48	0.06	0.36	0.36
Avail Cap(c_a), veh/h	299	0	378	128	0	433	576	887	827	423	842	853
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	0.0	41.8	58.0	0.0	35.4	11.9	20.0	20.1	12.6	2.0	2.0
Incr Delay (d2), s/veh	1.4	0.0	16.2	150.6	0.0	1.3	0.7	1.8	2.0	0.3	1.2	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	10.1	9.3	0.0	2.6	1.4	8.3	7.8	0.3	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.0	0.0	58.0	208.6	0.0	36.7	12.6	21.9	22.0	12.9	3.2	3.1
LnGrp LOS	D		E	F		D	B	C	C	B	A	A
Approach Vol, veh/h		359			260			923			636	
Approach Delay, s/veh		55.4			139.8			20.9			3.6	
Approach LOS		E			F			C			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.0	65.0		37.0	15.0	68.0		37.0				
Change Period (Y+Rc), s	6.3	8.6		6.3	6.0	8.6		6.3				
Max Green Setting (Gmax), s	11.7	56.4		30.7	9.0	59.4		30.7				
Max Q Clear Time (g_c+I1), s	5.2	3.8		32.7	2.8	20.8		25.0				
Green Ext Time (p_c), s	0.1	9.4		0.0	0.0	13.2		1.1				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			35.7									
HCM 6th LOS			D									



Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	6	6	726	701
v/c Ratio	0.02	0.02	0.29	0.28
Control Delay (s/veh)	39.2	22.4	2.8	2.0
Queue Delay	0.0	0.0	0.0	0.1
Total Delay (s/veh)	39.2	22.4	2.8	2.1
Queue Length 50th (ft)	4	0	33	23
Queue Length 95th (ft)	15	11	40	27
Internal Link Dist (ft)	328		402	352
Turn Bay Length (ft)				
Base Capacity (vph)	353	303	2543	2518
Starvation Cap Reductn	0	0	422	746
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.34	0.40

Intersection Summary



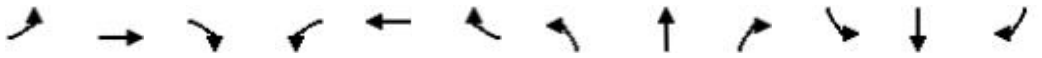
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	5	695	10	0	575
Future Volume (veh/h)	5	5	695	10	0	575
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.91	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1441	1900	1870
Adj Flow Rate, veh/h	6	6	716	10	0	701
Peak Hour Factor	0.81	0.81	0.97	0.97	0.82	0.82
Percent Heavy Veh, %	0	0	0	31	0	2
Cap, veh/h	354	315	2590	36	0	2529
Arrive On Green	0.20	0.20	0.71	0.71	0.00	1.00
Sat Flow, veh/h	1810	1610	3734	51	0	3741
Grp Volume(v), veh/h	6	6	355	371	0	701
Grp Sat Flow(s),veh/h/ln	1810	1610	1805	1885	0	1777
Q Serve(g_s), s	0.3	0.4	8.5	8.5	0.0	0.0
Cycle Q Clear(g_c), s	0.3	0.4	8.5	8.5	0.0	0.0
Prop In Lane	1.00	1.00		0.03	0.00	
Lane Grp Cap(c), veh/h	354	315	1285	1341	0	2529
V/C Ratio(X)	0.02	0.02	0.28	0.28	0.00	0.28
Avail Cap(c_a), veh/h	354	315	1285	1341	0	2529
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.9	38.9	6.2	6.2	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.5	0.5	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	3.3	3.4	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	39.0	39.1	6.7	6.7	0.0	0.3
LnGrp LOS	D	D	A	A		A
Approach Vol, veh/h	12		726			701
Approach Delay, s/veh	39.0		6.7			0.3
Approach LOS	D		A			A

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		91.0		29.0		91.0
Change Period (Y+Rc), s		5.6		5.5		5.6
Max Green Setting (Gmax), s		85.4		23.5		85.4
Max Q Clear Time (g_c+I1), s		2.0		2.4		10.5
Green Ext Time (p_c), s		12.9		0.0		12.3

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		3.9
HCM 6th LOS		A

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	110	106	768	742
v/c Ratio	0.30	0.28	0.38	0.38
Control Delay (s/veh)	30.9	41.7	12.0	21.8
Queue Delay	0.0	0.0	0.1	0.0
Total Delay (s/veh)	30.9	41.7	12.2	21.8
Queue Length 50th (ft)	52	69	126	203
Queue Length 95th (ft)	79	100	121	240
Internal Link Dist (ft)	365	478	352	685
Turn Bay Length (ft)				
Base Capacity (vph)	368	375	2021	1932
Starvation Cap Reductn	0	0	409	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.30	0.28	0.48	0.38

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	35	35	10	55	15	30	670	15	25	560	60
Future Volume (veh/h)	10	35	35	10	55	15	30	670	15	25	560	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.95	0.97		0.95	0.99		0.91	0.99		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1856	1856	1900	1900	1900	1856	1900	1900	1900	1870	1737
Adj Flow Rate, veh/h	14	48	48	13	73	20	32	720	16	29	644	69
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.93	0.93	0.93	0.87	0.87	0.87
Percent Heavy Veh, %	0	3	3	0	0	0	3	0	0	0	2	11
Cap, veh/h	58	174	154	59	285	72	96	2097	46	88	1880	199
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	114	803	710	116	1314	333	100	3281	72	87	2942	311
Grp Volume(v), veh/h	110	0	0	106	0	0	389	0	379	385	0	357
Grp Sat Flow(s),veh/h/ln	1627	0	0	1762	0	0	1745	0	1708	1730	0	1611
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3	0.0	0.0	12.3
Cycle Q Clear(g_c), s	6.6	0.0	0.0	5.8	0.0	0.0	11.2	0.0	12.3	11.2	0.0	12.3
Prop In Lane	0.13		0.44	0.12		0.19	0.08		0.04	0.08		0.19
Lane Grp Cap(c), veh/h	386	0	0	416	0	0	1148	0	1092	1138	0	1029
V/C Ratio(X)	0.28	0.00	0.00	0.26	0.00	0.00	0.34	0.00	0.35	0.34	0.00	0.35
Avail Cap(c_a), veh/h	386	0	0	416	0	0	1148	0	1092	1138	0	1029
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.4	0.0	0.0	39.1	0.0	0.0	9.8	0.0	10.0	9.8	0.0	10.0
Incr Delay (d2), s/veh	1.8	0.0	0.0	1.5	0.0	0.0	0.8	0.0	0.9	0.8	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	0.0	2.8	0.0	0.0	4.9	0.0	4.8	4.8	0.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.2	0.0	0.0	40.6	0.0	0.0	10.6	0.0	10.9	10.6	0.0	11.0
LnGrp LOS	D			D			B		B	B		B
Approach Vol, veh/h		110			106			768			742	
Approach Delay, s/veh		41.2			40.6			10.8			10.8	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		85.0		35.0		85.0		35.0				
Change Period (Y+Rc), s		* 8.3		9.0		* 8.3		9.0				
Max Green Setting (Gmax), s		* 77		26.0		* 77		26.0				
Max Q Clear Time (g_c+I1), s		14.3		7.8		14.3		8.6				
Green Ext Time (p_c), s		13.1		0.5		13.5		0.5				

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		14.6
HCM 6th LOS		B

Notes

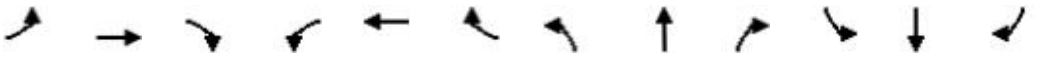
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	40	227	163	81	710	68	704
v/c Ratio	0.17	0.66	0.40	0.19	0.31	0.17	0.32
Control Delay (s/veh)	30.3	38.2	43.1	8.0	6.2	9.7	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.3	38.2	43.1	8.0	6.2	9.7	9.4
Queue Length 50th (ft)	12	69	107	10	44	20	106
Queue Length 95th (ft)	m35	m136	172	35	107	34	116
Internal Link Dist (ft)		429	286		685		737
Turn Bay Length (ft)				145		110	
Base Capacity (vph)	232	342	403	428	2278	406	2188
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.66	0.40	0.19	0.31	0.17	0.32

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	60	140	5	130	10	75	640	20	55	520	50
Future Volume (veh/h)	35	60	140	5	130	10	75	640	20	55	520	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1870	1870	1900	1900	1900	1900	1900	1900	1856	1856	1900
Adj Flow Rate, veh/h	40	68	159	6	146	11	81	688	22	68	642	62
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.93	0.93	0.93	0.81	0.81	0.81
Percent Heavy Veh, %	5	2	2	0	0	0	0	0	0	3	3	0
Cap, veh/h	283	104	243	36	371	27	473	2273	73	463	2064	199
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	1179	477	1116	23	1706	125	754	3566	114	732	3238	312
Grp Volume(v), veh/h	40	0	227	163	0	0	81	348	362	68	349	355
Grp Sat Flow(s),veh/h/ln	1179	0	1593	1854	0	0	754	1805	1875	732	1763	1787
Q Serve(g_s), s	0.0	0.0	15.6	0.0	0.0	0.0	6.5	10.4	10.4	5.5	10.7	10.8
Cycle Q Clear(g_c), s	5.4	0.0	15.6	9.0	0.0	0.0	17.3	10.4	10.4	15.9	10.7	10.8
Prop In Lane	1.00		0.70	0.04		0.07	1.00		0.06	1.00		0.17
Lane Grp Cap(c), veh/h	283	0	346	434	0	0	473	1151	1195	463	1124	1139
V/C Ratio(X)	0.14	0.00	0.66	0.38	0.00	0.00	0.17	0.30	0.30	0.15	0.31	0.31
Avail Cap(c_a), veh/h	283	0	346	434	0	0	473	1151	1195	463	1124	1139
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.8	0.0	42.8	40.2	0.0	0.0	13.8	9.8	9.8	13.3	9.8	9.8
Incr Delay (d2), s/veh	1.0	0.0	9.3	2.5	0.0	0.0	0.8	0.7	0.7	0.7	0.7	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	7.0	4.4	0.0	0.0	1.2	4.3	4.4	1.0	4.3	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.9	0.0	52.2	42.7	0.0	0.0	14.5	10.4	10.4	14.0	10.6	10.6
LnGrp LOS	D		D	D			B	B	B	B	B	B
Approach Vol, veh/h		267			163			791			772	
Approach Delay, s/veh		50.3			42.7			10.9			10.9	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		85.0		35.0		85.0		35.0				
Change Period (Y+Rc), s		8.5		8.9		8.5		8.9				
Max Green Setting (Gmax), s		76.5		26.1		76.5		26.1				
Max Q Clear Time (g_c+I1), s		17.9		11.0		19.3		17.6				
Green Ext Time (p_c), s		13.2		0.7		13.4		0.9				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			18.7									
HCM 6th LOS			B									



Lane Group	NBL	SET	NWT
Lane Group Flow (vph)	484	815	787
v/c Ratio	0.30	0.41	0.40
Control Delay (s/veh)	53.0	16.1	8.5
Queue Delay	0.0	0.9	0.0
Total Delay (s/veh)	53.0	16.9	8.5
Queue Length 50th (ft)	116	182	139
Queue Length 95th (ft)	151	224	158
Internal Link Dist (ft)	94	395	737
Turn Bay Length (ft)			
Base Capacity (vph)	1610	1989	1951
Starvation Cap Reductn	0	821	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.30	0.70	0.40

Intersection Summary



Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	460	15	725	0	0	590
Future Volume (vph)	460	15	725	0	0	590
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7		8.2			8.2
Lane Util. Factor	0.94		0.95			0.95
Frt	1.00		1.00			1.00
Flt Protected	0.95		1.00			1.00
Satd. Flow (prot)	5038		3574			3505
Flt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	5038		3574			3505
Peak-hour factor, PHF	0.98	0.98	0.89	0.89	0.75	0.75
Adj. Flow (vph)	469	15	815	0	0	787
RTOR Reduction (vph)	3	0	0	0	0	0
Lane Group Flow (vph)	481	0	815	0	0	787
Heavy Vehicles (%)	1%	0%	1%	0%	0%	3%
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	38.3		66.8			66.8
Effective Green, g (s)	38.3		66.8			66.8
Actuated g/C Ratio	0.32		0.56			0.56
Clearance Time (s)	6.7		8.2			8.2
Lane Grp Cap (vph)	1607		1989			1951
v/s Ratio Prot	c0.10		c0.23			0.22
v/s Ratio Perm						
v/c Ratio	0.30		0.41			0.40
Uniform Delay, d1	30.8		15.3			15.2
Progression Factor	1.72		1.00			0.52
Incremental Delay, d2	0.4		0.6			0.6
Delay (s)	53.2		15.9			8.4
Level of Service	D		B			A
Approach Delay (s/veh)	53.2		15.9			8.4
Approach LOS	D		B			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.9
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

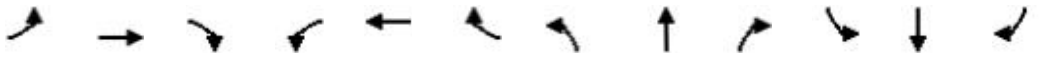
Build I Results

(Geo-Only): AM



Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	895	1042	309	74	379
v/c Ratio	0.36	0.63	0.26	0.14	0.37
Control Delay (s/veh)	24.2	34.8	33.9	19.3	37.3
Queue Delay	0.0	1.6	0.1	0.0	0.0
Total Delay (s/veh)	24.2	36.3	34.0	19.3	37.3
Queue Length 50th (ft)	190	338	110	15	100
Queue Length 95th (ft)	232	390	155	62	128
Internal Link Dist (ft)	687	429	482		263
Turn Bay Length (ft)				215	
Base Capacity (vph)	2497	1658	1185	519	1021
Starvation Cap Reductn	0	409	0	0	0
Spillback Cap Reductn	0	375	134	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.36	0.83	0.29	0.14	0.37

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	660	190	5	885	110	0	290	70	25	230	75
Future Volume (veh/h)	0	660	190	5	885	110	0	290	70	25	230	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.92	0.98		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1856	1900	1693	1856	1870	1900	1841	1811	1841	1841	1900
Adj Flow Rate, veh/h	0	695	200	5	922	115	0	309	74	29	264	86
Peak Hour Factor	0.95	0.95	0.95	0.96	0.96	0.96	0.94	0.94	0.94	0.87	0.87	0.87
Percent Heavy Veh, %	0	3	0	14	3	2	0	4	6	4	4	0
Cap, veh/h	0	1988	563	32	1566	195	0	1195	483	92	778	244
Arrive On Green	0.00	0.51	0.51	0.68	0.68	0.68	0.00	0.34	0.34	0.11	0.11	0.11
Sat Flow, veh/h	0	4066	1104	4	3071	381	0	3589	1415	169	2278	715
Grp Volume(v), veh/h	0	601	294	557	0	485	0	309	74	202	0	177
Grp Sat Flow(s),veh/h/ln	0	1689	1625	1847	0	1609	0	1749	1415	1687	0	1475
Q Serve(g_s), s	0.0	12.7	13.0	0.0	0.0	19.4	0.0	7.7	4.4	0.8	0.0	13.3
Cycle Q Clear(g_c), s	0.0	12.7	13.0	19.3	0.0	19.4	0.0	7.7	4.4	12.2	0.0	13.3
Prop In Lane	0.00		0.68	0.01		0.24	0.00		1.00	0.14		0.48
Lane Grp Cap(c), veh/h	0	1722	829	972	0	821	0	1195	483	611	0	504
V/C Ratio(X)	0.00	0.35	0.36	0.57	0.00	0.59	0.00	0.26	0.15	0.33	0.00	0.35
Avail Cap(c_a), veh/h	0	1722	829	972	0	821	0	1195	483	611	0	504
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.5	17.6	12.6	0.0	12.6	0.0	28.5	27.4	40.4	0.0	41.0
Incr Delay (d2), s/veh	0.0	0.6	1.2	2.5	0.0	3.1	0.0	0.5	0.7	1.4	0.0	1.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	8.6	8.7	11.0	0.0	10.1	0.0	6.0	2.9	10.3	0.0	9.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	18.1	18.8	15.0	0.0	15.7	0.0	29.0	28.1	41.9	0.0	42.9
LnGrp LOS		B	B	B		B		C	C	D		D
Approach Vol, veh/h		895			1042			383			379	
Approach Delay, s/veh		18.3			15.3			28.9			42.3	
Approach LOS		B			B			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		70.0		50.0		70.0		50.0				
Change Period (Y+Rc), s		8.8		9.0		8.8		9.0				
Max Green Setting (Gmax), s		61.2		41.0		61.2		41.0				
Max Q Clear Time (g_c+I1), s		21.4		15.3		15.0		9.7				
Green Ext Time (p_c), s		17.0		2.6		14.5		2.5				

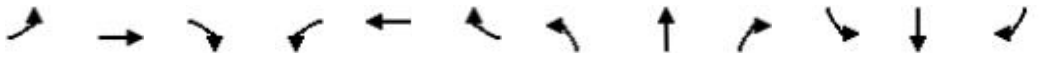
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			22.0									
HCM 6th LOS			C									



Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	84	367	149	26	389	45	241
v/c Ratio	0.22	0.66	0.23	0.10	0.75	0.11	0.29
Control Delay (s/veh)	30.5	28.8	5.8	43.2	60.3	24.6	29.1
Queue Delay	0.0	0.4	0.0	0.0	55.3	0.0	0.0
Total Delay (s/veh)	30.5	29.1	5.8	43.2	115.7	24.6	29.1
Queue Length 50th (ft)	45	227	23	17	308	21	135
Queue Length 95th (ft)	89	m304	m70	m40	412	46	246
Internal Link Dist (ft)	703	436			263		452
Turn Bay Length (ft)						150	
Base Capacity (vph)	379	553	638	253	521	414	843
Starvation Cap Reductn	0	25	0	0	177	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.70	0.23	0.10	1.13	0.11	0.29

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	50	25	90	230	130	25	350	20	40	205	10
Future Volume (vph)	0	50	25	90	230	130	25	350	20	40	205	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.9			8.9	8.9	5.4	5.4		5.1	8.4	
Lane Util. Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes		0.98			1.00	0.89	1.00	0.98		1.00	0.99	
Flpb, ped/bikes		1.00			0.99	1.00	0.81	1.00		1.00	1.00	
Frt		0.96			1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected		1.00			0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1502			1825	1423	1371	1804		1770	1787	
Flt Permitted		1.00			0.76	1.00	0.61	1.00		0.30	1.00	
Satd. Flow (perm)		1502			1406	1423	879	1804		556	1787	
Peak-hour factor, PHF	0.89	0.89	0.89	0.87	0.87	0.87	0.95	0.95	0.95	0.89	0.89	0.89
Adj. Flow (vph)	0	56	28	103	264	149	26	368	21	45	230	11
RTOR Reduction (vph)	0	15	0	0	0	87	0	2	0	0	2	0
Lane Group Flow (vph)	0	69	0	0	367	62	26	387	0	45	239	0
Confl. Peds. (#/hr)	23		29	29		23	61		79	79		61
Confl. Bikes (#/hr)							5					5
Heavy Vehicles (%)	0%	27%	0%	1%	2%	1%	7%	3%	0%	2%	4%	10%
Turn Type		NA		pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		8		7	4			6		5	2	
Permitted Phases	8			4		4	6			2		
Actuated Green, G (s)		42.1			50.1	50.1	44.6	44.6		52.6	52.6	
Effective Green, g (s)		42.1			50.1	50.1	44.6	44.6		52.6	52.6	
Actuated g/C Ratio		0.35			0.42	0.42	0.37	0.37		0.44	0.44	
Clearance Time (s)		5.9			8.9	8.9	5.4	5.4		5.1	8.4	
Lane Grp Cap (vph)		526			604	594	326	670		303	783	
v/s Ratio Prot		0.05			c0.03			c0.21		0.01	c0.13	
v/s Ratio Perm					c0.23	0.04	0.03			0.06		
v/c Ratio		0.13			0.61	0.10	0.08	0.58		0.15	0.31	
Uniform Delay, d1		26.5			27.3	21.3	24.4	30.2		21.3	21.9	
Progression Factor		1.05			0.76	1.42	1.37	1.37		1.51	1.45	
Incremental Delay, d2		0.5			4.3	0.3	0.5	3.4		1.0	1.0	
Delay (s)		28.2			25.1	30.5	33.8	44.7		33.0	32.7	
Level of Service		C			C	C	C	D		C	C	
Approach Delay (s/veh)		28.2			26.6			44.0			32.7	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	22.4
Intersection Capacity Utilization	64.3%	ICU Level of Service	C
Analysis Period (min)	15		

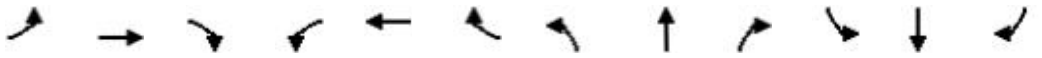
c Critical Lane Group



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	79	20	57	437	18	292
v/c Ratio	0.20	0.09	0.17	0.57	0.06	0.39
Control Delay (s/veh)	7.9	45.9	5.4	7.0	12.5	17.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.9	45.9	5.4	7.0	12.5	17.1
Queue Length 50th (ft)	2	14	7	58	7	119
Queue Length 95th (ft)	23	31	m12	83	13	101
Internal Link Dist (ft)	730	415		452		358
Turn Bay Length (ft)			150		100	
Base Capacity (vph)	390	212	332	766	310	752
Starvation Cap Reductn	0	0	0	0	0	24
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.09	0.17	0.57	0.06	0.40

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	20	25	5	10	0	55	390	30	15	220	25
Future Volume (vph)	15	20	25	5	10	0	55	390	30	15	220	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7			5.7		5.2	5.2		5.2	5.2	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		0.92			1.00		1.00	0.97		1.00	0.96	
Flpb, ped/bikes		0.94			0.95		0.81	1.00		1.00	1.00	
Frt		0.94			1.00		1.00	0.99		1.00	0.98	
Flt Protected		0.99			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1346			1593		1285	1593		1625	1560	
Flt Permitted		0.94			0.91		0.51	1.00		0.38	1.00	
Satd. Flow (perm)		1281			1472		692	1593		646	1560	
Peak-hour factor, PHF	0.76	0.76	0.76	0.75	0.75	0.75	0.96	0.96	0.96	0.84	0.84	0.84
Adj. Flow (vph)	20	26	33	7	13	0	57	406	31	18	262	30
RTOR Reduction (vph)	0	21	0	0	0	0	0	2	0	0	4	0
Lane Group Flow (vph)	0	58	0	0	20	0	57	435	0	18	288	0
Confl. Peds. (#/hr)	53		41	41		53	82		89	89		82
Confl. Bikes (#/hr)							6		1	1		6
Heavy Vehicles (%)	11%	0%	0%	0%	0%	0%	3%	3%	0%	0%	4%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8 16			8			6 14			2 10	
Permitted Phases	8 16			8			6 14			2 10		
Actuated Green, G (s)		34.6			17.3		57.6	57.6		57.6	57.6	
Effective Green, g (s)		34.6			17.3		57.6	57.6		57.6	57.6	
Actuated g/C Ratio		0.29			0.14		0.48	0.48		0.48	0.48	
Clearance Time (s)					5.7							
Lane Grp Cap (vph)		369			212		332	764		310	748	
v/s Ratio Prot								c0.27			0.18	
v/s Ratio Perm		c0.05			0.01		0.08			0.03		
v/c Ratio		0.16			0.09		0.17	0.57		0.06	0.39	
Uniform Delay, d1		31.8			44.6		17.7	22.3		16.7	19.9	
Progression Factor		0.58			1.00		0.61	0.86		1.41	1.58	
Incremental Delay, d2		0.9			0.9		1.0	2.7		0.3	1.4	
Delay (s)		19.4			45.4		11.8	22.0		23.9	32.8	
Level of Service		B			D		B	C		C	C	
Approach Delay (s/veh)		19.4			45.4			20.8			32.3	
Approach LOS		B			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.8
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		

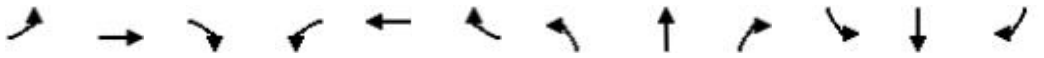
c Critical Lane Group



Lane Group	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	38	5	424	6	299
v/c Ratio	0.10	0.01	0.49	0.02	0.34
Control Delay (s/veh)	11.8	2.6	3.8	9.6	11.0
Queue Delay	0.0	0.0	0.1	0.0	0.1
Total Delay (s/veh)	11.8	2.6	3.8	9.6	11.2
Queue Length 50th (ft)	7	0	16	2	100
Queue Length 95th (ft)	20	m1	48	m8	190
Internal Link Dist (ft)	299		358		376
Turn Bay Length (ft)		100		100	
Base Capacity (vph)	379	350	871	351	876
Starvation Cap Reductn	0	0	35	0	99
Spillback Cap Reductn	13	0	31	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.10	0.01	0.51	0.02	0.38

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	5	10	15	5	380	10	5	260	0
Future Volume (vph)	0	0	0	5	10	15	5	380	10	5	260	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.3		4.7	4.7		4.7	4.7	
Lane Util. Factor					1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes					0.89		1.00	0.99		1.00	1.00	
Flpb, ped/bikes					0.97		0.77	1.00		1.00	1.00	
Frt					0.93		1.00	1.00		1.00	1.00	
Flt Protected					0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1468		1388	1814		1805	1827	
Flt Permitted					0.98		0.50	1.00		0.39	1.00	
Satd. Flow (perm)					1442		731	1814		732	1827	
Peak-hour factor, PHF	0.25	0.25	0.25	0.79	0.79	0.79	0.92	0.92	0.92	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	6	13	19	5	413	11	6	299	0
RTOR Reduction (vph)	0	0	0	0	14	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	24	0	5	423	0	6	299	0
Confl. Peds. (#/hr)	42		44	44		42	128		78	78		128
Confl. Bikes (#/hr)	1					1	6					6
Heavy Vehicles (%)	0%	0%	0%	0%	0%	5%	0%	3%	8%	0%	4%	0%
Turn Type				Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4 12			6 14			2 10	
Permitted Phases	4			4 12			6 14			2 10		
Actuated Green, G (s)					30.4		57.6	57.6		57.6	57.6	
Effective Green, g (s)					30.4		57.6	57.6		57.6	57.6	
Actuated g/C Ratio					0.25		0.48	0.48		0.48	0.48	
Clearance Time (s)												
Lane Grp Cap (vph)					365		350	870		351	876	
v/s Ratio Prot								c0.23			0.16	
v/s Ratio Perm					c0.02		0.01			0.01		
v/c Ratio					0.07		0.01	0.49		0.02	0.34	
Uniform Delay, d1					34.0		16.3	21.2		16.4	19.4	
Progression Factor					1.00		0.17	0.15		1.15	1.01	
Incremental Delay, d2					0.3		0.1	1.6		0.1	1.0	
Delay (s)					34.4		2.9	4.7		19.0	20.7	
Level of Service					C		A	A		B	C	
Approach Delay (s/veh)		0.0			34.4			4.7			20.7	
Approach LOS		A			C			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	39.1%	ICU Level of Service	A
Analysis Period (min)	15		

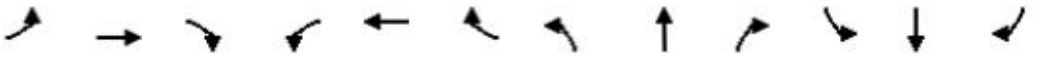
c Critical Lane Group



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	82	89	47	412	17	320
v/c Ratio	0.14	0.14	0.13	0.45	0.04	0.36
Control Delay (s/veh)	12.9	19.1	30.0	36.3	21.7	20.7
Queue Delay	0.0	0.0	0.0	1.2	0.0	0.7
Total Delay (s/veh)	12.9	19.1	30.0	37.5	21.7	21.4
Queue Length 50th (ft)	7	36	24	277	6	113
Queue Length 95th (ft)	28	65	52	360	m19	213
Internal Link Dist (ft)	791	417		376		368
Turn Bay Length (ft)			100		100	
Base Capacity (vph)	578	618	352	922	391	881
Starvation Cap Reductn	0	0	0	300	0	293
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.14	0.13	0.66	0.04	0.54

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	30	20	5	50	20	40	340	15	15	250	25
Future Volume (veh/h)	10	30	20	5	50	20	40	340	15	15	250	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.90	0.96		0.90	0.94		0.88	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1767	1900	1900	1826	1767	1870	1811	1900	1856	1900
Adj Flow Rate, veh/h	14	41	27	6	59	24	47	395	17	17	291	29
Peak Hour Factor	0.74	0.74	0.74	0.85	0.85	0.85	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	9	0	0	5	9	2	6	0	3	0
Cap, veh/h	113	321	196	53	440	170	530	887	38	415	821	82
Arrive On Green	0.36	0.36	0.36	0.12	0.12	0.12	0.50	0.50	0.50	1.00	1.00	1.00
Sat Flow, veh/h	215	881	538	58	1205	466	938	1768	76	989	1637	163
Grp Volume(v), veh/h	82	0	0	89	0	0	47	0	412	17	0	320
Grp Sat Flow(s),veh/h/ln	1633	0	0	1729	0	0	938	0	1844	989	0	1800
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	17.2	0.6	0.0	0.0
Cycle Q Clear(g_c), s	3.8	0.0	0.0	5.4	0.0	0.0	3.2	0.0	17.2	17.8	0.0	0.0
Prop In Lane	0.17		0.33	0.07		0.27	1.00		0.04	1.00		0.09
Lane Grp Cap(c), veh/h	631	0	0	663	0	0	530	0	925	415	0	903
V/C Ratio(X)	0.13	0.00	0.00	0.13	0.00	0.00	0.09	0.00	0.45	0.04	0.00	0.35
Avail Cap(c_a), veh/h	631	0	0	663	0	0	530	0	925	415	0	903
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.4	0.0	0.0	35.9	0.0	0.0	15.7	0.0	19.2	2.5	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.4	0.0	0.0	0.3	0.0	1.6	0.2	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.0	0.0	0.0	4.6	0.0	0.0	1.3	0.0	12.4	0.2	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.8	0.0	0.0	36.3	0.0	0.0	16.0	0.0	20.7	2.7	0.0	1.1
LnGrp LOS	C			D			B		C	A		A
Approach Vol, veh/h		82			89			459			337	
Approach Delay, s/veh		25.8			36.3			20.3			1.2	
Approach LOS		C			D			C			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		68.0		52.0		68.0		52.0				
Change Period (Y+Rc), s		7.8		8.2		7.8		8.2				
Max Green Setting (Gmax), s		60.2		43.8		60.2		43.8				
Max Q Clear Time (g_c+I1), s		19.8		7.4		19.2		5.8				
Green Ext Time (p_c), s		4.7		0.5		6.7		0.5				

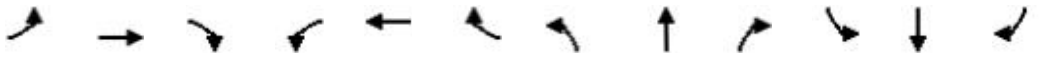
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			15.6									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	20	28	6	379	347
v/c Ratio	0.04	0.05	0.02	0.48	0.46
Control Delay (s/veh)	2.1	12.4	13.0	23.5	12.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.1	12.4	13.0	23.5	12.3
Queue Length 50th (ft)	0	5	0	237	149
Queue Length 95th (ft)	0	16	m0	317	176
Internal Link Dist (ft)	820	418		368	345
Turn Bay Length (ft)			100		
Base Capacity (vph)	479	510	348	782	759
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.04	0.05	0.02	0.48	0.46

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	5	5	10	5	5	330	0	0	280	15
Future Volume (veh/h)	10	0	5	5	10	5	5	330	0	0	280	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.90		0.90	0.90		0.90	0.97		1.00	1.00		0.80
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1693	1900	1900	1693	1900	1870	1159	1900	1856	1900
Adj Flow Rate, veh/h	13	0	7	7	14	7	6	379	0	0	329	18
Peak Hour Factor	0.75	0.75	0.75	0.72	0.72	0.72	0.87	0.87	0.87	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	14	0	0	14	0	2	50	0	3	0
Cap, veh/h	356	20	149	163	299	129	369	786	0	120	721	39
Arrive On Green	0.31	0.00	0.31	0.31	0.31	0.31	0.42	0.42	0.00	0.00	0.14	0.14
Sat Flow, veh/h	815	63	473	279	950	410	1020	1870	0	1020	1717	94
Grp Volume(v), veh/h	20	0	0	28	0	0	6	379	0	0	0	347
Grp Sat Flow(s),veh/h/ln	1352	0	0	1638	0	0	1020	1870	0	1020	0	1811
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.3	8.8	0.0	0.0	0.0	10.6
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.7	0.0	0.0	10.8	8.8	0.0	0.0	0.0	10.6
Prop In Lane	0.65		0.35	0.25		0.25	1.00		0.00	1.00		0.05
Lane Grp Cap(c), veh/h	525	0	0	591	0	0	369	786	0	120	0	760
V/C Ratio(X)	0.04	0.00	0.00	0.05	0.00	0.00	0.02	0.48	0.00	0.00	0.00	0.46
Avail Cap(c_a), veh/h	525	0	0	591	0	0	369	786	0	120	0	760
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	14.2	0.0	0.0	14.3	0.0	0.0	17.3	12.7	0.0	0.0	0.0	19.5
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	0.1	2.1	0.0	0.0	0.0	2.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.4	0.0	0.0	0.5	0.0	0.0	0.1	6.8	0.0	0.0	0.0	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.4	0.0	0.0	14.5	0.0	0.0	17.3	14.8	0.0	0.0	0.0	21.5
LnGrp LOS	B			B			B	B				C
Approach Vol, veh/h		20			28			385			347	
Approach Delay, s/veh		14.4			14.5			14.8			21.5	
Approach LOS		B			B			B			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		33.0		27.0		33.0		27.0				
Change Period (Y+Rc), s		7.8		8.1		7.8		8.1				
Max Green Setting (Gmax), s		25.2		18.9		25.2		18.9				
Max Q Clear Time (g_c+I1), s		12.6		2.7		12.8		2.5				
Green Ext Time (p_c), s		3.0		0.1		3.3		0.0				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			17.8									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	79	116	12	395	17	335
v/c Ratio	0.13	0.19	0.04	0.46	0.05	0.38
Control Delay (s/veh)	21.9	19.7	20.0	20.8	7.1	7.3
Queue Delay	0.0	0.0	0.0	1.2	0.0	0.5
Total Delay (s/veh)	21.9	19.7	20.0	21.9	7.1	7.7
Queue Length 50th (ft)	34	37	4	151	1	29
Queue Length 95th (ft)	57	m72	m13	258	m5	79
Internal Link Dist (ft)	632	423		345		286
Turn Bay Length (ft)			75		75	
Base Capacity (vph)	630	613	339	855	317	871
Starvation Cap Reductn	0	0	0	254	0	215
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.19	0.04	0.66	0.05	0.51

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	40	10	10	55	45	10	315	25	15	285	10
Future Volume (veh/h)	10	40	10	10	55	45	10	315	25	15	285	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.90	0.95		0.90	0.94		0.86	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1767	1870	1796	1826	1856	1781
Adj Flow Rate, veh/h	13	53	13	11	58	47	12	366	29	17	324	11
Peak Hour Factor	0.76	0.76	0.76	0.95	0.95	0.95	0.86	0.86	0.86	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	9	2	7	5	3	8
Cap, veh/h	117	458	106	69	336	254	496	813	64	387	854	29
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.48	0.48	0.48	0.96	0.96	0.96
Sat Flow, veh/h	215	1209	281	96	885	669	925	1688	134	966	1773	60
Grp Volume(v), veh/h	79	0	0	116	0	0	12	0	395	17	0	335
Grp Sat Flow(s),veh/h/ln	1705	0	0	1650	0	0	925	0	1821	966	0	1833
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	17.2	0.7	0.0	1.3
Cycle Q Clear(g_c), s	3.4	0.0	0.0	5.5	0.0	0.0	2.1	0.0	17.2	17.9	0.0	1.3
Prop In Lane	0.16		0.16	0.09		0.41	1.00		0.07	1.00		0.03
Lane Grp Cap(c), veh/h	681	0	0	659	0	0	496	0	877	387	0	883
V/C Ratio(X)	0.12	0.00	0.00	0.18	0.00	0.00	0.02	0.00	0.45	0.04	0.00	0.38
Avail Cap(c_a), veh/h	681	0	0	659	0	0	496	0	877	387	0	883
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.2	0.0	0.0	24.8	0.0	0.0	17.0	0.0	20.6	4.4	0.0	1.2
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.6	0.0	0.0	0.1	0.0	1.7	0.2	0.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	0.0	0.0	4.2	0.0	0.0	0.3	0.0	12.3	0.2	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.5	0.0	0.0	25.4	0.0	0.0	17.1	0.0	22.3	4.6	0.0	2.4
LnGrp LOS	C			C			B		C	A		A
Approach Vol, veh/h		79			116			407			352	
Approach Delay, s/veh		24.5			25.4			22.1			2.5	
Approach LOS		C			C			C			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		66.0		54.0		66.0		54.0				
Change Period (Y+Rc), s		8.2		8.5		8.2		8.5				
Max Green Setting (Gmax), s		57.8		45.5		57.8		45.5				
Max Q Clear Time (g_c+I1), s		19.9		7.5		19.2		5.4				
Green Ext Time (p_c), s		4.8		0.8		5.9		0.5				

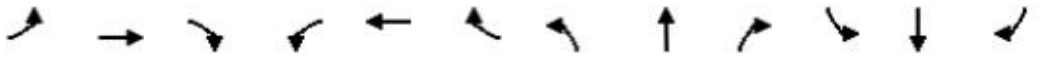
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			15.5									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	66	96	11	406	24	378
v/c Ratio	0.14	0.21	0.02	0.38	0.07	0.35
Control Delay (s/veh)	38.5	26.9	15.2	19.1	3.2	3.7
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.2
Total Delay (s/veh)	38.5	26.9	15.2	19.3	3.2	3.8
Queue Length 50th (ft)	38	54	4	150	1	25
Queue Length 95th (ft)	58	83	m7	154	m4	30
Internal Link Dist (ft)	879	412		286		375
Turn Bay Length (ft)			75		100	
Base Capacity (vph)	457	465	469	1064	356	1065
Starvation Cap Reductn	0	0	0	157	0	172
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.21	0.02	0.45	0.07	0.42

Intersection Summary

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



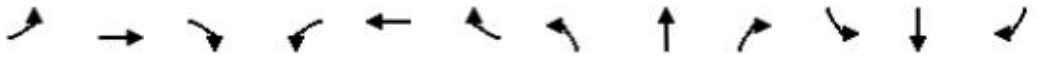
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	30	10	5	35	30	10	355	15	20	300	10
Future Volume (veh/h)	5	30	10	5	35	30	10	355	15	20	300	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.93	0.96		0.93	0.94		0.88	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1781	1900	1900	1826	1900	1900	1870	1900	1678	1856	1900
Adj Flow Rate, veh/h	7	44	15	7	48	41	11	390	16	24	366	12
Peak Hour Factor	0.68	0.68	0.68	0.73	0.73	0.73	0.91	0.91	0.91	0.82	0.82	0.82
Percent Heavy Veh, %	0	8	0	0	5	0	0	2	0	15	3	0
Cap, veh/h	60	323	103	47	241	191	622	1038	43	472	1041	34
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.59	0.59	0.59	1.00	1.00	1.00
Sat Flow, veh/h	97	1166	371	52	873	690	959	1772	73	878	1777	58
Grp Volume(v), veh/h	66	0	0	96	0	0	11	0	406	24	0	378
Grp Sat Flow(s),veh/h/ln	1635	0	0	1615	0	0	959	0	1845	878	0	1835
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	14.0	0.7	0.0	0.0
Cycle Q Clear(g_c), s	3.6	0.0	0.0	5.4	0.0	0.0	0.6	0.0	14.0	14.7	0.0	0.0
Prop In Lane	0.11		0.23	0.07		0.43	1.00		0.04	1.00		0.03
Lane Grp Cap(c), veh/h	485	0	0	479	0	0	622	0	1081	472	0	1075
V/C Ratio(X)	0.14	0.00	0.00	0.20	0.00	0.00	0.02	0.00	0.38	0.05	0.00	0.35
Avail Cap(c_a), veh/h	485	0	0	479	0	0	622	0	1081	472	0	1075
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.7	0.0	0.0	33.4	0.0	0.0	10.4	0.0	13.2	1.5	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.9	0.0	0.0	0.1	0.0	1.0	0.2	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	0.0	0.0	4.2	0.0	0.0	0.2	0.0	10.1	0.1	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.3	0.0	0.0	34.3	0.0	0.0	10.5	0.0	14.2	1.7	0.0	0.9
LnGrp LOS	C			C			B		B	A		A
Approach Vol, veh/h		66			96			417			402	
Approach Delay, s/veh		33.3			34.3			14.1			1.0	
Approach LOS		C			C			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		78.0		42.0		78.0		42.0				
Change Period (Y+Rc), s		7.7		8.8		7.7		8.8				
Max Green Setting (Gmax), s		70.3		33.2		70.3		33.2				
Max Q Clear Time (g_c+I1), s		16.7		7.4		16.0		5.6				
Green Ext Time (p_c), s		6.0		0.5		6.4		0.3				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			12.0									
HCM 6th LOS			B									

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	103	67	426	442
v/c Ratio	0.21	0.14	0.42	0.45
Control Delay (s/veh)	38.7	18.2	9.3	13.6
Queue Delay	179.7	124.3	0.3	21.4
Total Delay (s/veh)	218.4	142.5	9.6	35.0
Queue Length 50th (ft)	69	19	71	268
Queue Length 95th (ft)	106	54	79	311
Internal Link Dist (ft)	989	252	375	264
Turn Bay Length (ft)				
Base Capacity (vph)	481	470	1018	977
Starvation Cap Reductn	0	0	166	532
Spillback Cap Reductn	470	443	90	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	9.36	2.48	0.50	0.99

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	50	10	5	25	30	0	360	20	5	320	20
Future Volume (veh/h)	20	50	10	5	25	30	0	360	20	5	320	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.88	0.94		0.88	1.00		0.89	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1841	1900	1900	1885	1900	1900	1841	1900
Adj Flow Rate, veh/h	26	64	13	6	28	33	0	404	22	6	410	26
Peak Hour Factor	0.78	0.78	0.78	0.90	0.90	0.90	0.89	0.89	0.89	0.78	0.78	0.78
Percent Heavy Veh, %	0	0	0	0	4	0	0	1	0	0	4	0
Cap, veh/h	142	336	64	55	216	231	0	977	53	34	937	59
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.00	0.56	0.56	1.00	1.00	1.00
Sat Flow, veh/h	344	1103	209	74	708	759	0	1758	96	7	1686	106
Grp Volume(v), veh/h	103	0	0	67	0	0	0	0	426	442	0	0
Grp Sat Flow(s),veh/h/ln	1655	0	0	1540	0	0	0	0	1854	1799	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	15.9	0.0	0.0	0.0
Prop In Lane	0.25		0.13	0.09		0.49	0.00		0.05	0.01		0.06
Lane Grp Cap(c), veh/h	542	0	0	502	0	0	0	0	1030	1030	0	0
V/C Ratio(X)	0.19	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.41	0.43	0.00	0.00
Avail Cap(c_a), veh/h	542	0	0	502	0	0	0	0	1030	1030	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	30.7	0.0	0.0	30.3	0.0	0.0	0.0	0.0	15.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.6	0.0	0.0	0.0	0.0	1.2	1.3	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.2	0.0	0.0	2.7	0.0	0.0	0.0	0.0	11.4	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.5	0.0	0.0	30.8	0.0	0.0	0.0	0.0	16.6	1.3	0.0	0.0
LnGrp LOS	C			C					B	A		
Approach Vol, veh/h		103			67			426			442	
Approach Delay, s/veh		31.5			30.8			16.6			1.3	
Approach LOS		C			C			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		75.0		45.0		75.0		45.0				
Change Period (Y+Rc), s		8.3		8.4		8.3		8.4				
Max Green Setting (Gmax), s		66.7		36.6		66.7		36.6				
Max Q Clear Time (g_c+I1), s		2.0		5.7		17.9		7.0				
Green Ext Time (p_c), s		7.1		0.3		6.5		0.4				

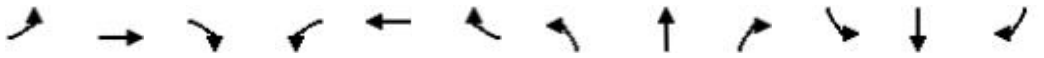
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			12.5									
HCM 6th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	177	516	97	23	564	47	358	32	98	264	109
v/c Ratio	0.41	0.68	0.18	0.08	0.45	0.16	0.79	0.11	0.45	0.59	0.25
Control Delay (s/veh)	7.0	23.4	5.0	9.7	12.1	44.5	77.7	1.8	51.3	69.1	24.7
Queue Delay	0.4	0.0	0.0	0.0	0.0	0.0	54.8	0.0	0.0	55.9	0.0
Total Delay (s/veh)	7.3	23.4	5.0	9.7	12.1	44.5	132.5	1.8	51.3	125.1	24.7
Queue Length 50th (ft)	13	319	18	5	51	32	276	0	70	201	37
Queue Length 95th (ft)	28	452	54	m7	m65	71	#394	5	108	277	70
Internal Link Dist (ft)		1129			389		264			487	
Turn Bay Length (ft)	170		85	110		95		100	225		100
Base Capacity (vph)	433	762	543	289	1262	302	453	289	220	444	432
Starvation Cap Reductn	0	0	0	0	0	0	131	0	0	0	0
Spillback Cap Reductn	54	0	14	0	2	0	16	0	0	201	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.68	0.18	0.08	0.45	0.16	1.11	0.11	0.45	1.09	0.25

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	480	90	20	325	165	45	340	30	85	230	95
Future Volume (veh/h)	165	480	90	20	325	165	45	340	30	85	230	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.86	1.00		0.85	0.91		0.60	0.95		0.76
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1841	1752	1870	1885	1870	1885	1811	1870	1856	1885
Adj Flow Rate, veh/h	177	516	97	23	374	190	47	358	32	98	264	109
Peak Hour Factor	0.93	0.93	0.93	0.87	0.87	0.87	0.95	0.95	0.95	0.87	0.87	0.87
Percent Heavy Veh, %	2	3	4	10	2	1	2	1	6	2	3	1
Cap, veh/h	465	767	555	327	824	405	290	454	220	254	447	291
Arrive On Green	0.11	0.41	0.41	0.08	0.38	0.38	0.08	0.24	0.24	0.03	0.08	0.08
Sat Flow, veh/h	1781	1856	1343	1668	2168	1066	1781	1885	914	1781	1856	1210
Grp Volume(v), veh/h	177	516	97	23	304	260	47	358	32	98	264	109
Grp Sat Flow(s),veh/h/ln	1781	1856	1343	1668	1777	1457	1781	1885	914	1781	1856	1210
Q Serve(g_s), s	6.7	27.1	5.5	0.9	15.4	16.1	2.2	21.4	3.3	4.8	16.5	10.3
Cycle Q Clear(g_c), s	6.7	27.1	5.5	0.9	15.4	16.1	2.2	21.4	3.3	4.8	16.5	10.3
Prop In Lane	1.00		1.00	1.00		0.73	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	465	767	555	327	675	554	290	454	220	254	447	291
V/C Ratio(X)	0.38	0.67	0.17	0.07	0.45	0.47	0.16	0.79	0.15	0.39	0.59	0.37
Avail Cap(c_a), veh/h	465	767	555	327	675	554	290	454	220	254	447	291
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	28.6	22.3	20.4	27.8	28.1	30.0	42.7	35.8	33.6	49.5	46.6
Incr Delay (d2), s/veh	2.4	4.7	0.7	0.4	2.2	2.8	1.2	13.0	1.4	4.4	5.6	3.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.5	18.8	3.3	0.7	11.3	10.1	1.9	17.2	1.5	4.5	13.9	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.8	33.3	22.9	20.8	30.0	30.9	31.2	55.7	37.2	37.9	55.2	50.3
LnGrp LOS	C	C	C	C	C	C	C	E	D	D	E	D
Approach Vol, veh/h		790			587			437			471	
Approach Delay, s/veh		29.2			30.0			51.7			50.4	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	35.0	19.0	51.0	15.0	35.0	15.0	55.0
Change Period (Y+Rc), s	* 5.9	6.1	5.6	* 5.4	* 5.9	6.1	6.0	* 5.4
Max Green Setting (Gmax), s	* 9.1	28.9	13.4	* 46	* 9.1	28.9	9.0	* 50
Max Q Clear Time (g_c+I1), s	4.2	18.5	8.7	18.1	6.8	23.4	2.9	29.1
Green Ext Time (p_c), s	0.0	2.6	0.1	4.0	0.1	1.8	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	38.1
HCM 6th LOS	D

Notes

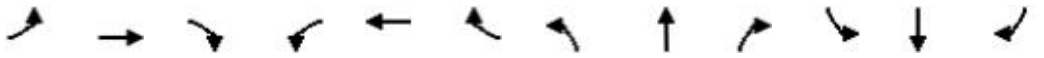
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	49	104	28	85	81	698	27	362
v/c Ratio	0.10	0.20	0.07	0.17	0.20	0.75	0.12	0.39
Control Delay (s/veh)	45.1	20.5	27.2	16.9	11.1	22.5	17.5	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.5
Total Delay (s/veh)	45.1	20.5	27.2	16.9	11.1	25.5	17.5	20.9
Queue Length 50th (ft)	27	27	16	29	19	405	9	122
Queue Length 95th (ft)	56	64	41	70	m32	542	m14	157
Internal Link Dist (ft)	1144			417		487		393
Turn Bay Length (ft)		180	60		60		170	
Base Capacity (vph)	514	533	405	495	412	928	226	929
Starvation Cap Reductn	0	0	0	0	0	138	0	243
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.20	0.07	0.17	0.20	0.88	0.12	0.53

Intersection Summary

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



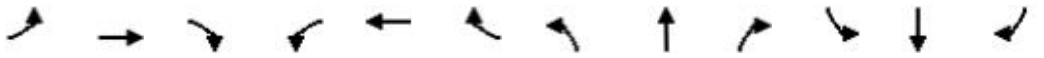
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	30	85	25	40	35	70	550	50	25	305	25
Future Volume (veh/h)	10	30	85	25	40	35	70	550	50	25	305	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.92		0.87	0.91		0.87	0.92		0.86	1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1678	1900	1900	1900	1870	1826	1900	1885	1900	1900	1856	1841
Adj Flow Rate, veh/h	12	37	104	28	45	40	81	640	58	27	335	27
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.86	0.86	0.86	0.91	0.91	0.91
Percent Heavy Veh, %	15	0	0	0	2	5	0	1	0	0	3	4
Cap, veh/h	148	440	451	409	273	243	558	876	79	233	872	70
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.52	0.52	0.52	1.00	1.00	1.00
Sat Flow, veh/h	345	1364	1398	1147	847	753	954	1676	152	759	1669	134
Grp Volume(v), veh/h	49	0	104	28	0	85	81	0	698	27	0	362
Grp Sat Flow(s),veh/h/ln	1709	0	1398	1147	0	1600	954	0	1828	759	0	1803
Q Serve(g_s), s	0.0	0.0	6.5	2.1	0.0	4.6	5.3	0.0	35.4	2.6	0.0	0.0
Cycle Q Clear(g_c), s	2.2	0.0	6.5	4.2	0.0	4.6	5.3	0.0	35.4	38.0	0.0	0.0
Prop In Lane	0.24		1.00	1.00		0.47	1.00		0.08	1.00		0.07
Lane Grp Cap(c), veh/h	588	0	451	409	0	516	558	0	955	233	0	942
V/C Ratio(X)	0.08	0.00	0.23	0.07	0.00	0.16	0.15	0.00	0.73	0.12	0.00	0.38
Avail Cap(c_a), veh/h	588	0	451	409	0	516	558	0	955	233	0	942
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	29.8	29.7	0.0	29.1	15.0	0.0	22.1	10.7	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	1.2	0.3	0.0	0.7	0.5	0.0	4.9	1.0	0.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	0.0	4.3	1.1	0.0	3.4	2.3	0.0	22.9	0.8	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.5	0.0	30.9	30.1	0.0	29.8	15.5	0.0	27.1	11.7	0.0	1.2
LnGrp LOS	C		C	C		C	B		C	B		A
Approach Vol, veh/h		153			113			779			389	
Approach Delay, s/veh		30.2			29.8			25.9			1.9	
Approach LOS		C			C			C			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		72.0		48.0		72.0		48.0				
Change Period (Y+Rc), s		9.3		9.3		9.3		9.3				
Max Green Setting (Gmax), s		62.7		38.7		62.7		38.7				
Max Q Clear Time (g_c+I1), s		40.0		6.6		37.4		8.5				
Green Ext Time (p_c), s		4.7		0.6		11.1		0.7				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			20.1									
HCM 6th LOS			C									

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	86	198	647	462
v/c Ratio	0.23	0.50	0.65	0.59
Control Delay (s/veh)	23.8	30.0	9.2	25.9
Queue Delay	0.0	4.8	0.2	0.3
Total Delay (s/veh)	23.8	34.8	9.4	26.2
Queue Length 50th (ft)	31	90	81	196
Queue Length 95th (ft)	46	118	134	356
Internal Link Dist (ft)	1407	172	393	362
Turn Bay Length (ft)				
Base Capacity (vph)	373	395	999	789
Starvation Cap Reductn	0	134	46	57
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.23	0.76	0.68	0.63

Intersection Summary



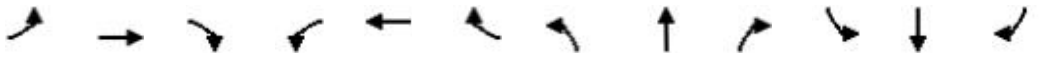
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	20	25	25	55	65	20	505	70	85	310	30
Future Volume (veh/h)	10	20	25	25	55	65	20	505	70	85	310	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.82	0.90		0.82	1.00		0.88	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1841	1856	1870	1900	1900	1870	1856	1900	1856	1900
Adj Flow Rate, veh/h	16	31	39	34	75	89	22	549	76	92	337	33
Peak Hour Factor	0.64	0.64	0.64	0.73	0.73	0.73	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	4	3	2	0	0	2	3	0	3	0
Cap, veh/h	89	164	180	80	165	172	50	913	124	175	621	58
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	207	634	698	175	638	664	32	1533	208	233	1042	98
Grp Volume(v), veh/h	86	0	0	198	0	0	647	0	0	462	0	0
Grp Sat Flow(s),veh/h/ln	1539	0	0	1477	0	0	1773	0	0	1372	0	0
Q Serve(g_s), s	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
Cycle Q Clear(g_c), s	5.1	0.0	0.0	13.3	0.0	0.0	27.2	0.0	0.0	27.7	0.0	0.0
Prop In Lane	0.19		0.45	0.17		0.45	0.03		0.12	0.20		0.07
Lane Grp Cap(c), veh/h	433	0	0	417	0	0	1087	0	0	854	0	0
V/C Ratio(X)	0.20	0.00	0.00	0.48	0.00	0.00	0.60	0.00	0.00	0.54	0.00	0.00
Avail Cap(c_a), veh/h	433	0	0	417	0	0	1087	0	0	854	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	34.9	0.0	0.0	37.8	0.0	0.0	15.3	0.0	0.0	14.4	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	3.8	0.0	0.0	2.4	0.0	0.0	2.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.8	0.0	0.0	9.3	0.0	0.0	17.2	0.0	0.0	12.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.9	0.0	0.0	41.7	0.0	0.0	17.7	0.0	0.0	16.8	0.0	0.0
LnGrp LOS	D			D			B			B		
Approach Vol, veh/h		86			198			647			462	
Approach Delay, s/veh		35.9			41.7			17.7			16.8	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0				
Change Period (Y+Rc), s		8.5		9.0		8.5		9.0				
Max Green Setting (Gmax), s		71.5		31.0		71.5		31.0				
Max Q Clear Time (g_c+I1), s		29.7		15.3		29.2		7.1				
Green Ext Time (p_c), s		7.9		1.1		11.6		0.5				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			21.9									
HCM 6th LOS			C									

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	5	64	587	538
v/c Ratio	0.04	0.48	0.37	0.35
Control Delay (s/veh)	48.2	63.5	2.9	3.0
Queue Delay	0.0	0.0	0.3	0.6
Total Delay (s/veh)	48.2	63.5	3.2	3.6
Queue Length 50th (ft)	4	48	34	20
Queue Length 95th (ft)	16	70	144	146
Internal Link Dist (ft)	99	147	362	308
Turn Bay Length (ft)				
Base Capacity (vph)	277	268	1573	1517
Starvation Cap Reductn	0	9	426	578
Spillback Cap Reductn	0	0	176	68
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.25	0.51	0.57

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	5	10	0	35	0	530	5	20	465	5
Future Volume (veh/h)	0	0	5	10	0	35	0	530	5	20	465	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	0.91		0.89	1.00		0.91	0.99		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1796	1900	1900	1900	1870	1900	1900	1870	1900
Adj Flow Rate, veh/h	0	0	5	14	0	50	0	582	5	22	511	5
Peak Hour Factor	1.00	1.00	1.00	0.70	0.70	0.70	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	7	0	0	0	2	0	0	2	0
Cap, veh/h	0	0	165	56	16	128	0	1469	13	64	1393	13
Arrive On Green	0.00	0.00	0.11	0.11	0.00	0.11	0.00	0.79	0.79	1.00	1.00	1.00
Sat Flow, veh/h	0	0	1467	175	142	1134	0	1850	16	42	1754	17
Grp Volume(v), veh/h	0	0	5	64	0	0	0	0	587	538	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1467	1451	0	0	0	0	1866	1812	0	0
Q Serve(g_s), s	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	11.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.4	4.7	0.0	0.0	0.0	0.0	11.3	0.0	0.0	0.0
Prop In Lane	0.00		1.00	0.22		0.78	0.00		0.01	0.04		0.01
Lane Grp Cap(c), veh/h	0	0	165	200	0	0	0	0	1481	1470	0	0
V/C Ratio(X)	0.00	0.00	0.03	0.32	0.00	0.00	0.00	0.00	0.40	0.37	0.00	0.00
Avail Cap(c_a), veh/h	0	0	269	299	0	0	0	0	1481	1470	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.72	0.66	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	47.4	49.3	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.9	0.0	0.0	0.0	0.0	0.6	0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.2	3.3	0.0	0.0	0.0	0.0	6.6	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	47.5	50.2	0.0	0.0	0.0	0.0	4.3	0.5	0.0	0.0
LnGrp LOS			D	D					A	A		
Approach Vol, veh/h		5			64			587			538	
Approach Delay, s/veh		47.5			50.2			4.3			0.5	
Approach LOS		D			D			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		100.5		19.5		100.5		19.5				
Change Period (Y+Rc), s		5.2		6.0		5.2		6.0				
Max Green Setting (Gmax), s		86.8		22.0		86.8		22.0				
Max Q Clear Time (g_c+I1), s		13.3		2.4		2.0		6.7				
Green Ext Time (p_c), s		10.6		0.0		9.6		0.2				

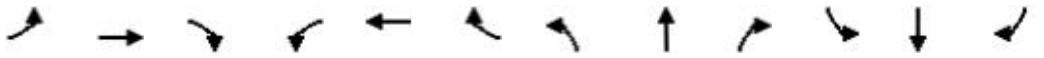
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			5.2									
HCM 6th LOS			A									



Lane Group	EBL	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	161	405	553	131	466	28	78	394	72
v/c Ratio	0.45	0.56	0.62	0.37	0.84	0.06	0.28	0.69	0.14
Control Delay (s/veh)	33.2	28.1	31.5	19.5	47.9	0.2	11.9	22.6	0.9
Queue Delay	0.0	0.6	4.5	0.0	15.4	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.2	28.7	36.0	19.5	63.3	0.2	11.9	22.6	0.9
Queue Length 50th (ft)	59	136	116	40	264	0	19	108	0
Queue Length 95th (ft)	m97	230	211	79	#485	1	33	133	4
Internal Link Dist (ft)		333	203		308			643	
Turn Bay Length (ft)				200		150	200		
Base Capacity (vph)	355	728	895	350	552	506	282	568	527
Starvation Cap Reductn	0	97	263	0	81	0	0	0	0
Spillback Cap Reductn	0	40	36	0	0	3	0	0	1
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.64	0.88	0.37	0.99	0.06	0.28	0.69	0.14

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	235	130	0	420	100	115	410	25	70	355	65
Future Volume (veh/h)	145	235	130	0	420	100	115	410	25	70	355	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.80	0.97		0.87	0.98		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1856	1900	0	1885	1870	1885	1870	1900	1826	1870	1885
Adj Flow Rate, veh/h	161	261	144	0	447	106	131	466	28	78	394	72
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.88	0.88	0.88	0.90	0.90	0.90
Percent Heavy Veh, %	1	3	0	0	1	2	1	2	0	5	2	1
Cap, veh/h	243	453	250	0	758	176	365	555	413	270	570	423
Arrive On Green	0.10	0.43	0.43	0.00	0.09	0.09	0.03	0.10	0.10	0.19	0.61	0.61
Sat Flow, veh/h	1795	1062	586	0	2833	637	1795	1870	1394	1739	1870	1388
Grp Volume(v), veh/h	161	0	405	0	289	264	131	466	28	78	394	72
Grp Sat Flow(s),veh/h/ln	1795	0	1648	0	1791	1584	1795	1870	1394	1739	1870	1388
Q Serve(g_s), s	10.6	0.0	22.4	0.0	18.6	19.2	5.9	29.4	2.2	3.2	17.0	2.7
Cycle Q Clear(g_c), s	10.6	0.0	22.4	0.0	18.6	19.2	5.9	29.4	2.2	3.2	17.0	2.7
Prop In Lane	1.00		0.36	0.00		0.40	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	703	0	495	438	365	555	413	270	570	423
V/C Ratio(X)	0.00	0.00	0.58	0.00	0.58	0.60	0.36	0.84	0.07	0.29	0.69	0.17
Avail Cap(c_a), veh/h	0	0	703	0	495	438	365	555	413	270	570	423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	26.2	0.0	47.9	48.2	27.5	51.3	39.1	24.3	19.6	16.8
Incr Delay (d2), s/veh	0.0	0.0	3.4	0.0	5.0	6.0	2.7	14.2	0.3	2.7	6.7	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	14.2	0.0	14.7	13.8	5.3	23.8	1.4	2.7	10.4	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	29.6	0.0	52.9	54.2	30.2	65.5	39.4	26.9	26.3	17.7
LnGrp LOS			C		D	D	C	E	D	C	C	B
Approach Vol, veh/h		566			553			625			544	
Approach Delay, s/veh		21.2			53.5			57.0			25.3	
Approach LOS		C			D			E			C	

Timer - Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	17.0	46.0	18.0	39.0	18.0	45.0		57.0
Change Period (Y+Rc), s	6.5	9.4	5.8	5.8	6.6	9.4		5.8
Max Green Setting (Gmax), s	10.5	36.6	12.2	33.2	11.4	35.6		51.2
Max Q Clear Time (g_c+I1), s	7.9	19.0	12.6	21.2	5.2	31.4		24.4
Green Ext Time (p_c), s	0.1	4.8	0.0	2.7	0.1	1.8		2.8

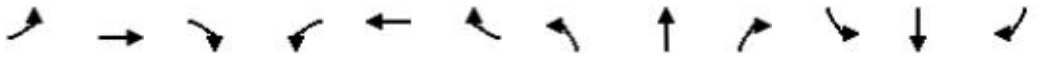
Intersection Summary	
HCM 6th Ctrl Delay, s/veh	39.7
HCM 6th LOS	D



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	17	84	94	130	96	484	66	671
v/c Ratio	0.05	0.21	0.20	0.31	0.25	0.61	0.21	0.49
Control Delay (s/veh)	20.0	8.7	27.5	40.3	12.9	30.7	20.3	43.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay (s/veh)	20.0	8.7	27.5	40.3	12.9	30.8	20.3	43.7
Queue Length 50th (ft)	6	12	48	82	26	239	17	189
Queue Length 95th (ft)	m14	23	82	132	m39	m322	42	227
Internal Link Dist (ft)		1162		364		643		402
Turn Bay Length (ft)	40		140		75		150	
Base Capacity (vph)	353	393	472	413	380	789	321	1370
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	19	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.21	0.20	0.31	0.25	0.63	0.21	0.49

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	15	60	80	100	10	90	405	50	50	425	85
Future Volume (veh/h)	15	15	60	80	100	10	90	405	50	50	425	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.94	0.96		0.89	0.98		0.90	1.00		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1500	1900	1841	1900	1900	1781	1870	1885	1826	1870	1856	1796
Adj Flow Rate, veh/h	17	17	67	94	118	12	96	431	53	66	559	112
Peak Hour Factor	0.89	0.89	0.89	0.85	0.85	0.85	0.94	0.94	0.94	0.76	0.76	0.76
Percent Heavy Veh, %	27	0	4	0	0	8	2	1	5	2	3	7
Cap, veh/h	345	71	279	453	372	38	443	707	87	322	1177	234
Arrive On Green	0.09	0.22	0.22	0.09	0.22	0.22	0.07	0.44	0.44	0.08	0.82	0.82
Sat Flow, veh/h	1428	319	1255	1810	1675	170	1781	1624	200	1781	2866	571
Grp Volume(v), veh/h	17	0	84	94	0	130	96	0	484	66	343	328
Grp Sat Flow(s),veh/h/ln	1428	0	1574	1810	0	1846	1781	0	1823	1781	1763	1674
Q Serve(g_s), s	0.0	0.0	5.3	0.0	0.0	7.1	0.0	0.0	24.5	0.0	6.8	6.9
Cycle Q Clear(g_c), s	0.0	0.0	5.3	0.0	0.0	7.1	0.0	0.0	24.5	0.0	6.8	6.9
Prop In Lane	1.00		0.80	1.00		0.09	1.00		0.11	1.00		0.34
Lane Grp Cap(c), veh/h	345	0	349	453	0	410	443	0	794	322	724	687
V/C Ratio(X)	0.05	0.00	0.24	0.21	0.00	0.32	0.22	0.00	0.61	0.20	0.47	0.48
Avail Cap(c_a), veh/h	345	0	349	453	0	410	443	0	794	322	724	687
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	0.0	38.5	34.6	0.0	39.2	23.2	0.0	26.1	34.9	6.9	7.0
Incr Delay (d2), s/veh	0.3	0.0	1.6	1.0	0.0	2.0	1.1	0.0	3.5	1.4	2.2	2.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.7	0.0	4.0	4.2	0.0	6.3	3.6	0.0	17.0	3.0	4.2	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.3	0.0	40.1	35.7	0.0	41.2	24.4	0.0	29.6	36.4	9.2	9.3
LnGrp LOS	C		D	D		D	C		C	D	A	A
Approach Vol, veh/h		101			224			580			737	
Approach Delay, s/veh		39.1			38.9			28.7			11.7	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	58.0	15.0	33.0	11.3	61.0	15.0	33.0
Change Period (Y+Rc), s	6.3	8.6	4.0	6.3	6.3	* 8.6	4.0	6.3
Max Green Setting (Gmax), s	7.7	49.4	11.0	26.7	5.0	* 52	11.0	26.7
Max Q Clear Time (g_c+I1), s	2.0	8.9	2.0	9.1	2.0	26.5	2.0	7.3
Green Ext Time (p_c), s	0.0	10.3	0.0	0.6	0.0	6.5	0.1	0.4

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	23.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	WBR	NBT	SBT
Lane Group Flow (vph)	10	453	737
v/c Ratio	0.02	0.34	0.56
Control Delay (s/veh)	0.0	9.5	17.8
Queue Delay	0.0	3.0	44.3
Total Delay (s/veh)	0.0	12.5	62.1
Queue Length 50th (ft)	0	209	443
Queue Length 95th (ft)	0	310	503
Internal Link Dist (ft)		402	352
Turn Bay Length (ft)			
Base Capacity (vph)	609	1316	1308
Starvation Cap Reductn	0	735	626
Spillback Cap Reductn	41	200	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.02	0.78	1.08

Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	5	420	10	5	570
Future Volume (veh/h)	0	5	420	10	5	570
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.93	0.99	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1900	1900	1856
Adj Flow Rate, veh/h	0	10	442	11	6	731
Peak Hour Factor	0.50	0.50	0.95	0.95	0.78	0.78
Percent Heavy Veh, %	0	0	2	0	0	3
Cap, veh/h	354	315	1290	32	33	1314
Arrive On Green	0.00	0.20	0.71	0.71	0.23	0.23
Sat Flow, veh/h	1810	1610	1813	45	4	1847
Grp Volume(v), veh/h	0	10	0	453	737	0
Grp Sat Flow(s),veh/h/ln	1810	1610	0	1858	1851	0
Q Serve(g_s), s	0.0	0.6	0.0	11.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.6	0.0	11.2	42.0	0.0
Prop In Lane	1.00	1.00		0.02	0.01	
Lane Grp Cap(c), veh/h	354	315	0	1323	1348	0
V/C Ratio(X)	0.00	0.03	0.00	0.34	0.55	0.00
Avail Cap(c_a), veh/h	354	315	0	1323	1348	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	39.0	0.0	6.6	29.3	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.7	1.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.5	0.0	7.9	29.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	39.2	0.0	7.3	30.9	0.0
LnGrp LOS		D		A	C	
Approach Vol, veh/h	10		453			737
Approach Delay, s/veh	39.2		7.3			30.9
Approach LOS	D		A			C

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		91.0		29.0		91.0
Change Period (Y+Rc), s		5.6		5.5		5.6
Max Green Setting (Gmax), s		85.4		23.5		85.4
Max Q Clear Time (g_c+I1), s		44.0		2.6		13.2
Green Ext Time (p_c), s		13.6		0.0		7.3

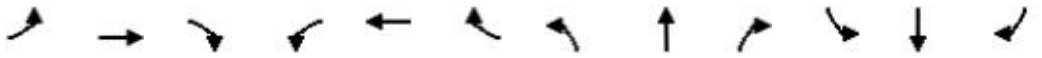
Intersection Summary	
HCM 6th Ctrl Delay, s/veh	22.1
HCM 6th LOS	C



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	35	135	16	441	34	842
v/c Ratio	0.11	0.39	0.06	0.36	0.06	0.72
Control Delay (s/veh)	22.6	45.6	23.1	26.9	7.3	11.7
Queue Delay	0.0	0.0	0.0	2.2	0.0	5.6
Total Delay (s/veh)	22.6	45.6	23.1	29.0	7.3	17.2
Queue Length 50th (ft)	9	92	9	265	7	299
Queue Length 95th (ft)	26	84	m29	372	m9	318
Internal Link Dist (ft)	365	478		352		685
Turn Bay Length (ft)			100		150	
Base Capacity (vph)	322	346	280	1212	543	1173
Starvation Cap Reductn	0	0	0	610	0	136
Spillback Cap Reductn	3	0	0	0	0	270
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.39	0.06	0.73	0.06	0.93

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	5	15	5	50	15	15	400	10	25	565	50
Future Volume (veh/h)	5	5	15	5	50	15	15	400	10	25	565	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.91	0.94		0.91	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1870	1900	1900	1870	1900	1900	1856	1707
Adj Flow Rate, veh/h	7	7	21	10	96	29	16	430	11	34	774	68
Peak Hour Factor	0.70	0.70	0.70	0.52	0.52	0.52	0.93	0.93	0.93	0.73	0.73	0.73
Percent Heavy Veh, %	0	0	0	0	2	0	0	2	0	0	3	13
Cap, veh/h	77	81	184	43	262	75	298	1189	30	587	1096	96
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	206	407	919	55	1309	373	664	1812	46	960	1672	147
Grp Volume(v), veh/h	35	0	0	135	0	0	16	0	441	34	0	842
Grp Sat Flow(s),veh/h/ln	1531	0	0	1737	0	0	664	0	1859	960	0	1818
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	12.8	2.0	0.0	35.6
Cycle Q Clear(g_c), s	2.1	0.0	0.0	8.0	0.0	0.0	37.5	0.0	12.8	14.8	0.0	35.6
Prop In Lane	0.20		0.60	0.07		0.21	1.00		0.02	1.00		0.08
Lane Grp Cap(c), veh/h	342	0	0	380	0	0	298	0	1219	587	0	1193
V/C Ratio(X)	0.10	0.00	0.00	0.36	0.00	0.00	0.05	0.00	0.36	0.06	0.00	0.71
Avail Cap(c_a), veh/h	342	0	0	380	0	0	298	0	1219	587	0	1193
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.3	0.0	0.0	41.6	0.0	0.0	25.3	0.0	9.3	12.7	0.0	13.2
Incr Delay (d2), s/veh	0.6	0.0	0.0	2.6	0.0	0.0	0.3	0.0	0.8	0.2	0.0	3.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	0.0	6.8	0.0	0.0	0.6	0.0	9.2	0.8	0.0	21.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.8	0.0	0.0	44.2	0.0	0.0	25.6	0.0	10.2	12.9	0.0	16.8
LnGrp LOS	D			D			C		B	B		B
Approach Vol, veh/h		35			135			457			876	
Approach Delay, s/veh		39.8			44.2			10.7			16.6	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		87.0		33.0		87.0		33.0				
Change Period (Y+Rc), s		* 8.3		9.0		* 8.3		9.0				
Max Green Setting (Gmax), s		* 79		24.0		* 79		24.0				
Max Q Clear Time (g_c+I1), s		37.6		10.0		39.5		4.1				
Green Ext Time (p_c), s		17.4		0.6		6.8		0.1				

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		17.8
HCM 6th LOS		B

Notes

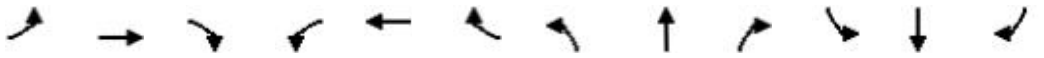
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	63	291	159	93	348	26	701	91
v/c Ratio	0.21	0.90	0.37	0.38	0.35	0.07	0.92	0.10
Control Delay (s/veh)	41.1	61.2	39.2	13.9	10.1	12.7	47.1	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	41.1	61.2	39.2	13.9	10.1	12.7	47.1	4.9
Queue Length 50th (ft)	26	120	99	24	88	11	527	11
Queue Length 95th (ft)	m37	m#282	109	33	93	24	552	25
Internal Link Dist (ft)		429	286		685		737	
Turn Bay Length (ft)				145		110		
Base Capacity (vph)	298	323	428	246	1001	367	765	922
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.90	0.37	0.38	0.35	0.07	0.92	0.10

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	30	200	5	85	10	80	285	15	20	540	70
Future Volume (veh/h)	50	30	200	5	85	10	80	285	15	20	540	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.96	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1011	1752	1900	1900	863	1455	1752	863	1159	1159	1900
Adj Flow Rate, veh/h	63	38	253	8	135	16	93	331	17	26	701	91
Peak Hour Factor	0.79	0.79	0.79	0.63	0.63	0.63	0.86	0.86	0.86	0.77	0.77	0.77
Percent Heavy Veh, %	0	60	10	0	0	70	30	10	70	50	50	0
Cap, veh/h	128	27	179	32	260	29	60	995	51	382	700	921
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	1256	107	713	0	1037	116	533	1646	85	639	1159	1524
Grp Volume(v), veh/h	63	0	291	159	0	0	93	0	348	26	701	91
Grp Sat Flow(s),veh/h/ln	1256	0	820	1153	0	0	533	0	1731	639	1159	1524
Q Serve(g_s), s	0.0	0.0	30.1	0.0	0.0	0.0	0.0	0.0	12.0	2.5	72.5	3.0
Cycle Q Clear(g_c), s	27.0	0.0	30.1	30.1	0.0	0.0	72.5	0.0	12.0	14.5	72.5	3.0
Prop In Lane	1.00		0.87	0.05		0.10	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	128	0	206	321	0	0	60	0	1046	382	700	921
V/C Ratio(X)	0.49	0.00	1.42	0.50	0.00	0.00	1.55	0.00	0.33	0.07	1.00	0.10
Avail Cap(c_a), veh/h	128	0	206	321	0	0	60	0	1046	382	700	921
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.8	0.0	45.0	37.4	0.0	0.0	60.0	0.0	11.8	15.4	23.7	10.0
Incr Delay (d2), s/veh	12.8	0.0	213.2	5.4	0.0	0.0	314.1	0.0	0.9	0.3	34.3	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.0	0.0	29.5	7.7	0.0	0.0	12.7	0.0	8.4	0.7	33.6	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.6	0.0	258.1	42.8	0.0	0.0	374.1	0.0	12.6	15.7	58.0	10.2
LnGrp LOS	E		F	D			F		B	B	F	B
Approach Vol, veh/h		354			159			441			818	
Approach Delay, s/veh		222.3			42.8			88.9			51.4	
Approach LOS		F			D			F			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		81.0		39.0		81.0		39.0				
Change Period (Y+Rc), s		8.5		8.9		8.5		8.9				
Max Green Setting (Gmax), s		72.5		30.1		72.5		30.1				
Max Q Clear Time (g_c+I1), s		74.5		32.1		74.5		32.1				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			94.1									
HCM 6th LOS			F									



Lane Group	NBL	SET	NWT
Lane Group Flow (vph)	364	337	744
v/c Ratio	0.24	0.16	0.37
Control Delay (s/veh)	9.4	10.1	23.2
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	9.4	10.1	23.2
Queue Length 50th (ft)	11	48	220
Queue Length 95th (ft)	13	60	230
Internal Link Dist (ft)	94	395	737
Turn Bay Length (ft)			
Base Capacity (vph)	1507	2049	1990
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.24	0.16	0.37

Intersection Summary



Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	315	20	280	0	0	580
Future Volume (vph)	315	20	280	0	0	580
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7		8.2			8.2
Lane Util. Factor	0.94		0.95			0.95
Frt	0.99		1.00			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	4963		3574			3471
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	4963		3574			3471
Peak-hour factor, PHF	0.92	0.92	0.83	0.83	0.78	0.78
Adj. Flow (vph)	342	22	337	0	0	744
RTOR Reduction (vph)	6	0	0	0	0	0
Lane Group Flow (vph)	358	0	337	0	0	744
Heavy Vehicles (%)	2%	5%	1%	0%	0%	4%
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	36.3		68.8			68.8
Effective Green, g (s)	36.3		68.8			68.8
Actuated g/C Ratio	0.30		0.57			0.57
Clearance Time (s)	6.7		8.2			8.2
Lane Grp Cap (vph)	1501		2049			1990
v/s Ratio Prot	c0.07		0.09			c0.21
v/s Ratio Perm						
v/c Ratio	0.24		0.16			0.37
Uniform Delay, d1	31.5		12.1			13.9
Progression Factor	0.29		0.82			1.62
Incremental Delay, d2	0.4		0.2			0.5
Delay (s)	9.6		10.0			23.0
Level of Service	A		B			C
Approach Delay (s/veh)	9.6		10.0			23.0
Approach LOS	A		B			C

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.9
Intersection Capacity Utilization	35.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

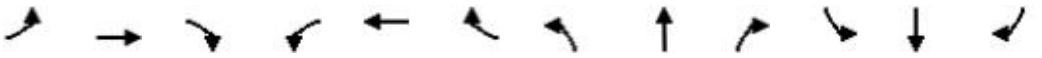
Build I Results

(Geo-Only): PM



Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	1077	919	505	132	643
v/c Ratio	0.47	0.59	0.35	0.23	0.60
Control Delay (s/veh)	26.9	44.8	45.3	34.8	44.9
Queue Delay	0.0	1.4	0.6	0.0	4.8
Total Delay (s/veh)	26.9	46.2	45.8	34.8	49.8
Queue Length 50th (ft)	189	335	203	72	211
Queue Length 95th (ft)	238	407	255	139	293
Internal Link Dist (ft)	687	429	482		263
Turn Bay Length (ft)				215	
Base Capacity (vph)	2294	1564	1429	563	1065
Starvation Cap Reductn	0	420	0	0	345
Spillback Cap Reductn	0	155	537	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.47	0.80	0.57	0.23	0.89

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	915	75	0	770	75	0	460	120	60	425	100
Future Volume (veh/h)	0	915	75	0	770	75	0	460	120	60	425	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.90	0.99		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1841	1900	1870	1885	1900	1885	1870	1900	1870	1870
Adj Flow Rate, veh/h	0	995	82	0	837	82	0	505	132	66	467	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	4	0	2	1	0	1	2	0	2	2
Cap, veh/h	0	2198	181	0	1471	144	0	1433	573	126	875	211
Arrive On Green	0.00	0.45	0.45	0.00	0.30	0.30	0.00	0.40	0.40	0.13	0.13	0.13
Sat Flow, veh/h	0	5038	400	0	3350	319	0	3676	1432	225	2186	527
Grp Volume(v), veh/h	0	706	371	0	457	462	0	505	132	322	0	321
Grp Sat Flow(s),veh/h/ln	0	1729	1809	0	1777	1798	0	1791	1432	1398	0	1541
Q Serve(g_s), s	0.0	16.9	17.0	0.0	26.0	26.0	0.0	11.8	7.3	15.1	0.0	23.3
Cycle Q Clear(g_c), s	0.0	16.9	17.0	0.0	26.0	26.0	0.0	11.8	7.3	26.9	0.0	23.3
Prop In Lane	0.00		0.22	0.00		0.18	0.00		1.00	0.21		0.34
Lane Grp Cap(c), veh/h	0	1562	817	0	803	812	0	1433	573	595	0	616
V/C Ratio(X)	0.00	0.45	0.45	0.00	0.57	0.57	0.00	0.35	0.23	0.54	0.00	0.52
Avail Cap(c_a), veh/h	0	1562	817	0	803	812	0	1433	573	595	0	616
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	22.7	22.7	0.0	32.0	32.0	0.0	25.1	23.8	42.7	0.0	41.4
Incr Delay (d2), s/veh	0.0	0.9	1.8	0.0	2.9	2.9	0.0	0.7	0.9	3.5	0.0	3.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	11.3	12.0	0.0	18.1	18.3	0.0	9.0	4.8	15.7	0.0	15.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	23.6	24.5	0.0	34.9	34.9	0.0	25.8	24.7	46.2	0.0	44.5
LnGrp LOS		C	C		C	C		C	C	D		D
Approach Vol, veh/h		1077			919			637			643	
Approach Delay, s/veh		23.9			34.9			25.6			45.3	
Approach LOS		C			C			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		63.0		57.0		63.0		57.0				
Change Period (Y+Rc), s		8.8		9.0		8.8		9.0				
Max Green Setting (Gmax), s		54.2		48.0		54.2		48.0				
Max Q Clear Time (g_c+I1), s		28.0		28.9		19.0		13.8				
Green Ext Time (p_c), s		11.8		4.5		16.2		4.5				

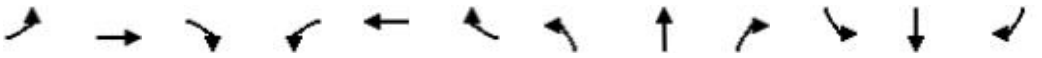
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			31.5									
HCM 6th LOS			C									



Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	132	350	94	17	598	140	591
v/c Ratio	0.39	0.72	0.20	0.08	1.00	0.40	0.65
Control Delay (s/veh)	32.2	26.7	1.2	36.7	85.8	30.2	29.7
Queue Delay	1.0	25.8	0.0	0.0	37.7	0.0	0.5
Total Delay (s/veh)	33.2	52.5	1.2	36.7	123.5	30.2	30.2
Queue Length 50th (ft)	57	86	0	12	485	66	284
Queue Length 95th (ft)	96	m316	m3	m32	#661	130	329
Internal Link Dist (ft)	703	436			263		452
Turn Bay Length (ft)						150	
Base Capacity (vph)	337	486	470	224	598	349	911
Starvation Cap Reductn	0	0	0	0	238	0	84
Spillback Cap Reductn	71	139	0	0	0	0	5
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	1.01	0.20	0.08	1.66	0.40	0.71

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	110	15	60	255	85	15	445	70	130	505	45
Future Volume (vph)	0	110	15	60	255	85	15	445	70	130	505	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.9			8.9	8.9	5.4	5.4		5.1	8.4	
Lane Util. Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes		0.98			1.00	0.74	1.00	0.96		1.00	0.96	
Flpb, ped/bikes		1.00			0.99	1.00	0.83	1.00		1.00	1.00	
Frt		0.98			1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected		1.00			0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1661			1835	1191	1500	1755		1787	1771	
Flt Permitted		1.00			0.73	1.00	0.40	1.00		0.17	1.00	
Satd. Flow (perm)		1661			1345	1191	628	1755		324	1771	
Peak-hour factor, PHF	0.95	0.95	0.95	0.90	0.90	0.90	0.86	0.86	0.86	0.93	0.93	0.93
Adj. Flow (vph)	0	116	16	67	283	94	17	517	81	140	543	48
RTOR Reduction (vph)	0	4	0	0	0	63	0	4	0	0	3	0
Lane Group Flow (vph)	0	128	0	0	350	31	17	594	0	140	588	0
Confl. Peds. (#/hr)	60		72	72		60	110		81	81		110
Confl. Bikes (#/hr)			1	1			2					2
Heavy Vehicles (%)	0%	11%	6%	2%	1%	1%	0%	2%	0%	1%	2%	0%
Turn Type		NA		pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		8		7	4			6		5	2	
Permitted Phases	8			4		4	6			2		
Actuated Green, G (s)		31.1			39.1	39.1	52.6	52.6		63.6	63.6	
Effective Green, g (s)		31.1			39.1	39.1	52.6	52.6		63.6	63.6	
Actuated g/C Ratio		0.26			0.33	0.33	0.44	0.44		0.53	0.53	
Clearance Time (s)		5.9			8.9	8.9	5.4	5.4		5.1	8.4	
Lane Grp Cap (vph)		430			458	388	275	769		280	938	
v/s Ratio Prot		0.08			c0.03			c0.34		0.04	c0.33	
v/s Ratio Perm					c0.22	0.03	0.03			0.23		
v/c Ratio		0.30			0.76	0.08	0.06	0.77		0.50	0.63	
Uniform Delay, d1		35.7			36.3	28.0	19.5	28.6		19.9	19.9	
Progression Factor		0.71			0.57	0.06	1.27	1.36		1.36	1.26	
Incremental Delay, d2		1.7			11.2	0.4	0.4	7.0		5.0	2.5	
Delay (s)		27.2			32.0	2.0	25.2	45.9		32.2	27.6	
Level of Service		C			C	A	C	D		C	C	
Approach Delay (s/veh)		27.2			25.6			45.4			28.5	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	22.4
Intersection Capacity Utilization	93.7%	ICU Level of Service	F
Analysis Period (min)	15		

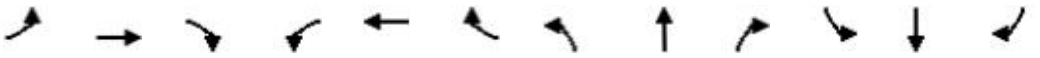
c Critical Lane Group



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	250	38	65	510	16	676
v/c Ratio	0.58	0.09	0.20	0.48	0.04	0.62
Control Delay (s/veh)	70.2	25.2	4.4	4.4	6.7	8.0
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.1
Total Delay (s/veh)	70.2	25.2	4.4	4.7	6.7	8.1
Queue Length 50th (ft)	175	15	7	50	1	64
Queue Length 95th (ft)	235	37	m8	m53	m4	122
Internal Link Dist (ft)	730	415		452		358
Turn Bay Length (ft)			150		100	
Base Capacity (vph)	433	426	329	1056	385	1098
Starvation Cap Reductn	0	0	0	133	0	25
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.09	0.20	0.55	0.04	0.63

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	90	100	5	15	10	60	430	40	15	595	20
Future Volume (veh/h)	15	90	100	5	15	10	60	430	40	15	595	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.92		0.88	1.00		0.88	0.96		0.87	1.00		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1870	1900	1900	1870	1900
Adj Flow Rate, veh/h	18	110	122	6	19	12	65	467	43	16	654	22
Peak Hour Factor	0.82	0.82	0.82	0.80	0.80	0.80	0.92	0.92	0.92	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	2	0	0	2	0
Cap, veh/h	48	199	204	82	242	139	504	995	92	459	1070	36
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.60	0.60	0.60	1.00	1.00	1.00
Sat Flow, veh/h	60	762	783	180	927	531	741	1663	153	904	1788	60
Grp Volume(v), veh/h	250	0	0	37	0	0	65	0	510	16	0	676
Grp Sat Flow(s),veh/h/ln	1605	0	0	1638	0	0	741	0	1816	904	0	1849
Q Serve(g_s), s	1.3	0.0	0.0	0.0	0.0	0.0	4.6	0.0	18.8	0.6	0.0	0.0
Cycle Q Clear(g_c), s	16.1	0.0	0.0	2.0	0.0	0.0	4.6	0.0	18.8	19.4	0.0	0.0
Prop In Lane	0.07		0.49	0.16		0.32	1.00		0.08	1.00		0.03
Lane Grp Cap(c), veh/h	451	0	0	462	0	0	504	0	1087	459	0	1106
V/C Ratio(X)	0.55	0.00	0.00	0.08	0.00	0.00	0.13	0.00	0.47	0.03	0.00	0.61
Avail Cap(c_a), veh/h	451	0	0	462	0	0	504	0	1087	459	0	1106
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.7	0.0	0.0	33.5	0.0	0.0	10.6	0.0	13.5	2.5	0.0	0.0
Incr Delay (d2), s/veh	4.9	0.0	0.0	0.3	0.0	0.0	0.5	0.0	1.5	0.1	0.0	2.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.5	0.0	0.0	1.6	0.0	0.0	1.5	0.0	12.7	0.2	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.6	0.0	0.0	33.8	0.0	0.0	11.1	0.0	14.9	2.7	0.0	2.5
LnGrp LOS	D			C			B		B	A		A
Approach Vol, veh/h		250			37			575			692	
Approach Delay, s/veh		43.6			33.8			14.5			2.5	
Approach LOS		D			C			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0				
Change Period (Y+Rc), s		8.2		8.7		8.2		8.7				
Max Green Setting (Gmax), s		71.8		31.3		71.8		31.3				
Max Q Clear Time (g_c+I1), s		21.4		4.0		20.8		18.1				
Green Ext Time (p_c), s		12.9		0.2		9.7		1.3				

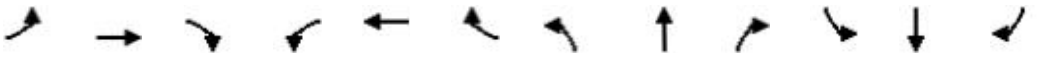
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			14.3									
HCM 6th LOS			B									



Lane Group	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	54	11	474	11	700
v/c Ratio	0.13	0.04	0.43	0.03	0.62
Control Delay (s/veh)	25.4	11.8	11.6	8.8	11.0
Queue Delay	0.0	0.0	0.2	0.0	0.1
Total Delay (s/veh)	25.4	11.8	11.8	8.8	11.1
Queue Length 50th (ft)	21	2	116	2	137
Queue Length 95th (ft)	50	m6	150	m4	173
Internal Link Dist (ft)	299		358		376
Turn Bay Length (ft)		100		100	
Base Capacity (vph)	402	284	1106	403	1127
Starvation Cap Reductn	0	0	127	0	34
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.13	0.04	0.48	0.03	0.64

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	15	15	15	10	435	10	10	625	5
Future Volume (veh/h)	0	0	0	15	15	15	10	435	10	10	625	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.91		0.91	0.96		0.88	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1752	1870	1900	1900	1885	1900
Adj Flow Rate, veh/h	0	0	0	18	18	18	11	463	11	11	694	6
Peak Hour Factor	0.50	0.50	0.50	0.83	0.83	0.83	0.94	0.94	0.94	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	10	2	0	0	1	0
Cap, veh/h	0	502	0	157	155	136	465	1092	26	496	1123	10
Arrive On Green	0.00	0.00	0.00	0.26	0.26	0.26	0.60	0.60	0.60	1.00	1.00	1.00
Sat Flow, veh/h	0	1900	0	443	588	516	672	1812	43	934	1863	16
Grp Volume(v), veh/h	0	0	0	54	0	0	11	0	474	11	0	700
Grp Sat Flow(s),veh/h/ln	0	1900	0	1547	0	0	672	0	1855	934	0	1880
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	16.4	0.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	2.8	0.0	0.0	0.8	0.0	16.4	16.7	0.0	0.0
Prop In Lane	0.00		0.00	0.33		0.33	1.00		0.02	1.00		0.01
Lane Grp Cap(c), veh/h	0	502	0	449	0	0	465	0	1118	496	0	1132
V/C Ratio(X)	0.00	0.00	0.00	0.12	0.00	0.00	0.02	0.00	0.42	0.02	0.00	0.62
Avail Cap(c_a), veh/h	0	502	0	449	0	0	465	0	1118	496	0	1132
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	33.5	0.0	0.0	9.6	0.0	12.7	1.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0	1.2	0.1	0.0	2.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	2.3	0.0	0.0	0.2	0.0	11.5	0.1	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	0.0	34.1	0.0	0.0	9.7	0.0	13.9	2.0	0.0	2.5
LnGrp LOS				C			A		B	A		A
Approach Vol, veh/h		0			54			485			711	
Approach Delay, s/veh		0.0			34.1			13.8			2.5	
Approach LOS					C			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	80.0	40.0	80.0	40.0
Change Period (Y+Rc), s	7.7	* 8.3	7.7	* 8.3
Max Green Setting (Gmax), s	72.3	* 32	72.3	* 32
Max Q Clear Time (g_c+I1), s	18.7	4.8	18.4	0.0
Green Ext Time (p_c), s	11.6	0.3	6.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	8.3
HCM 6th LOS	A

Notes

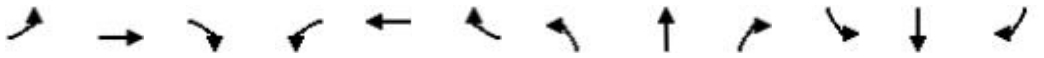
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	185	143	22	473	47	641
v/c Ratio	0.38	0.30	0.07	0.45	0.12	0.61
Control Delay (s/veh)	24.6	32.4	12.5	14.9	8.6	10.8
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.2
Total Delay (s/veh)	24.6	32.4	12.5	15.1	8.6	11.0
Queue Length 50th (ft)	94	91	5	108	8	107
Queue Length 95th (ft)	157	143	m12	139	m12	120
Internal Link Dist (ft)	791	417		376		368
Turn Bay Length (ft)			100		100	
Base Capacity (vph)	493	471	326	1056	405	1052
Starvation Cap Reductn	0	0	0	114	0	73
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.30	0.07	0.50	0.12	0.65

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	125	30	15	70	35	20	410	15	45	595	20
Future Volume (veh/h)	15	125	30	15	70	35	20	410	15	45	595	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.86	0.98		0.86	0.96		0.88	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1900	1900	1856	1900	1870	1900	1900	1870	1900
Adj Flow Rate, veh/h	16	136	33	18	83	42	22	456	17	47	620	21
Peak Hour Factor	0.92	0.92	0.92	0.84	0.84	0.84	0.90	0.90	0.90	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	0	0	0	3	0	2	0	0	2	0
Cap, veh/h	55	390	89	71	299	140	503	1027	38	463	1032	35
Arrive On Green	0.29	0.29	0.29	0.10	0.10	0.10	0.58	0.58	0.58	1.00	1.00	1.00
Sat Flow, veh/h	76	1344	308	129	1031	483	768	1781	66	935	1789	61
Grp Volume(v), veh/h	185	0	0	143	0	0	22	0	473	47	0	641
Grp Sat Flow(s),veh/h/ln	1729	0	0	1643	0	0	768	0	1848	935	0	1850
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	17.5	1.7	0.0	0.0
Cycle Q Clear(g_c), s	10.0	0.0	0.0	9.3	0.0	0.0	1.5	0.0	17.5	19.1	0.0	0.0
Prop In Lane	0.09		0.18	0.13		0.29	1.00		0.04	1.00		0.03
Lane Grp Cap(c), veh/h	534	0	0	510	0	0	503	0	1066	463	0	1067
V/C Ratio(X)	0.35	0.00	0.00	0.28	0.00	0.00	0.04	0.00	0.44	0.10	0.00	0.60
Avail Cap(c_a), veh/h	534	0	0	510	0	0	503	0	1066	463	0	1067
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.8	0.0	0.0	42.7	0.0	0.0	11.1	0.0	14.5	2.4	0.0	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.0	1.4	0.0	0.0	0.2	0.0	1.3	0.4	0.0	2.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.1	0.0	0.0	7.9	0.0	0.0	0.5	0.0	12.2	0.4	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.6	0.0	0.0	44.1	0.0	0.0	11.2	0.0	15.8	2.9	0.0	2.5
LnGrp LOS	D			D			B		B	A		A
Approach Vol, veh/h		185			143			495			688	
Approach Delay, s/veh		35.6			44.1			15.6			2.5	
Approach LOS		D			D			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		77.0		43.0		77.0		43.0				
Change Period (Y+Rc), s		7.8		8.2		7.8		8.2				
Max Green Setting (Gmax), s		69.2		34.8		69.2		34.8				
Max Q Clear Time (g_c+I1), s		21.1		11.3		19.5		12.0				
Green Ext Time (p_c), s		12.2		0.8		7.9		1.1				

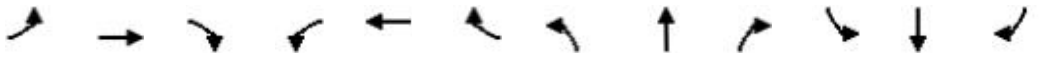
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			14.8									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	61	51	17	472	694
v/c Ratio	0.17	0.15	0.05	0.43	0.63
Control Delay (s/veh)	21.4	20.8	12.1	14.6	10.4
Queue Delay	0.0	0.0	0.0	0.2	0.3
Total Delay (s/veh)	21.4	20.8	12.1	14.8	10.6
Queue Length 50th (ft)	8	15	5	127	115
Queue Length 95th (ft)	22	38	m10	158	121
Internal Link Dist (ft)	820	418		368	345
Turn Bay Length (ft)			100		
Base Capacity (vph)	355	351	317	1108	1108
Starvation Cap Reductn	0	0	0	145	78
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.17	0.15	0.05	0.49	0.67

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	25	5	15	20	15	415	5	0	625	20
Future Volume (veh/h)	15	0	25	5	15	20	15	415	5	0	625	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.83		0.76	0.85		0.76	0.96		0.88	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1826	1900	1870	1411	1900	1885	1900
Adj Flow Rate, veh/h	23	0	38	6	19	26	17	466	6	0	672	22
Peak Hour Factor	0.66	0.66	0.66	0.77	0.77	0.77	0.89	0.89	0.89	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	5	0	2	33	0	1	0
Cap, veh/h	149	15	201	60	161	194	501	1106	14	60	1086	36
Arrive On Green	0.27	0.00	0.27	0.27	0.27	0.27	0.60	0.60	0.60	0.00	1.00	1.00
Sat Flow, veh/h	403	55	758	98	605	730	733	1838	24	936	1806	59
Grp Volume(v), veh/h	61	0	0	51	0	0	17	0	472	0	0	694
Grp Sat Flow(s),veh/h/ln	1216	0	0	1433	0	0	733	0	1862	936	0	1865
Q Serve(g_s), s	0.8	0.0	0.0	0.0	0.0	0.0	1.1	0.0	16.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.1	0.0	0.0	3.1	0.0	0.0	1.1	0.0	16.2	0.0	0.0	0.0
Prop In Lane	0.38		0.62	0.12		0.51	1.00		0.01	1.00		0.03
Lane Grp Cap(c), veh/h	365	0	0	414	0	0	501	0	1120	60	0	1122
V/C Ratio(X)	0.17	0.00	0.00	0.12	0.00	0.00	0.03	0.00	0.42	0.00	0.00	0.62
Avail Cap(c_a), veh/h	365	0	0	414	0	0	501	0	1120	60	0	1122
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	33.8	0.0	0.0	33.5	0.0	0.0	9.7	0.0	12.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.6	0.0	0.0	0.1	0.0	1.2	0.0	0.0	2.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.7	0.0	0.0	2.2	0.0	0.0	0.4	0.0	11.5	0.0	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.8	0.0	0.0	34.1	0.0	0.0	9.9	0.0	13.9	0.0	0.0	2.6
LnGrp LOS	C			C			A		B			A
Approach Vol, veh/h		61			51			489			694	
Approach Delay, s/veh		34.8			34.1			13.8			2.6	
Approach LOS		C			C			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0				
Change Period (Y+Rc), s		7.8		8.1		7.8		8.1				
Max Green Setting (Gmax), s		72.2		31.9		72.2		31.9				
Max Q Clear Time (g_c+I1), s		2.0		5.1		18.2		6.1				
Green Ext Time (p_c), s		13.9		0.3		7.8		0.4				

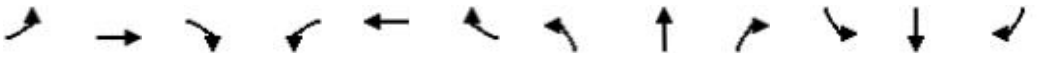
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			9.6									
HCM 6th LOS			A									



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	89	129	24	500	54	734
v/c Ratio	0.25	0.35	0.08	0.45	0.13	0.64
Control Delay (s/veh)	35.0	37.2	5.8	6.1	6.6	8.0
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.2
Total Delay (s/veh)	35.0	37.2	5.8	6.2	6.6	8.2
Queue Length 50th (ft)	49	80	3	52	9	123
Queue Length 95th (ft)	97	m121	m10	98	m13	138
Internal Link Dist (ft)	744	423		345		286
Turn Bay Length (ft)			100		100	
Base Capacity (vph)	357	364	310	1101	414	1149
Starvation Cap Reductn	0	0	0	91	0	70
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.35	0.08	0.50	0.13	0.68

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	50	20	5	70	35	20	370	55	50	630	45
Future Volume (veh/h)	10	50	20	5	70	35	20	370	55	50	630	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.81	0.90		0.81	0.96		0.88	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1856	1767	1885	1900	1870	1885	1900
Adj Flow Rate, veh/h	11	56	22	6	82	41	24	435	65	54	685	49
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.85	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	3	9	1	0	2	1	0
Cap, veh/h	58	250	90	37	243	116	481	1004	150	511	1100	79
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.64	0.64	0.64	1.00	1.00	1.00
Sat Flow, veh/h	111	1132	408	26	1099	524	658	1569	234	898	1719	123
Grp Volume(v), veh/h	89	0	0	129	0	0	24	0	500	54	0	734
Grp Sat Flow(s),veh/h/ln	1651	0	0	1649	0	0	658	0	1804	898	0	1842
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	16.6	1.7	0.0	0.0
Cycle Q Clear(g_c), s	5.1	0.0	0.0	7.9	0.0	0.0	1.6	0.0	16.6	18.3	0.0	0.0
Prop In Lane	0.12		0.25	0.05		0.32	1.00		0.13	1.00		0.07
Lane Grp Cap(c), veh/h	398	0	0	395	0	0	481	0	1154	511	0	1179
V/C Ratio(X)	0.22	0.00	0.00	0.33	0.00	0.00	0.05	0.00	0.43	0.11	0.00	0.62
Avail Cap(c_a), veh/h	398	0	0	395	0	0	481	0	1154	511	0	1179
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.4	0.0	0.0	39.5	0.0	0.0	8.1	0.0	10.8	2.0	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.0	2.2	0.0	0.0	0.2	0.0	1.2	0.4	0.0	2.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.2	0.0	0.0	6.3	0.0	0.0	0.5	0.0	11.1	0.4	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.7	0.0	0.0	41.7	0.0	0.0	8.3	0.0	11.9	2.4	0.0	2.5
LnGrp LOS	D			D			A		B	A		A
Approach Vol, veh/h		89			129			524			788	
Approach Delay, s/veh		39.7			41.7			11.8			2.5	
Approach LOS		D			D			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		85.0		35.0		85.0		35.0				
Change Period (Y+Rc), s		8.2		8.5		8.2		8.5				
Max Green Setting (Gmax), s		76.8		26.5		76.8		26.5				
Max Q Clear Time (g_c+I1), s		20.3		9.9		18.6		7.1				
Green Ext Time (p_c), s		15.9		0.6		8.9		0.4				

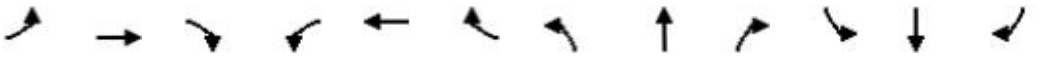
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			11.1									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	170	76	16	445	94	745
v/c Ratio	0.39	0.19	0.06	0.41	0.24	0.68
Control Delay (s/veh)	41.8	26.9	5.6	6.6	5.6	6.2
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.8
Total Delay (s/veh)	41.8	26.9	5.6	6.9	5.6	7.0
Queue Length 50th (ft)	110	35	2	61	4	33
Queue Length 95th (ft)	m156	78	m5	78	m20	154
Internal Link Dist (ft)	879	412		286		375
Turn Bay Length (ft)			100		75	
Base Capacity (vph)	431	394	280	1075	399	1091
Starvation Cap Reductn	0	0	0	222	0	130
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.19	0.06	0.52	0.24	0.78

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	110	25	10	25	30	15	380	25	90	675	40
Future Volume (veh/h)	20	110	25	10	25	30	15	380	25	90	675	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.85	0.97		0.85	0.96		0.87	1.00		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1856	1900	1900	1900	1900	1870	1900	1900	1885	1900
Adj Flow Rate, veh/h	22	121	27	12	29	35	16	418	27	94	703	42
Peak Hour Factor	0.91	0.91	0.91	0.85	0.85	0.85	0.91	0.91	0.91	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	3	0	0	0	0	2	0	0	1	0
Cap, veh/h	69	342	71	77	174	184	480	1036	67	516	1050	63
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.60	0.60	0.60	1.00	1.00	1.00
Sat Flow, veh/h	135	1317	274	162	668	709	698	1719	111	960	1743	104
Grp Volume(v), veh/h	170	0	0	76	0	0	16	0	445	94	0	745
Grp Sat Flow(s),veh/h/ln	1726	0	0	1538	0	0	698	0	1830	960	0	1848
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	15.3	3.0	0.0	0.0
Cycle Q Clear(g_c), s	9.3	0.0	0.0	4.4	0.0	0.0	1.1	0.0	15.3	18.3	0.0	0.0
Prop In Lane	0.13		0.16	0.16		0.46	1.00		0.06	1.00		0.06
Lane Grp Cap(c), veh/h	483	0	0	435	0	0	480	0	1103	516	0	1113
V/C Ratio(X)	0.35	0.00	0.00	0.17	0.00	0.00	0.03	0.00	0.40	0.18	0.00	0.67
Avail Cap(c_a), veh/h	483	0	0	435	0	0	480	0	1103	516	0	1113
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.3	0.0	0.0	34.5	0.0	0.0	9.7	0.0	12.5	1.9	0.0	0.0
Incr Delay (d2), s/veh	2.0	0.0	0.0	0.9	0.0	0.0	0.1	0.0	1.1	0.8	0.0	3.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.8	0.0	0.0	3.3	0.0	0.0	0.3	0.0	10.8	0.7	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.3	0.0	0.0	35.4	0.0	0.0	9.8	0.0	13.6	2.7	0.0	3.2
LnGrp LOS	D			D			A		B	A		A
Approach Vol, veh/h		170			76			461			839	
Approach Delay, s/veh		38.3			35.4			13.5			3.1	
Approach LOS		D			D			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0				
Change Period (Y+Rc), s		7.7		8.8		7.7		8.8				
Max Green Setting (Gmax), s		72.3		31.2		72.3		31.2				
Max Q Clear Time (g_c+I1), s		20.3		6.4		17.3		11.3				
Green Ext Time (p_c), s		16.6		0.4		7.4		0.9				

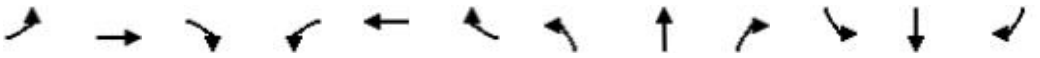
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			11.7									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	96	149	457	890
v/c Ratio	0.28	0.39	0.43	0.83
Control Delay (s/veh)	38.8	27.1	7.4	45.9
Queue Delay	0.6	1.2	1.9	52.3
Total Delay (s/veh)	39.3	28.3	9.3	98.1
Queue Length 50th (ft)	64	61	65	720
Queue Length 95th (ft)	109	112	102	m748
Internal Link Dist (ft)	989	252	375	264
Turn Bay Length (ft)				
Base Capacity (vph)	348	378	1069	1072
Starvation Cap Reductn	0	0	154	566
Spillback Cap Reductn	84	96	443	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.36	0.53	0.73	1.76

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	35	20	15	40	70	5	405	20	5	790	50
Future Volume (veh/h)	25	35	20	15	40	70	5	405	20	5	790	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.77	0.88		0.77	1.00		0.86	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1900	1900	1900	1900	1900	1900	1870	1900	1900	1885	1870
Adj Flow Rate, veh/h	30	42	24	18	48	83	5	431	21	5	832	53
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	4	0	0	0	0	0	0	2	0	0	1	2
Cap, veh/h	144	192	99	60	138	207	34	1039	50	32	1033	66
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.60	0.60	0.60	0.79	0.79	0.79
Sat Flow, veh/h	397	730	376	100	526	787	5	1740	84	3	1730	110
Grp Volume(v), veh/h	96	0	0	149	0	0	457	0	0	890	0	0
Grp Sat Flow(s),veh/h/ln	1503	0	0	1413	0	0	1829	0	0	1842	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.4	0.0	0.0	10.1	0.0	0.0	16.0	0.0	0.0	33.2	0.0	0.0
Prop In Lane	0.31		0.25	0.12		0.56	0.01		0.05	0.01		0.06
Lane Grp Cap(c), veh/h	435	0	0	406	0	0	1123	0	0	1131	0	0
V/C Ratio(X)	0.22	0.00	0.00	0.37	0.00	0.00	0.41	0.00	0.00	0.79	0.00	0.00
Avail Cap(c_a), veh/h	435	0	0	406	0	0	1123	0	0	1131	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	34.5	0.0	0.0	36.3	0.0	0.0	12.9	0.0	0.0	8.4	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	2.6	0.0	0.0	1.1	0.0	0.0	5.6	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.3	0.0	0.0	7.1	0.0	0.0	11.2	0.0	0.0	15.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.7	0.0	0.0	38.8	0.0	0.0	14.0	0.0	0.0	13.9	0.0	0.0
LnGrp LOS	D			D			B			B		
Approach Vol, veh/h		96			149			457			890	
Approach Delay, s/veh		35.7			38.8			14.0			13.9	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0				
Change Period (Y+Rc), s		8.3		8.4		8.3		8.4				
Max Green Setting (Gmax), s		71.7		31.6		71.7		31.6				
Max Q Clear Time (g_c+I1), s		35.2		12.1		18.0		7.4				
Green Ext Time (p_c), s		17.4		0.6		7.3		0.4				

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		17.6
HCM 6th LOS		B

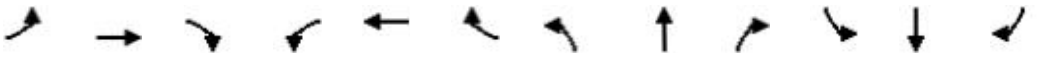


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	127	608	133	43	381	65	435	43	309	750	133
v/c Ratio	0.37	1.00	0.34	0.32	0.40	0.47	0.75	0.11	0.82	1.00	0.24
Control Delay (s/veh)	14.6	58.8	2.4	21.0	15.4	29.3	52.1	0.6	27.4	57.7	5.5
Queue Delay	0.2	39.7	0.5	16.7	0.1	0.0	54.3	1.3	45.9	42.5	0.0
Total Delay (s/veh)	14.7	98.5	2.8	37.6	15.5	29.3	106.4	1.9	73.2	100.3	5.5
Queue Length 50th (ft)	24	471	0	10	34	31	355	0	142	574	19
Queue Length 95th (ft)	36	#568	0	m24	m71	59	462	1	m174	m#748	m23
Internal Link Dist (ft)		1129			389		264			487	
Turn Bay Length (ft)	170		85	110		95		100	225		100
Base Capacity (vph)	343	611	392	134	950	138	578	385	376	750	551
Starvation Cap Reductn	0	0	0	0	0	0	191	0	0	97	0
Spillback Cap Reductn	22	272	72	73	50	0	0	238	89	466	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	1.79	0.42	0.70	0.42	0.47	1.12	0.29	1.08	2.64	0.24

Intersection Summary

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

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	480	105	40	240	110	60	400	40	290	705	125
Future Volume (veh/h)	100	480	105	40	240	110	60	400	40	290	705	125
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.71	1.00		0.71	1.00		0.67	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1870	1856	1885	1885	1885	1870	1900	1885	1885
Adj Flow Rate, veh/h	127	608	133	43	261	120	65	435	43	309	750	133
Peak Hour Factor	0.79	0.79	0.79	0.92	0.92	0.92	0.92	0.92	0.92	0.94	0.94	0.94
Percent Heavy Veh, %	1	0	1	2	3	1	1	1	2	0	1	1
Cap, veh/h	365	611	365	138	634	263	137	580	325	396	753	538
Arrive On Green	0.14	0.64	0.64	0.04	0.30	0.30	0.04	0.31	0.31	0.09	0.27	0.27
Sat Flow, veh/h	1795	1900	1135	1781	2138	887	1795	1885	1057	1810	1885	1347
Grp Volume(v), veh/h	127	608	133	43	210	171	65	435	43	309	750	133
Grp Sat Flow(s),veh/h/ln	1795	1900	1135	1781	1763	1263	1795	1885	1057	1810	1885	1347
Q Serve(g_s), s	5.8	38.0	6.5	2.0	11.4	13.2	2.9	24.9	3.5	13.2	47.7	9.3
Cycle Q Clear(g_c), s	5.8	38.0	6.5	2.0	11.4	13.2	2.9	24.9	3.5	13.2	47.7	9.3
Prop In Lane	1.00		1.00	1.00		0.70	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	365	611	365	138	523	375	137	580	325	396	753	538
V/C Ratio(X)	0.35	0.99	0.36	0.31	0.40	0.46	0.47	0.75	0.13	0.78	1.00	0.25
Avail Cap(c_a), veh/h	365	611	365	138	523	375	137	580	325	396	753	538
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	21.3	15.7	32.2	33.7	34.3	32.0	37.4	30.0	27.1	43.9	29.8
Incr Delay (d2), s/veh	2.6	35.2	2.8	5.8	2.3	4.0	11.2	8.7	0.8	14.2	32.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.6	22.9	3.2	1.9	9.0	7.9	3.1	18.8	1.8	12.0	38.8	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.3	56.5	18.5	38.0	36.0	38.3	43.2	46.1	30.8	41.3	75.9	30.9
LnGrp LOS	C	E	B	D	D	D	D	D	C	D	E	C
Approach Vol, veh/h		868			424			543			1192	
Approach Delay, s/veh		46.4			37.1			44.5			61.9	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	54.0	14.0	41.0	22.0	43.0	11.0	44.0
Change Period (Y+Rc), s	* 5.9	6.1	5.6	* 5.4	* 5.9	6.1	6.0	* 5.4
Max Green Setting (Gmax), s	* 5.1	47.9	8.4	* 36	* 16	36.9	5.0	* 39
Max Q Clear Time (g_c+I1), s	4.9	49.7	7.8	15.2	15.2	26.9	4.0	40.0
Green Ext Time (p_c), s	0.0	0.0	0.0	2.5	0.2	3.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	50.9
HCM 6th LOS	D

Notes

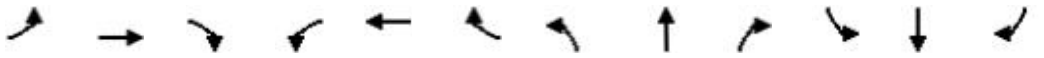
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	169	308	47	151	56	572	48	903
v/c Ratio	0.34	0.74	0.15	0.37	0.66	0.60	0.15	0.93
Control Delay (s/veh)	32.0	38.6	29.3	17.8	58.0	25.6	11.7	29.6
Queue Delay	0.0	8.6	0.2	0.0	0.0	1.5	0.0	45.6
Total Delay (s/veh)	32.0	47.2	29.5	17.8	58.0	27.1	11.7	75.2
Queue Length 50th (ft)	86	136	24	42	38	348	11	562
Queue Length 95th (ft)	129	201	51	92	m#73	505	m12	m#691
Internal Link Dist (ft)	1144			417		487		393
Turn Bay Length (ft)		180	60		60		170	
Base Capacity (vph)	503	415	313	413	85	954	326	974
Starvation Cap Reductn	0	0	0	0	0	212	0	133
Spillback Cap Reductn	0	76	55	0	0	0	0	188
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.91	0.18	0.37	0.66	0.77	0.15	1.15

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	120	265	40	50	80	55	525	35	45	810	30
Future Volume (veh/h)	25	120	265	40	50	80	55	525	35	45	810	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.76	0.94		0.77	0.96		0.85	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1870	1885	1900	1885	1900	1870	1885	1900
Adj Flow Rate, veh/h	29	140	308	47	58	93	56	536	36	48	871	32
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.98	0.98	0.98	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	0	0	2	1	0	1	0	2	1	0
Cap, veh/h	102	470	386	269	170	273	380	915	61	328	952	35
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.53	0.53	0.53	1.00	1.00	1.00
Sat Flow, veh/h	214	1497	1228	903	542	869	603	1724	116	840	1793	66
Grp Volume(v), veh/h	169	0	308	47	0	151	56	0	572	48	0	903
Grp Sat Flow(s),veh/h/ln	1711	0	1228	903	0	1411	603	0	1840	840	0	1859
Q Serve(g_s), s	0.1	0.0	27.5	5.1	0.0	9.9	5.8	0.0	25.4	3.1	0.0	0.0
Cycle Q Clear(g_c), s	9.9	0.0	27.5	15.0	0.0	9.9	5.8	0.0	25.4	28.5	0.0	0.0
Prop In Lane	0.17		1.00	1.00		0.62	1.00		0.06	1.00		0.04
Lane Grp Cap(c), veh/h	573	0	386	269	0	443	380	0	977	328	0	987
V/C Ratio(X)	0.30	0.00	0.80	0.17	0.00	0.34	0.15	0.00	0.59	0.15	0.00	0.92
Avail Cap(c_a), veh/h	573	0	386	269	0	443	380	0	977	328	0	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.0	0.0	37.7	37.4	0.0	31.6	14.6	0.0	19.2	5.7	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	15.7	1.4	0.0	2.1	0.8	0.0	2.6	0.9	0.0	14.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.1	0.0	15.2	2.2	0.0	6.6	1.6	0.0	17.0	1.0	0.0	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.3	0.0	53.4	38.8	0.0	33.7	15.4	0.0	21.7	6.6	0.0	14.3
LnGrp LOS	C		D	D		C	B		C	A		B
Approach Vol, veh/h		477			198			628			951	
Approach Delay, s/veh		45.9			34.9			21.2			13.9	
Approach LOS		D			C			C			B	

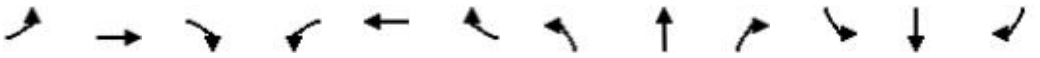
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		73.0		47.0		73.0		47.0				
Change Period (Y+Rc), s		9.3		9.3		9.3		9.3				
Max Green Setting (Gmax), s		63.7		37.7		63.7		37.7				
Max Q Clear Time (g_c+I1), s		30.5		17.0		27.4		29.5				
Green Ext Time (p_c), s		17.5		1.2		10.3		1.7				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			24.6									
HCM 6th LOS			C									

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	142	150	675	943
v/c Ratio	0.45	0.48	0.63	0.92
Control Delay (s/veh)	37.5	39.0	6.8	31.0
Queue Delay	0.0	3.1	0.0	45.6
Total Delay (s/veh)	37.6	42.2	6.8	76.7
Queue Length 50th (ft)	76	88	88	458
Queue Length 95th (ft)	142	142	122	#682
Internal Link Dist (ft)	1407	172	393	369
Turn Bay Length (ft)				
Base Capacity (vph)	319	312	1065	1021
Starvation Cap Reductn	0	88	0	1
Spillback Cap Reductn	2	2	0	172
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.45	0.67	0.63	1.11

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	60	55	30	40	55	30	550	35	75	790	50
Future Volume (veh/h)	15	60	55	30	40	55	30	550	35	75	790	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.90		0.74	0.91		0.74	0.97		0.88	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1900	1900	1900	1885	1900	1900	1885	1870
Adj Flow Rate, veh/h	16	66	60	36	48	66	33	604	38	77	814	52
Peak Hour Factor	0.91	0.91	0.91	0.83	0.83	0.83	0.91	0.91	0.91	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	0	0	0	0	0	1	0	0	1	2
Cap, veh/h	51	164	133	94	119	139	64	1018	63	103	951	60
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.64	0.64	0.64	1.00	1.00	1.00
Sat Flow, veh/h	83	756	614	264	551	640	52	1598	98	111	1492	94
Grp Volume(v), veh/h	142	0	0	150	0	0	675	0	0	943	0	0
Grp Sat Flow(s),veh/h/ln	1454	0	0	1455	0	0	1748	0	0	1696	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.9	0.0	0.0	9.6	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.11		0.42	0.24		0.44	0.05		0.06	0.08		0.06
Lane Grp Cap(c), veh/h	348	0	0	352	0	0	1146	0	0	1114	0	0
V/C Ratio(X)	0.41	0.00	0.00	0.43	0.00	0.00	0.59	0.00	0.00	0.85	0.00	0.00
Avail Cap(c_a), veh/h	348	0	0	352	0	0	1146	0	0	1114	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	40.7	0.0	0.0	40.8	0.0	0.0	12.4	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	3.5	0.0	0.0	3.7	0.0	0.0	2.2	0.0	0.0	8.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.2	0.0	0.0	7.6	0.0	0.0	16.1	0.0	0.0	4.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.2	0.0	0.0	44.5	0.0	0.0	14.6	0.0	0.0	8.0	0.0	0.0
LnGrp LOS	D			D			B			A		
Approach Vol, veh/h		142			150			675			943	
Approach Delay, s/veh		44.2			44.5			14.6			8.0	
Approach LOS		D			D			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		85.0		35.0		85.0		35.0				
Change Period (Y+Rc), s		8.5		9.0		8.5		9.0				
Max Green Setting (Gmax), s		76.5		26.0		76.5		26.0				
Max Q Clear Time (g_c+I1), s		2.0		11.6		27.0		11.9				
Green Ext Time (p_c), s		27.1		0.8		13.2		0.7				

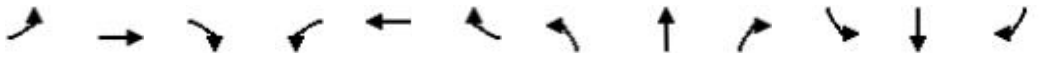
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			15.9									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	10	82	688	971
v/c Ratio	0.06	0.56	0.45	0.66
Control Delay (s/veh)	47.2	65.1	3.0	10.2
Queue Delay	0.0	0.2	0.2	3.3
Total Delay (s/veh)	47.2	65.2	3.2	13.6
Queue Length 50th (ft)	7	62	37	235
Queue Length 95th (ft)	13	105	159	m276
Internal Link Dist (ft)	146	143	369	321
Turn Bay Length (ft)				
Base Capacity (vph)	284	266	1533	1471
Starvation Cap Reductn	0	16	223	390
Spillback Cap Reductn	0	0	119	154
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.04	0.33	0.53	0.90

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	5	30	5	35	0	615	25	40	830	15
Future Volume (veh/h)	0	0	5	30	5	35	0	615	25	40	830	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.94		0.94	1.00		0.91	1.00		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1856	1900	1900	1900	1885	1841	1900	1885	1900
Adj Flow Rate, veh/h	0	0	10	35	6	41	0	661	27	43	912	16
Peak Hour Factor	0.50	0.50	0.50	0.86	0.86	0.86	0.93	0.93	0.93	0.94	0.91	0.94
Percent Heavy Veh, %	0	0	0	3	0	0	0	1	4	0	1	0
Cap, veh/h	0	0	151	91	26	75	0	1445	59	74	1384	24
Arrive On Green	0.00	0.00	0.10	0.10	0.10	0.10	0.00	0.81	0.81	1.00	1.00	1.00
Sat Flow, veh/h	0	0	1513	487	266	753	0	1790	73	53	1715	30
Grp Volume(v), veh/h	0	0	10	82	0	0	0	0	688	971	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1513	1506	0	0	0	0	1864	1797	0	0
Q Serve(g_s), s	0.0	0.0	0.7	3.4	0.0	0.0	0.0	0.0	13.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.7	6.0	0.0	0.0	0.0	0.0	13.6	0.0	0.0	0.0
Prop In Lane	0.00		1.00	0.43		0.50	0.00		0.04	0.04		0.02
Lane Grp Cap(c), veh/h	0	0	151	193	0	0	0	0	1504	1482	0	0
V/C Ratio(X)	0.00	0.00	0.07	0.43	0.00	0.00	0.00	0.00	0.46	0.66	0.00	0.00
Avail Cap(c_a), veh/h	0	0	277	315	0	0	0	0	1504	1482	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.73	0.10	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	49.0	51.2	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.2	1.5	0.0	0.0	0.0	0.0	0.7	0.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.5	4.3	0.0	0.0	0.0	0.0	7.4	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	49.1	52.7	0.0	0.0	0.0	0.0	4.3	0.2	0.0	0.0
LnGrp LOS			D	D					A	A		
Approach Vol, veh/h		10			82			688			971	
Approach Delay, s/veh		49.1			52.7			4.3			0.2	
Approach LOS		D			D			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		102.0		18.0		102.0		18.0				
Change Period (Y+Rc), s		5.2		6.0		5.2		6.0				
Max Green Setting (Gmax), s		86.8		22.0		86.8		22.0				
Max Q Clear Time (g_c+I1), s		15.6		2.7		2.0		8.0				
Green Ext Time (p_c), s		13.8		0.0		29.1		0.3				

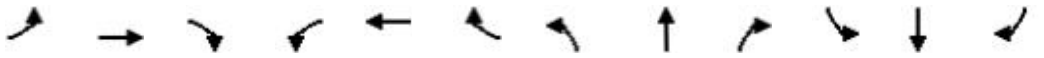
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			4.6									
HCM 6th LOS			A									



Lane Group	EBL	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	167	522	373	76	634	41	116	791	41
v/c Ratio	0.58	0.91	0.76	0.46	0.80	0.07	0.47	1.00	0.07
Control Delay (s/veh)	23.1	35.5	40.1	24.7	31.1	0.3	15.2	55.9	0.2
Queue Delay	0.0	47.9	0.0	0.0	7.4	0.0	0.0	1.2	0.0
Total Delay (s/veh)	23.1	83.4	40.1	24.7	38.5	0.3	15.2	57.2	0.2
Queue Length 50th (ft)	31	277	143	20	279	0	30	573	0
Queue Length 95th (ft)	52	#580	190	59	414	2	m42	#809	m0
Internal Link Dist (ft)		305	231		321			621	
Turn Bay Length (ft)				175		150	200		
Base Capacity (vph)	290	571	491	164	793	630	246	793	627
Starvation Cap Reductn	0	6	0	0	97	0	0	0	0
Spillback Cap Reductn	0	145	0	0	123	0	0	4	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	1.23	0.76	0.46	0.95	0.07	0.47	1.00	0.07

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	295	175	5	225	90	65	545	35	100	680	35
Future Volume (veh/h)	150	295	175	5	225	90	65	545	35	100	680	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.74	1.00		0.63	1.00		0.91	1.00		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1900	1885	1885	1900	1885	1826	1885	1885	1856
Adj Flow Rate, veh/h	167	328	194	6	262	105	76	634	41	116	791	41
Peak Hour Factor	0.90	0.90	0.90	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	1	0	1	0	1	1	0	1	5	1	1	3
Cap, veh/h	183	336	199	31	378	160	167	795	592	255	795	602
Arrive On Green	0.07	0.34	0.34	0.45	0.45	0.45	0.05	0.42	0.42	0.11	0.84	0.84
Sat Flow, veh/h	1795	980	580	0	1670	708	1810	1885	1404	1795	1885	1427
Grp Volume(v), veh/h	167	0	522	211	0	162	76	634	41	116	791	41
Grp Sat Flow(s),veh/h/ln	1795	0	1559	1289	0	1088	1810	1885	1404	1795	1885	1427
Q Serve(g_s), s	11.5	0.0	39.7	0.0	0.0	13.8	2.8	35.2	2.1	4.4	49.0	0.6
Cycle Q Clear(g_c), s	11.5	0.0	39.7	27.2	0.0	13.8	2.8	35.2	2.1	4.4	49.0	0.6
Prop In Lane	1.00		0.37	0.03		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	535	323	0	247	167	795	592	255	795	602
V/C Ratio(X)	0.00	0.00	0.98	0.65	0.00	0.65	0.46	0.80	0.07	0.46	1.00	0.07
Avail Cap(c_a), veh/h	0	0	535	323	0	247	167	795	592	255	795	602
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	38.9	28.6	0.0	29.1	27.8	30.2	20.7	22.4	9.3	5.5
Incr Delay (d2), s/veh	0.0	0.0	33.2	9.9	0.0	12.8	8.7	8.2	0.2	5.8	30.8	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	26.9	8.1	0.0	6.8	2.8	24.6	1.3	3.8	16.2	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	72.1	38.5	0.0	41.9	36.5	38.4	20.9	28.1	40.0	5.7
LnGrp LOS			E	D		D	D	D	C	C	D	A
Approach Vol, veh/h		689			373			751			948	
Approach Delay, s/veh		54.6			40.0			37.3			37.1	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	60.0	14.0	33.0	13.0	60.0		47.0				
Change Period (Y+Rc), s	6.5	9.4	5.8	5.8	6.6	9.4		5.8				
Max Green Setting (Gmax), s	6.5	50.6	8.2	27.2	6.4	50.6		41.2				
Max Q Clear Time (g_c+I1), s	4.8	51.0	13.5	29.2	6.4	37.2		41.7				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	6.4		0.0				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			41.9									
HCM 6th LOS			D									



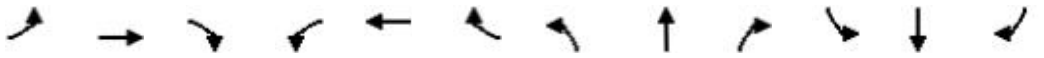
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	56	303	156	104	104	819	27	609
v/c Ratio	0.13	0.78	0.56	0.27	0.28	1.06	0.19	0.41
Control Delay (s/veh)	32.5	50.5	45.9	36.6	12.4	70.7	6.3	5.8
Queue Delay	0.0	0.2	0.0	0.0	0.0	1.0	0.0	0.1
Total Delay (s/veh)	32.5	50.7	45.9	36.6	12.4	71.7	6.3	5.8
Queue Length 50th (ft)	28	136	84	59	30	~683	2	34
Queue Length 95th (ft)	55	#268	116	92	m39	#922	m3	71
Internal Link Dist (ft)		1162		364		621		402
Turn Bay Length (ft)	75		140		75		150	
Base Capacity (vph)	425	389	277	379	367	776	141	1479
Starvation Cap Reductn	0	0	0	0	0	2	0	0
Spillback Cap Reductn	0	3	0	0	0	0	0	136
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.78	0.56	0.27	0.28	1.06	0.19	0.45

Intersection Summary

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

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

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	75	195	120	60	20	95	635	110	25	530	25
Future Volume (veh/h)	50	75	195	120	60	20	95	635	110	25	530	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.80		0.83	1.00		0.71	0.94		0.81	1.00		0.81
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1885	1870	1870	1856	1900	1856	1885	1870	1900	1885	1574
Adj Flow Rate, veh/h	56	84	219	156	78	26	104	698	121	27	582	27
Peak Hour Factor	0.89	0.89	0.89	0.77	0.77	0.77	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	1	2	2	3	0	3	1	2	0	1	22
Cap, veh/h	384	85	223	228	256	85	459	669	116	135	1471	68
Arrive On Green	0.09	0.21	0.21	0.09	0.21	0.21	0.06	0.44	0.44	0.08	0.85	0.85
Sat Flow, veh/h	1767	400	1043	1781	1196	399	1767	1506	261	1810	3443	159
Grp Volume(v), veh/h	56	0	303	156	0	104	104	0	819	27	302	307
Grp Sat Flow(s),veh/h/ln	1767	0	1442	1781	0	1595	1767	0	1768	1810	1791	1812
Q Serve(g_s), s	0.0	0.0	25.2	5.7	0.0	6.6	0.0	0.0	53.4	0.0	4.5	4.5
Cycle Q Clear(g_c), s	0.0	0.0	25.2	5.7	0.0	6.6	0.0	0.0	53.4	0.0	4.5	4.5
Prop In Lane	1.00		0.72	1.00		0.25	1.00		0.15	1.00		0.09
Lane Grp Cap(c), veh/h	384	0	308	228	0	341	459	0	785	135	765	774
V/C Ratio(X)	0.15	0.00	0.98	0.69	0.00	0.31	0.23	0.00	1.04	0.20	0.39	0.40
Avail Cap(c_a), veh/h	384	0	308	228	0	341	459	0	785	135	765	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.8	0.0	47.1	51.1	0.0	39.8	21.2	0.0	33.5	52.9	5.3	5.3
Incr Delay (d2), s/veh	0.8	0.0	47.2	15.5	0.0	2.3	1.1	0.0	44.2	3.3	1.5	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	0.0	19.0	9.1	0.0	5.1	3.7	0.0	42.7	1.6	3.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.6	0.0	94.3	66.6	0.0	42.1	22.4	0.0	77.6	56.2	6.9	6.9
LnGrp LOS	D		F	E		D	C		F	E	A	A
Approach Vol, veh/h		359			260			923			636	
Approach Delay, s/veh		85.3			56.8			71.4			9.0	
Approach LOS		F			E			E			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	60.0	15.0	32.0	11.3	62.0	15.0	32.0
Change Period (Y+Rc), s	6.3	8.6	4.0	6.3	6.3	* 8.6	4.0	6.3
Max Green Setting (Gmax), s	6.7	51.4	11.0	25.7	5.0	* 53	11.0	25.7
Max Q Clear Time (g_c+I1), s	2.0	6.5	2.0	8.6	2.0	55.4	7.7	27.2
Green Ext Time (p_c), s	0.0	9.2	0.1	0.5	0.0	0.0	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	53.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	6	6	726	701
v/c Ratio	0.02	0.02	0.54	0.53
Control Delay (s/veh)	39.2	22.6	2.5	2.9
Queue Delay	0.0	0.0	0.6	0.2
Total Delay (s/veh)	39.2	22.6	3.0	3.1
Queue Length 50th (ft)	4	0	68	44
Queue Length 95th (ft)	15	11	m67	52
Internal Link Dist (ft)	328		402	352
Turn Bay Length (ft)				
Base Capacity (vph)	353	291	1338	1325
Starvation Cap Reductn	0	0	266	141
Spillback Cap Reductn	0	0	44	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.68	0.59

Intersection Summary

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



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	5	695	10	0	575
Future Volume (veh/h)	5	5	695	10	0	575
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.91	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1441	1900	1870
Adj Flow Rate, veh/h	6	6	716	10	0	701
Peak Hour Factor	0.81	0.81	0.97	0.97	0.82	0.82
Percent Heavy Veh, %	0	0	0	31	0	2
Cap, veh/h	354	315	1328	19	0	1331
Arrive On Green	0.20	0.20	0.71	0.71	0.00	1.00
Sat Flow, veh/h	1810	1610	1866	26	0	1870
Grp Volume(v), veh/h	6	6	0	726	0	701
Grp Sat Flow(s),veh/h/ln	1810	1610	0	1892	0	1870
Q Serve(g_s), s	0.3	0.4	0.0	21.5	0.0	0.0
Cycle Q Clear(g_c), s	0.3	0.4	0.0	21.5	0.0	0.0
Prop In Lane	1.00	1.00		0.01	0.00	
Lane Grp Cap(c), veh/h	354	315	0	1347	0	1331
V/C Ratio(X)	0.02	0.02	0.00	0.54	0.00	0.53
Avail Cap(c_a), veh/h	354	315	0	1347	0	1331
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.9	38.9	0.0	8.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	1.6	0.0	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	0.3	0.0	13.6	0.0	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	39.0	39.1	0.0	9.6	0.0	1.5
LnGrp LOS	D	D		A		A
Approach Vol, veh/h	12		726			701
Approach Delay, s/veh	39.0		9.6			1.5
Approach LOS	D		A			A

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		91.0		29.0		91.0
Change Period (Y+Rc), s		5.6		5.5		5.6
Max Green Setting (Gmax), s		85.4		23.5		85.4
Max Q Clear Time (g_c+I1), s		2.0		2.4		23.5
Green Ext Time (p_c), s		14.3		0.0		14.7

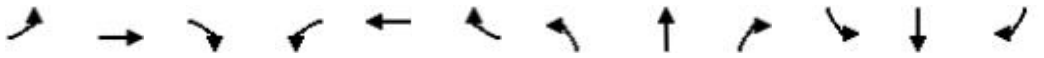
Intersection Summary	
HCM 6th Ctrl Delay, s/veh	5.9
HCM 6th LOS	A



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	110	106	32	736	29	713
v/c Ratio	0.31	0.29	0.09	0.61	0.09	0.63
Control Delay (s/veh)	31.1	41.8	14.2	19.2	14.3	25.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay (s/veh)	31.1	41.8	14.2	19.3	14.3	25.6
Queue Length 50th (ft)	52	69	11	256	11	281
Queue Length 95th (ft)	79	100	m20	395	m17	243
Internal Link Dist (ft)	365	478		352		685
Turn Bay Length (ft)			100		100	
Base Capacity (vph)	359	371	343	1202	336	1139
Starvation Cap Reductn	0	0	0	20	0	28
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.29	0.09	0.62	0.09	0.64

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	35	35	10	55	15	30	670	15	25	560	60
Future Volume (veh/h)	10	35	35	10	55	15	30	670	15	25	560	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.91	0.94		0.91	1.00		0.91	1.00		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1856	1856	1900	1900	1900	1856	1900	1900	1900	1870	1737
Adj Flow Rate, veh/h	14	48	48	13	73	20	32	720	16	29	644	69
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.93	0.93	0.93	0.87	0.87	0.87
Percent Heavy Veh, %	0	3	3	0	0	0	3	0	0	0	2	11
Cap, veh/h	58	171	151	59	282	71	357	1180	26	360	1050	112
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	111	788	696	115	1301	329	731	1847	41	733	1643	176
Grp Volume(v), veh/h	110	0	0	106	0	0	32	0	736	29	0	713
Grp Sat Flow(s),veh/h/ln	1595	0	0	1744	0	0	731	0	1888	733	0	1819
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	27.7	2.9	0.0	27.9
Cycle Q Clear(g_c), s	6.7	0.0	0.0	5.9	0.0	0.0	31.2	0.0	27.7	30.6	0.0	27.9
Prop In Lane	0.13		0.44	0.12		0.19	1.00		0.02	1.00		0.10
Lane Grp Cap(c), veh/h	379	0	0	412	0	0	357	0	1207	360	0	1162
V/C Ratio(X)	0.29	0.00	0.00	0.26	0.00	0.00	0.09	0.00	0.61	0.08	0.00	0.61
Avail Cap(c_a), veh/h	379	0	0	412	0	0	357	0	1207	360	0	1162
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.5	0.0	0.0	39.1	0.0	0.0	22.1	0.0	12.8	21.8	0.0	12.8
Incr Delay (d2), s/veh	1.9	0.0	0.0	1.5	0.0	0.0	0.5	0.0	2.3	0.4	0.0	2.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.3	0.0	0.0	5.1	0.0	0.0	1.1	0.0	17.8	1.0	0.0	17.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.4	0.0	0.0	40.6	0.0	0.0	22.6	0.0	15.1	22.3	0.0	15.3
LnGrp LOS	D			D			C		B	C		B
Approach Vol, veh/h		110			106			768			742	
Approach Delay, s/veh		41.4			40.6			15.4			15.5	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		85.0		35.0		85.0		35.0				
Change Period (Y+Rc), s		* 8.3		9.0		* 8.3		9.0				
Max Green Setting (Gmax), s		* 77		26.0		* 77		26.0				
Max Q Clear Time (g_c+I1), s		32.6		7.9		33.2		8.7				
Green Ext Time (p_c), s		13.9		0.5		14.4		0.5				

Intersection Summary		
HCM 6th Ctrl Delay, s/veh	18.7	
HCM 6th LOS	B	

Notes

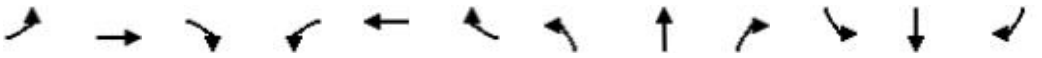
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	40	227	163	81	710	68	642	62
v/c Ratio	0.17	0.69	0.41	0.20	0.59	0.20	0.55	0.07
Control Delay (s/veh)	30.3	40.8	43.1	13.4	16.1	10.3	20.3	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Total Delay (s/veh)	30.3	40.8	43.1	13.4	16.2	10.3	20.3	2.1
Queue Length 50th (ft)	12	70	107	24	217	20	228	0
Queue Length 95th (ft)	m35	m137	172	m40	264	34	282	12
Internal Link Dist (ft)		429	286		685		737	
Turn Bay Length (ft)				145		110		
Base Capacity (vph)	232	329	402	405	1198	344	1176	901
Starvation Cap Reductn	0	0	0	0	39	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.69	0.41	0.20	0.61	0.20	0.55	0.07

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	60	140	5	130	10	75	640	20	55	520	50
Future Volume (veh/h)	35	60	140	5	130	10	75	640	20	55	520	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.91	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1870	1870	1900	1900	1900	1900	1900	1900	1856	1856	1900
Adj Flow Rate, veh/h	40	68	159	6	146	11	81	688	22	68	642	62
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.93	0.93	0.93	0.81	0.81	0.81
Percent Heavy Veh, %	5	2	2	0	0	0	0	0	0	3	3	0
Cap, veh/h	283	101	236	36	371	27	397	1166	37	367	1183	994
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	1179	463	1083	23	1706	125	755	1829	58	733	1856	1560
Grp Volume(v), veh/h	40	0	227	163	0	0	81	0	710	68	642	62
Grp Sat Flow(s),veh/h/ln	1179	0	1547	1854	0	0	755	0	1887	733	1856	1560
Q Serve(g_s), s	0.0	0.0	16.2	0.0	0.0	0.0	8.0	0.0	26.2	7.1	23.0	1.8
Cycle Q Clear(g_c), s	5.4	0.0	16.2	9.0	0.0	0.0	31.0	0.0	26.2	33.4	23.0	1.8
Prop In Lane	1.00		0.70	0.04		0.07	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	283	0	336	434	0	0	397	0	1203	367	1183	994
V/C Ratio(X)	0.14	0.00	0.67	0.38	0.00	0.00	0.20	0.00	0.59	0.19	0.54	0.06
Avail Cap(c_a), veh/h	283	0	336	434	0	0	397	0	1203	367	1183	994
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.8	0.0	43.1	40.2	0.0	0.0	20.6	0.0	12.6	22.3	12.1	8.2
Incr Delay (d2), s/veh	1.0	0.0	10.4	2.5	0.0	0.0	1.2	0.0	2.1	1.1	1.8	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	0.0	11.4	7.8	0.0	0.0	2.8	0.0	17.0	2.5	15.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.9	0.0	53.4	42.7	0.0	0.0	21.8	0.0	14.8	23.4	13.8	8.3
LnGrp LOS	D		D	D			C		B	C	B	A
Approach Vol, veh/h		267			163			791			772	
Approach Delay, s/veh		51.4			42.7			15.5			14.2	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		85.0		35.0		85.0		35.0				
Change Period (Y+Rc), s		8.5		8.9		8.5		8.9				
Max Green Setting (Gmax), s		76.5		26.1		76.5		26.1				
Max Q Clear Time (g_c+I1), s		35.4		11.0		33.0		18.2				
Green Ext Time (p_c), s		13.0		0.7		14.6		0.9				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			22.0									
HCM 6th LOS			C									



Lane Group	NBL	SET	NWT
Lane Group Flow (vph)	484	815	787
v/c Ratio	0.30	0.41	0.40
Control Delay (s/veh)	53.0	16.1	6.8
Queue Delay	0.0	0.9	0.0
Total Delay (s/veh)	53.0	16.9	6.8
Queue Length 50th (ft)	116	182	114
Queue Length 95th (ft)	151	224	85
Internal Link Dist (ft)	94	395	737
Turn Bay Length (ft)			
Base Capacity (vph)	1610	1989	1951
Starvation Cap Reductn	0	821	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.30	0.70	0.40

Intersection Summary

HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.



Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	460	15	725	0	0	590
Future Volume (vph)	460	15	725	0	0	590
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7		8.2			8.2
Lane Util. Factor	0.94		0.95			0.95
Frt	1.00		1.00			1.00
Flt Protected	0.95		1.00			1.00
Satd. Flow (prot)	5038		3574			3505
Flt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	5038		3574			3505
Peak-hour factor, PHF	0.98	0.98	0.89	0.89	0.75	0.75
Adj. Flow (vph)	469	15	815	0	0	787
RTOR Reduction (vph)	3	0	0	0	0	0
Lane Group Flow (vph)	481	0	815	0	0	787
Heavy Vehicles (%)	1%	0%	1%	0%	0%	3%
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	38.3		66.8			66.8
Effective Green, g (s)	38.3		66.8			66.8
Actuated g/C Ratio	0.32		0.56			0.56
Clearance Time (s)	6.7		8.2			8.2
Lane Grp Cap (vph)	1607		1989			1951
v/s Ratio Prot	c0.10		c0.23			0.22
v/s Ratio Perm						
v/c Ratio	0.30		0.41			0.40
Uniform Delay, d1	30.8		15.3			15.2
Progression Factor	1.72		1.00			0.41
Incremental Delay, d2	0.4		0.6			0.5
Delay (s)	53.2		15.9			6.7
Level of Service	D		B			A
Approach Delay (s/veh)	53.2		15.9			6.7
Approach LOS	D		B			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.9
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Build II Results

(Geo + Volume Shift): AM

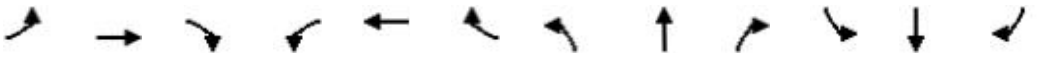


Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	916	927	271	64	292
v/c Ratio	0.36	0.55	0.22	0.12	0.27
Control Delay (s/veh)	24.3	33.0	33.2	19.5	33.5
Queue Delay	0.0	0.9	0.0	0.0	0.0
Total Delay (s/veh)	24.3	33.9	33.2	19.5	33.5
Queue Length 50th (ft)	195	302	95	13	72
Queue Length 95th (ft)	238	352	137	55	102
Internal Link Dist (ft)	687	429	482		263
Turn Bay Length (ft)				215	
Base Capacity (vph)	2516	1687	1209	531	1070
Starvation Cap Reductn	0	458	0	0	0
Spillback Cap Reductn	0	52	66	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.36	0.75	0.24	0.12	0.27

Intersection Summary

HCM 6th Signalized Intersection Summary
1: Peachtree St & North Ave

03/07/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	675	195	5	825	60	0	255	60	15	190	50
Future Volume (veh/h)	0	675	195	5	825	60	0	255	60	15	190	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.92	0.98		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1870	1870	1870	1900	1870	1870	1870	1870	1900
Adj Flow Rate, veh/h	0	711	205	5	859	62	0	271	64	17	218	57
Peak Hour Factor	0.95	0.95	0.95	0.96	0.96	0.96	0.94	0.94	0.94	0.87	0.87	0.87
Percent Heavy Veh, %	0	2	0	2	2	2	0	2	2	2	2	0
Cap, veh/h	0	2003	569	33	1670	120	0	1214	499	74	867	217
Arrive On Green	0.00	0.51	0.51	0.51	0.51	0.51	0.00	0.34	0.34	0.11	0.11	0.11
Sat Flow, veh/h	0	4095	1115	5	3274	235	0	3647	1461	120	2538	636
Grp Volume(v), veh/h	0	615	301	490	0	436	0	271	64	155	0	137
Grp Sat Flow(s),veh/h/ln	0	1702	1638	1861	0	1653	0	1777	1461	1770	0	1524
Q Serve(g_s), s	0.0	13.0	13.2	0.0	0.0	21.0	0.0	6.5	3.6	0.0	0.0	9.8
Cycle Q Clear(g_c), s	0.0	13.0	13.2	20.9	0.0	21.0	0.0	6.5	3.6	9.1	0.0	9.8
Prop In Lane	0.00		0.68	0.01		0.14	0.00		1.00	0.11		0.42
Lane Grp Cap(c), veh/h	0	1736	835	979	0	843	0	1214	499	638	0	521
V/C Ratio(X)	0.00	0.35	0.36	0.50	0.00	0.52	0.00	0.22	0.13	0.24	0.00	0.26
Avail Cap(c_a), veh/h	0	1736	835	979	0	843	0	1214	499	638	0	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.6	17.7	19.5	0.0	19.6	0.0	28.2	27.2	39.1	0.0	39.4
Incr Delay (d2), s/veh	0.0	0.6	1.2	1.8	0.0	2.3	0.0	0.4	0.5	0.9	0.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	8.8	8.9	14.3	0.0	13.1	0.0	5.2	2.5	8.3	0.0	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	18.1	18.9	21.4	0.0	21.8	0.0	28.6	27.7	40.0	0.0	40.6
LnGrp LOS		B	B	C		C		C	C	D		D
Approach Vol, veh/h		916			926			335			292	
Approach Delay, s/veh		18.4			21.6			28.4			40.3	
Approach LOS		B			C			C			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	70.0	50.0	70.0	50.0
Change Period (Y+Rc), s	8.8	9.0	8.8	9.0
Max Green Setting (Gmax), s	61.2	41.0	61.2	41.0
Max Q Clear Time (g_c+I1), s	23.0	11.8	15.2	8.5
Green Ext Time (p_c), s	14.1	1.9	14.9	2.2

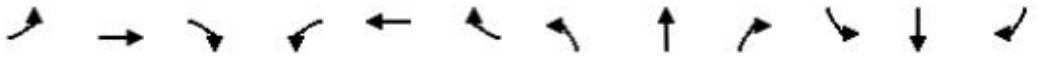
Intersection Summary	
HCM 6th Ctrl Delay, s/veh	23.5
HCM 6th LOS	C



Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	73	357	144	32	274	34	175
v/c Ratio	0.17	0.64	0.23	0.12	0.53	0.07	0.20
Control Delay (s/veh)	29.8	27.9	5.8	47.7	56.2	24.1	27.3
Queue Delay	0.0	0.4	0.0	0.0	6.8	0.0	0.0
Total Delay (s/veh)	29.8	28.3	5.8	47.7	63.0	24.1	27.3
Queue Length 50th (ft)	39	220	22	23	213	16	82
Queue Length 95th (ft)	81	m295	m67	m53	273	37	177
Internal Link Dist (ft)	703	436			263		452
Turn Bay Length (ft)						150	
Base Capacity (vph)	439	556	635	276	514	487	867
Starvation Cap Reductn	0	29	0	0	189	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.68	0.23	0.12	0.84	0.07	0.20

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	45	20	85	225	125	30	230	30	30	150	5
Future Volume (vph)	0	45	20	85	225	125	30	230	30	30	150	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.9			8.9	8.9	5.4	5.4		5.1	8.4	
Lane Util. Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes		0.98			1.00	0.89	1.00	0.97		1.00	0.99	
Flpb, ped/bikes		1.00			0.99	1.00	0.79	1.00		0.96	1.00	
Frt		0.96			1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected		1.00			0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1760			1826	1423	1407	1771		1699	1835	
Flt Permitted		1.00			0.78	1.00	0.65	1.00		0.39	1.00	
Satd. Flow (perm)		1760			1441	1423	958	1771		699	1835	
Peak-hour factor, PHF	0.89	0.89	0.89	0.87	0.87	0.87	0.95	0.95	0.95	0.89	0.89	0.89
Adj. Flow (vph)	0	51	22	98	259	144	32	242	32	34	169	6
RTOR Reduction (vph)	0	13	0	0	0	78	0	4	0	0	1	0
Lane Group Flow (vph)	0	60	0	0	357	66	32	270	0	34	174	0
Confl. Peds. (#/hr)	23		29	29		23	61		79	79		61
Confl. Bikes (#/hr)							5					5
Heavy Vehicles (%)	0%	2%	0%	1%	2%	1%	2%	2%	0%	2%	2%	2%
Turn Type		NA		pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		8		7	4			6		5	2	
Permitted Phases	8			4		4	6			2		
Actuated Green, G (s)		47.1			55.1	55.1	39.6	39.6		47.6	47.6	
Effective Green, g (s)		47.1			55.1	55.1	39.6	39.6		47.6	47.6	
Actuated g/C Ratio		0.39			0.46	0.46	0.33	0.33		0.40	0.40	
Clearance Time (s)		5.9			8.9	8.9	5.4	5.4		5.1	8.4	
Lane Grp Cap (vph)		690			677	653	316	584		326	727	
v/s Ratio Prot		0.03			c0.02			c0.15		0.01	c0.09	
v/s Ratio Perm					c0.22	0.05	0.03			0.04		
v/c Ratio		0.09			0.53	0.10	0.10	0.46		0.10	0.24	
Uniform Delay, d1		22.9			23.2	18.4	27.9	31.8		23.1	24.1	
Progression Factor		0.80			0.73	1.60	1.49	1.50		1.50	1.42	
Incremental Delay, d2		0.2			2.8	0.3	0.6	2.6		0.6	0.8	
Delay (s)		18.7			19.7	29.7	42.1	50.4		35.4	34.9	
Level of Service		B			B	C	D	D		D	C	
Approach Delay (s/veh)		18.7			22.6			49.5			35.0	
Approach LOS		B			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	22.4
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	79	20	36	281	12	185
v/c Ratio	0.18	0.09	0.09	0.33	0.03	0.22
Control Delay (s/veh)	7.5	45.7	6.2	6.7	15.6	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.5	45.7	6.2	6.7	15.6	17.5
Queue Length 50th (ft)	2	14	6	48	6	89
Queue Length 95th (ft)	22	31	m13	73	12	88
Internal Link Dist (ft)	730	415		452		358
Turn Bay Length (ft)			150		100	
Base Capacity (vph)	440	235	403	857	370	851
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.09	0.09	0.33	0.03	0.22

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	20	25	5	10	0	35	250	20	10	140	15
Future Volume (vph)	15	20	25	5	10	0	35	250	20	10	140	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7			5.7		5.2	5.2		5.2	5.2	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		0.92			1.00		1.00	0.97		1.00	0.96	
Flpb, ped/bikes		0.94			0.95		0.73	1.00		0.78	1.00	
Frt		0.94			1.00		1.00	0.99		1.00	0.99	
Flt Protected		0.99			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1529			1770		1290	1782		1405	1769	
Flt Permitted		0.94			0.91		0.62	1.00		0.52	1.00	
Satd. Flow (perm)		1455			1635		841	1782		773	1769	
Peak-hour factor, PHF	0.76	0.76	0.76	0.75	0.75	0.75	0.96	0.96	0.96	0.84	0.84	0.84
Adj. Flow (vph)	20	26	33	7	13	0	36	260	21	12	167	18
RTOR Reduction (vph)	0	21	0	0	0	0	0	3	0	0	3	0
Lane Group Flow (vph)	0	58	0	0	20	0	36	278	0	12	182	0
Confl. Peds. (#/hr)	53		41	41		53	82		89	89		82
Confl. Bikes (#/hr)							6		1	1		6
Heavy Vehicles (%)	2%	0%	0%	0%	0%	0%	2%	2%	0%	0%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8 16			8			6 14			2 10	
Permitted Phases	8 16			8			6 14			2 10		
Actuated Green, G (s)		34.6			17.3		57.6	57.6		57.6	57.6	
Effective Green, g (s)		34.6			17.3		57.6	57.6		57.6	57.6	
Actuated g/C Ratio		0.29			0.14		0.48	0.48		0.48	0.48	
Clearance Time (s)					5.7							
Lane Grp Cap (vph)		419			235		403	855		371	849	
v/s Ratio Prot								c0.16			0.10	
v/s Ratio Perm		c0.04			0.01		0.04			0.02		
v/c Ratio		0.14			0.09		0.09	0.33		0.03	0.21	
Uniform Delay, d1		31.6			44.5		17.0	19.2		16.5	18.1	
Progression Factor		0.57			1.00		0.69	0.66		1.84	1.91	
Incremental Delay, d2		0.7			0.7		0.4	1.0		0.2	0.6	
Delay (s)		18.7			45.2		12.1	13.7		30.5	35.1	
Level of Service		B			D		B	B		C	D	
Approach Delay (s/veh)		18.7			45.2			13.5			34.8	
Approach LOS		B			D			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.8
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	38	5	271	6	195
v/c Ratio	0.10	0.01	0.31	0.02	0.22
Control Delay (s/veh)	11.8	2.0	2.8	8.8	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.8	2.0	2.8	8.8	8.8
Queue Length 50th (ft)	7	0	13	1	42
Queue Length 95th (ft)	20	m1	18	m9	105
Internal Link Dist (ft)	299		358		376
Turn Bay Length (ft)		100		100	
Base Capacity (vph)	384	353	884	380	894
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.10	0.01	0.31	0.02	0.22

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	5	10	15	5	245	5	5	170	0
Future Volume (vph)	0	0	0	5	10	15	5	245	5	5	170	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.3		4.7	4.7		4.7	4.7	
Lane Util. Factor					1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes					0.89		1.00	0.99		1.00	1.00	
Flpb, ped/bikes					0.97		0.64	1.00		0.79	1.00	
Frt					0.93		1.00	1.00		1.00	1.00	
Flt Protected					0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1489		1159	1843		1430	1863	
Flt Permitted					0.98		0.60	1.00		0.53	1.00	
Satd. Flow (perm)					1464		736	1843		794	1863	
Peak-hour factor, PHF	0.25	0.25	0.25	0.79	0.79	0.79	0.92	0.92	0.92	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	6	13	19	5	266	5	6	195	0
RTOR Reduction (vph)	0	0	0	0	14	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	24	0	5	270	0	6	195	0
Confl. Peds. (#/hr)	42		44	44		42	128		78	78		128
Confl. Bikes (#/hr)	1					1	6					6
Heavy Vehicles (%)	0%	2%	2%	0%	0%	2%	0%	2%	2%	0%	2%	0%
Turn Type				Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4 12			6 14			2 10	
Permitted Phases	4			4 12			6 14			2 10		
Actuated Green, G (s)					30.4		57.6	57.6		57.6	57.6	
Effective Green, g (s)					30.4		57.6	57.6		57.6	57.6	
Actuated g/C Ratio					0.25		0.48	0.48		0.48	0.48	
Clearance Time (s)												
Lane Grp Cap (vph)					370		353	884		381	894	
v/s Ratio Prot								c0.15			0.10	
v/s Ratio Perm					c0.02		0.01			0.01		
v/c Ratio					0.06		0.01	0.31		0.02	0.22	
Uniform Delay, d1					34.0		16.3	19.0		16.3	18.1	
Progression Factor					1.00		0.21	0.20		1.05	0.90	
Incremental Delay, d2					0.3		0.1	0.9		0.1	0.6	
Delay (s)					34.3		3.5	4.7		17.2	16.9	
Level of Service					C		A	A		B	B	
Approach Delay (s/veh)		0.0			34.3			4.7			16.9	
Approach LOS		A			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	31.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	82	95	29	268	12	232
v/c Ratio	0.14	0.15	0.07	0.29	0.02	0.26
Control Delay (s/veh)	12.9	19.7	26.2	29.0	15.7	13.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.9	19.7	26.2	29.0	15.7	13.5
Queue Length 50th (ft)	6	39	12	122	3	50
Queue Length 95th (ft)	28	70	30	236	15	129
Internal Link Dist (ft)	791	417		376		368
Turn Bay Length (ft)			100		100	
Base Capacity (vph)	590	627	396	922	489	885
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.15	0.07	0.29	0.02	0.26

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	30	20	5	55	20	25	220	10	10	180	20
Future Volume (veh/h)	10	30	20	5	55	20	25	220	10	10	180	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.90	0.96		0.90	0.93		0.88	0.99		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1900	1900	1870	1870	1870	1870	1900	1870	1900
Adj Flow Rate, veh/h	14	41	27	6	65	24	29	256	12	12	209	23
Peak Hour Factor	0.74	0.74	0.74	0.85	0.85	0.85	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	2	0	0	2	2	2	2	0	2	0
Cap, veh/h	113	321	196	51	455	160	595	883	41	524	817	90
Arrive On Green	0.36	0.36	0.36	0.12	0.12	0.12	0.50	0.50	0.50	1.00	1.00	1.00
Sat Flow, veh/h	214	880	537	53	1248	440	1066	1760	82	1113	1630	179
Grp Volume(v), veh/h	82	0	0	95	0	0	29	0	268	12	0	232
Grp Sat Flow(s),veh/h/ln	1632	0	0	1740	0	0	1066	0	1842	1113	0	1809
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	10.2	0.2	0.0	0.0
Cycle Q Clear(g_c), s	3.8	0.0	0.0	5.8	0.0	0.0	1.7	0.0	10.2	10.4	0.0	0.0
Prop In Lane	0.17		0.33	0.06		0.25	1.00		0.04	1.00		0.10
Lane Grp Cap(c), veh/h	631	0	0	667	0	0	595	0	924	524	0	907
V/C Ratio(X)	0.13	0.00	0.00	0.14	0.00	0.00	0.05	0.00	0.29	0.02	0.00	0.26
Avail Cap(c_a), veh/h	631	0	0	667	0	0	595	0	924	524	0	907
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.4	0.0	0.0	36.1	0.0	0.0	15.3	0.0	17.4	0.9	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.4	0.0	0.0	0.2	0.0	0.8	0.1	0.0	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.0	0.0	0.0	4.9	0.0	0.0	0.8	0.0	8.1	0.0	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.8	0.0	0.0	36.5	0.0	0.0	15.5	0.0	18.2	1.0	0.0	0.7
LnGrp LOS	C			D			B		B	A		A
Approach Vol, veh/h		82			95			297			244	
Approach Delay, s/veh		25.8			36.5			18.0			0.7	
Approach LOS		C			D			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		68.0		52.0		68.0		52.0				
Change Period (Y+Rc), s		7.8		8.2		7.8		8.2				
Max Green Setting (Gmax), s		60.2		43.8		60.2		43.8				
Max Q Clear Time (g_c+I1), s		12.4		7.8		12.2		5.8				
Green Ext Time (p_c), s		3.3		0.6		4.0		0.5				

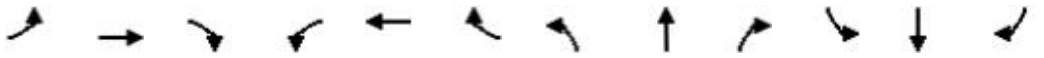
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			15.4									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	20	28	6	270	247
v/c Ratio	0.04	0.05	0.02	0.35	0.32
Control Delay (s/veh)	2.1	12.4	16.6	22.5	11.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.1	12.4	16.6	22.5	11.6
Queue Length 50th (ft)	0	5	0	150	130
Queue Length 95th (ft)	0	15	m0	222	157
Internal Link Dist (ft)	820	418		368	345
Turn Bay Length (ft)			100		
Base Capacity (vph)	496	525	373	782	767
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.04	0.05	0.02	0.35	0.32

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	5	5	10	5	5	235	0	0	200	10
Future Volume (veh/h)	10	0	5	5	10	5	5	235	0	0	200	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.90		0.90	0.90		0.90	0.94		1.00	1.00		0.80
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1900	1900	1870	1900	1870	1870	1870	1870	1900
Adj Flow Rate, veh/h	13	0	7	7	14	7	6	270	0	0	235	12
Peak Hour Factor	0.75	0.75	0.75	0.72	0.72	0.72	0.87	0.87	0.87	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	2	0	0	2	0	2	2	2	2	0
Cap, veh/h	356	20	149	163	299	129	441	786	0	120	730	37
Arrive On Green	0.31	0.00	0.31	0.31	0.31	0.31	0.42	0.42	0.00	0.00	0.14	0.14
Sat Flow, veh/h	815	63	473	279	950	410	1078	1870	0	1109	1739	89
Grp Volume(v), veh/h	20	0	0	28	0	0	6	270	0	0	0	247
Grp Sat Flow(s),veh/h/ln	1352	0	0	1638	0	0	1078	1870	0	1109	0	1828
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.2	5.9	0.0	0.0	0.0	7.3
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.7	0.0	0.0	7.5	5.9	0.0	0.0	0.0	7.3
Prop In Lane	0.65		0.35	0.25		0.25	1.00		0.00	1.00		0.05
Lane Grp Cap(c), veh/h	525	0	0	591	0	0	441	786	0	120	0	768
V/C Ratio(X)	0.04	0.00	0.00	0.05	0.00	0.00	0.01	0.34	0.00	0.00	0.00	0.32
Avail Cap(c_a), veh/h	525	0	0	591	0	0	441	786	0	120	0	768
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	14.2	0.0	0.0	14.3	0.0	0.0	14.9	11.8	0.0	0.0	0.0	18.1
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	0.1	1.2	0.0	0.0	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.4	0.0	0.0	0.5	0.0	0.0	0.1	4.4	0.0	0.0	0.0	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.4	0.0	0.0	14.5	0.0	0.0	14.9	13.0	0.0	0.0	0.0	19.2
LnGrp LOS	B			B			B	B				B
Approach Vol, veh/h		20			28			276			247	
Approach Delay, s/veh		14.4			14.5			13.0			19.2	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		33.0		27.0		33.0		27.0				
Change Period (Y+Rc), s		7.8		8.1		7.8		8.1				
Max Green Setting (Gmax), s		25.2		18.9		25.2		18.9				
Max Q Clear Time (g_c+I1), s		9.3		2.7		9.5		2.5				
Green Ext Time (p_c), s		2.3		0.1		2.5		0.0				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			15.8									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	79	116	6	285	11	211
v/c Ratio	0.13	0.19	0.02	0.33	0.03	0.24
Control Delay (s/veh)	21.9	19.6	11.6	11.3	9.0	8.1
Queue Delay	0.0	0.0	0.0	0.8	0.0	0.5
Total Delay (s/veh)	21.9	19.6	11.6	12.1	9.0	8.6
Queue Length 50th (ft)	34	37	2	84	1	22
Queue Length 95th (ft)	57	m72	m7	157	5	50
Internal Link Dist (ft)	632	423		345		286
Turn Bay Length (ft)			75		75	
Base Capacity (vph)	630	613	397	854	357	884
Starvation Cap Reductn	0	0	0	310	0	353
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.19	0.02	0.52	0.03	0.40

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	40	10	10	55	45	5	225	20	10	180	5
Future Volume (veh/h)	10	40	10	10	55	45	5	225	20	10	180	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.90	0.95		0.90	0.92		0.86	0.99		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	53	13	11	58	47	6	262	23	11	205	6
Peak Hour Factor	0.76	0.76	0.76	0.95	0.95	0.95	0.86	0.86	0.86	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	2	2	2	2	2	2
Cap, veh/h	117	458	106	69	336	254	573	804	71	477	866	25
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.48	0.48	0.48	0.96	0.96	0.96
Sat Flow, veh/h	215	1209	281	96	885	669	1078	1670	147	1084	1798	53
Grp Volume(v), veh/h	79	0	0	116	0	0	6	0	285	11	0	211
Grp Sat Flow(s),veh/h/ln	1705	0	0	1650	0	0	1078	0	1817	1084	0	1851
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	11.6	0.3	0.0	0.6
Cycle Q Clear(g_c), s	3.4	0.0	0.0	5.5	0.0	0.0	1.0	0.0	11.6	11.9	0.0	0.6
Prop In Lane	0.16		0.16	0.09		0.41	1.00		0.08	1.00		0.03
Lane Grp Cap(c), veh/h	681	0	0	659	0	0	573	0	875	477	0	892
V/C Ratio(X)	0.12	0.00	0.00	0.18	0.00	0.00	0.01	0.00	0.33	0.02	0.00	0.24
Avail Cap(c_a), veh/h	681	0	0	659	0	0	573	0	875	477	0	892
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.2	0.0	0.0	24.8	0.0	0.0	16.6	0.0	19.1	2.7	0.0	1.2
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.6	0.0	0.0	0.0	0.0	1.0	0.1	0.0	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	0.0	0.0	4.2	0.0	0.0	0.2	0.0	8.9	0.1	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.5	0.0	0.0	25.4	0.0	0.0	16.6	0.0	20.1	2.8	0.0	1.8
LnGrp LOS	C			C			B		C	A		A
Approach Vol, veh/h		79			116			291			222	
Approach Delay, s/veh		24.5			25.4			20.0			1.8	
Approach LOS		C			C			C			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		66.0		54.0		66.0		54.0				
Change Period (Y+Rc), s		8.2		8.5		8.2		8.5				
Max Green Setting (Gmax), s		57.8		45.5		57.8		45.5				
Max Q Clear Time (g_c+I1), s		13.9		7.5		13.6		5.4				
Green Ext Time (p_c), s		2.9		0.8		4.0		0.5				

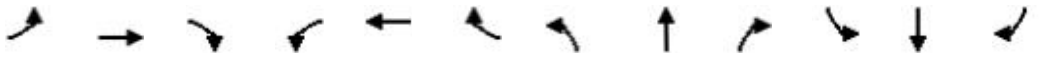
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			15.7									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	66	96	5	258	18	238
v/c Ratio	0.14	0.20	0.01	0.24	0.04	0.22
Control Delay (s/veh)	38.2	26.8	18.6	19.1	3.5	3.7
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.0
Total Delay (s/veh)	38.2	26.8	18.6	19.4	3.5	3.7
Queue Length 50th (ft)	38	54	2	102	1	20
Queue Length 95th (ft)	58	83	m6	136	4	26
Internal Link Dist (ft)	879	412		286		375
Turn Bay Length (ft)			75		100	
Base Capacity (vph)	475	472	527	1062	421	1079
Starvation Cap Reductn	0	0	0	381	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.20	0.01	0.38	0.04	0.22

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	30	10	5	35	30	5	225	10	15	190	5
Future Volume (veh/h)	5	30	10	5	35	30	5	225	10	15	190	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.93	0.96		0.93	0.93		0.88	0.98		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1870	1900	1900	1870	1900	1870	1870	1900
Adj Flow Rate, veh/h	7	44	15	7	48	41	5	247	11	18	232	6
Peak Hour Factor	0.68	0.68	0.68	0.73	0.73	0.73	0.91	0.91	0.91	0.82	0.82	0.82
Percent Heavy Veh, %	0	2	0	0	2	0	0	2	0	2	2	0
Cap, veh/h	61	339	108	47	247	195	690	1034	46	627	1059	27
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.59	0.59	0.59	1.00	1.00	1.00
Sat Flow, veh/h	102	1224	390	54	894	706	1075	1765	79	1094	1807	47
Grp Volume(v), veh/h	66	0	0	96	0	0	5	0	258	18	0	238
Grp Sat Flow(s),veh/h/ln	1716	0	0	1654	0	0	1075	0	1843	1094	0	1854
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	8.1	0.2	0.0	0.0
Cycle Q Clear(g_c), s	3.4	0.0	0.0	5.3	0.0	0.0	0.2	0.0	8.1	8.3	0.0	0.0
Prop In Lane	0.11		0.23	0.07		0.43	1.00		0.04	1.00		0.03
Lane Grp Cap(c), veh/h	508	0	0	490	0	0	690	0	1080	627	0	1086
V/C Ratio(X)	0.13	0.00	0.00	0.20	0.00	0.00	0.01	0.00	0.24	0.03	0.00	0.22
Avail Cap(c_a), veh/h	508	0	0	490	0	0	690	0	1080	627	0	1086
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.6	0.0	0.0	33.3	0.0	0.0	10.3	0.0	12.0	0.5	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.5	0.1	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	0.0	0.0	4.1	0.0	0.0	0.1	0.0	6.3	0.0	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.1	0.0	0.0	34.2	0.0	0.0	10.4	0.0	12.5	0.6	0.0	0.5
LnGrp LOS	C			C			B		B	A		A
Approach Vol, veh/h		66			96			263			256	
Approach Delay, s/veh		33.1			34.2			12.4			0.5	
Approach LOS		C			C			B			A	

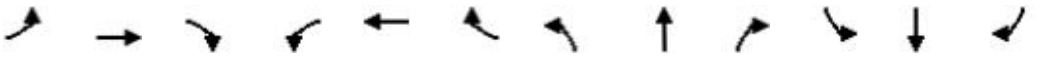
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		78.0		42.0		78.0		42.0				
Change Period (Y+Rc), s		7.7		8.8		7.7		8.8				
Max Green Setting (Gmax), s		70.3		33.2		70.3		33.2				
Max Q Clear Time (g_c+I1), s		10.3		7.3		10.1		5.4				
Green Ext Time (p_c), s		3.5		0.5		3.7		0.3				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			13.0									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	103	67	275	288
v/c Ratio	0.21	0.14	0.27	0.29
Control Delay (s/veh)	38.7	18.1	11.2	10.3
Queue Delay	0.3	0.2	0.0	2.6
Total Delay (s/veh)	39.0	18.3	11.2	12.9
Queue Length 50th (ft)	69	19	62	155
Queue Length 95th (ft)	106	54	73	192
Internal Link Dist (ft)	989	252	375	264
Turn Bay Length (ft)				
Base Capacity (vph)	481	474	1013	987
Starvation Cap Reductn	0	0	0	571
Spillback Cap Reductn	115	109	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.28	0.18	0.27	0.69

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	50	10	5	25	30	0	230	15	5	205	15
Future Volume (veh/h)	20	50	10	5	25	30	0	230	15	5	205	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.88	0.94		0.88	1.00		0.89	0.98		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1870	1900	1900	1885	1900	1900	1870	1900
Adj Flow Rate, veh/h	26	64	13	6	28	33	0	258	17	6	263	19
Peak Hour Factor	0.78	0.78	0.78	0.90	0.90	0.90	0.89	0.89	0.89	0.78	0.78	0.78
Percent Heavy Veh, %	0	0	0	0	2	0	0	1	0	0	2	0
Cap, veh/h	142	336	64	56	219	235	0	963	63	37	940	67
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.00	0.56	0.56	1.00	1.00	1.00
Sat Flow, veh/h	344	1103	209	75	719	771	0	1733	114	11	1691	120
Grp Volume(v), veh/h	103	0	0	67	0	0	0	0	275	288	0	0
Grp Sat Flow(s),veh/h/ln	1655	0	0	1565	0	0	0	0	1847	1823	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	9.3	0.0	0.0	0.0
Prop In Lane	0.25		0.13	0.09		0.49	0.00		0.06	0.02		0.07
Lane Grp Cap(c), veh/h	542	0	0	510	0	0	0	0	1027	1044	0	0
V/C Ratio(X)	0.19	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.27	0.28	0.00	0.00
Avail Cap(c_a), veh/h	542	0	0	510	0	0	0	0	1027	1044	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	30.7	0.0	0.0	30.3	0.0	0.0	0.0	0.0	13.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.6	0.7	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.2	0.0	0.0	2.7	0.0	0.0	0.0	0.0	7.4	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.5	0.0	0.0	30.8	0.0	0.0	0.0	0.0	14.5	0.7	0.0	0.0
LnGrp LOS	C			C					B	A		
Approach Vol, veh/h		103			67			275			288	
Approach Delay, s/veh		31.5			30.8			14.5			0.7	
Approach LOS		C			C			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		75.0		45.0		75.0		45.0				
Change Period (Y+Rc), s		8.3		8.4		8.3		8.4				
Max Green Setting (Gmax), s		66.7		36.6		66.7		36.6				
Max Q Clear Time (g_c+I1), s		2.0		5.7		11.3		7.0				
Green Ext Time (p_c), s		4.2		0.3		3.9		0.4				

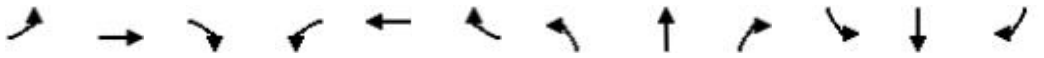
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			13.0									
HCM 6th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	194	511	97	23	598	32	232	21	69	190	80
v/c Ratio	0.46	0.66	0.18	0.07	0.47	0.09	0.51	0.07	0.25	0.42	0.19
Control Delay (s/veh)	7.8	22.9	4.9	9.6	12.1	42.1	62.8	0.8	43.7	61.7	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.8	22.9	4.9	9.6	12.1	42.1	66.3	0.8	43.7	61.7	15.7
Queue Length 50th (ft)	15	314	18	5	54	20	169	0	45	140	20
Queue Length 95th (ft)	33	445	54	m7	m69	48	255	2	75	205	43
Internal Link Dist (ft)		1129			389		264			487	
Turn Bay Length (ft)	170		85	110		95		100	225		100
Base Capacity (vph)	421	770	552	315	1263	355	453	297	281	448	432
Starvation Cap Reductn	0	0	0	0	0	0	140	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.66	0.18	0.07	0.47	0.09	0.74	0.07	0.25	0.42	0.19

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	475	90	20	340	180	30	220	20	60	165	70
Future Volume (veh/h)	180	475	90	20	340	180	30	220	20	60	165	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.86	1.00		0.85	0.88		0.60	0.83		0.76
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1885	1870	1885	1870	1870	1870	1885
Adj Flow Rate, veh/h	194	511	97	23	391	207	32	232	21	69	190	80
Peak Hour Factor	0.93	0.93	0.93	0.87	0.87	0.87	0.95	0.95	0.95	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	1	2	1	2	2	2	1
Cap, veh/h	451	773	564	350	809	416	335	454	227	321	450	291
Arrive On Green	0.11	0.41	0.41	0.08	0.38	0.38	0.08	0.24	0.24	0.03	0.08	0.08
Sat Flow, veh/h	1781	1870	1364	1781	2128	1095	1781	1885	944	1781	1870	1210
Grp Volume(v), veh/h	194	511	97	23	325	273	32	232	21	69	190	80
Grp Sat Flow(s),veh/h/ln	1781	1870	1364	1781	1777	1446	1781	1885	944	1781	1870	1210
Q Serve(g_s), s	7.4	26.5	5.4	0.9	16.6	17.3	1.5	12.8	2.1	3.4	11.6	7.5
Cycle Q Clear(g_c), s	7.4	26.5	5.4	0.9	16.6	17.3	1.5	12.8	2.1	3.4	11.6	7.5
Prop In Lane	1.00		1.00	1.00		0.76	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	451	773	564	350	675	549	335	454	227	321	450	291
V/C Ratio(X)	0.43	0.66	0.17	0.07	0.48	0.50	0.10	0.51	0.09	0.21	0.42	0.27
Avail Cap(c_a), veh/h	451	773	564	350	675	549	335	454	227	321	450	291
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.9	28.4	22.2	20.2	28.2	28.4	29.1	39.4	35.4	31.6	47.3	45.4
Incr Delay (d2), s/veh	3.0	4.4	0.7	0.4	2.4	3.2	0.6	4.1	0.8	1.5	2.9	2.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.1	18.5	3.3	0.7	12.0	10.7	1.3	10.7	1.0	3.0	10.3	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.9	32.8	22.9	20.6	30.7	31.6	29.7	43.5	36.2	33.1	50.2	47.7
LnGrp LOS	C	C	C	C	C	C	C	D	D	C	D	D
Approach Vol, veh/h		802			621			285			339	
Approach Delay, s/veh		29.0			30.7			41.4			46.1	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	35.0	19.0	51.0	15.0	35.0	15.0	55.0
Change Period (Y+Rc), s	* 5.9	6.1	5.6	* 5.4	* 5.9	6.1	6.0	* 5.4
Max Green Setting (Gmax), s	* 9.1	28.9	13.4	* 46	* 9.1	28.9	9.0	* 50
Max Q Clear Time (g_c+I1), s	3.5	13.6	9.4	19.3	5.4	14.8	2.9	28.5
Green Ext Time (p_c), s	0.0	2.3	0.1	4.2	0.1	2.2	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	34.1
HCM 6th LOS	C

Notes

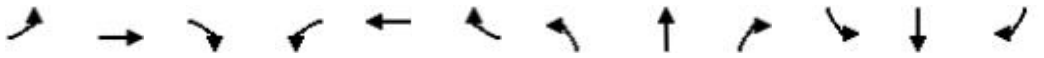
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	49	104	28	85	76	511	16	242
v/c Ratio	0.09	0.20	0.07	0.17	0.17	0.56	0.05	0.27
Control Delay (s/veh)	45.1	20.4	27.2	16.9	12.8	17.9	18.7	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
Total Delay (s/veh)	45.1	20.4	27.2	16.9	12.8	18.5	18.7	20.2
Queue Length 50th (ft)	27	27	16	29	20	243	6	91
Queue Length 95th (ft)	56	64	41	70	40	304	m13	113
Internal Link Dist (ft)	1144			417		487		393
Turn Bay Length (ft)		180	60		60		170	
Base Capacity (vph)	530	533	405	502	457	916	318	912
Starvation Cap Reductn	0	0	0	0	0	143	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.20	0.07	0.17	0.17	0.66	0.05	0.27

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	30	85	25	40	35	65	395	45	15	190	30
Future Volume (veh/h)	10	30	85	25	40	35	65	395	45	15	190	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.92		0.87	0.91		0.87	0.91		0.86	1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1900	1900	1900	1870	1870	1900	1885	1900	1900	1870	1870
Adj Flow Rate, veh/h	12	37	104	28	45	40	76	459	52	16	209	33
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.86	0.86	0.86	0.91	0.91	0.91
Percent Heavy Veh, %	2	0	0	0	2	2	0	1	0	0	2	2
Cap, veh/h	148	440	451	409	273	243	607	852	97	363	801	127
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.52	0.52	0.52	1.00	1.00	1.00
Sat Flow, veh/h	345	1364	1398	1147	847	753	1048	1630	185	903	1534	242
Grp Volume(v), veh/h	49	0	104	28	0	85	76	0	511	16	0	242
Grp Sat Flow(s),veh/h/ln	1709	0	1398	1147	0	1600	1048	0	1815	903	0	1776
Q Serve(g_s), s	0.0	0.0	6.5	2.1	0.0	4.6	4.5	0.0	22.5	0.8	0.0	0.0
Cycle Q Clear(g_c), s	2.2	0.0	6.5	4.2	0.0	4.6	4.5	0.0	22.5	23.2	0.0	0.0
Prop In Lane	0.24		1.00	1.00		0.47	1.00		0.10	1.00		0.14
Lane Grp Cap(c), veh/h	588	0	451	409	0	516	607	0	948	363	0	928
V/C Ratio(X)	0.08	0.00	0.23	0.07	0.00	0.16	0.13	0.00	0.54	0.04	0.00	0.26
Avail Cap(c_a), veh/h	588	0	451	409	0	516	607	0	948	363	0	928
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	29.8	29.7	0.0	29.1	14.8	0.0	19.0	4.2	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	1.2	0.3	0.0	0.7	0.4	0.0	2.2	0.2	0.0	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	0.0	4.3	1.1	0.0	3.4	2.1	0.0	15.2	0.2	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.5	0.0	30.9	30.1	0.0	29.8	15.2	0.0	21.2	4.4	0.0	0.7
LnGrp LOS	C		C	C		C	B		C	A		A
Approach Vol, veh/h		153			113			587			258	
Approach Delay, s/veh		30.2			29.8			20.5			0.9	
Approach LOS		C			C			C			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		72.0		48.0		72.0		48.0				
Change Period (Y+Rc), s		9.3		9.3		9.3		9.3				
Max Green Setting (Gmax), s		62.7		38.7		62.7		38.7				
Max Q Clear Time (g_c+I1), s		25.2		6.6		24.5		8.5				
Green Ext Time (p_c), s		3.4		0.6		8.9		0.7				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			18.2									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	86	212	413	375
v/c Ratio	0.23	0.53	0.41	0.43
Control Delay (s/veh)	23.8	30.3	9.0	19.0
Queue Delay	0.0	5.6	0.2	0.4
Total Delay (s/veh)	23.8	35.8	9.1	19.4
Queue Length 50th (ft)	31	95	65	136
Queue Length 95th (ft)	46	122	94	119
Internal Link Dist (ft)	1407	172	393	368
Turn Bay Length (ft)				
Base Capacity (vph)	376	398	1000	881
Starvation Cap Reductn	0	130	126	179
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.23	0.79	0.47	0.53

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	20	25	25	55	75	15	320	45	55	250	40
Future Volume (veh/h)	10	20	25	25	55	75	15	320	45	55	250	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.82	0.90		0.82	1.00		0.88	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1900	1900	1870	1870	1900	1870	1900
Adj Flow Rate, veh/h	16	31	39	34	75	103	16	348	49	60	272	43
Peak Hour Factor	0.64	0.64	0.64	0.73	0.73	0.73	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	0	0	2	2	0	2	0
Cap, veh/h	89	163	180	75	154	184	50	913	125	165	729	111
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	206	633	696	157	596	712	32	1532	211	218	1224	187
Grp Volume(v), veh/h	86	0	0	212	0	0	413	0	0	375	0	0
Grp Sat Flow(s),veh/h/ln	1535	0	0	1466	0	0	1775	0	0	1629	0	0
Q Serve(g_s), s	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.1	0.0	0.0	14.6	0.0	0.0	14.5	0.0	0.0	12.7	0.0	0.0
Prop In Lane	0.19		0.45	0.16		0.49	0.04		0.12	0.16		0.11
Lane Grp Cap(c), veh/h	432	0	0	413	0	0	1089	0	0	1005	0	0
V/C Ratio(X)	0.20	0.00	0.00	0.51	0.00	0.00	0.38	0.00	0.00	0.37	0.00	0.00
Avail Cap(c_a), veh/h	432	0	0	413	0	0	1089	0	0	1005	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	34.9	0.0	0.0	38.3	0.0	0.0	12.7	0.0	0.0	12.4	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	4.5	0.0	0.0	1.0	0.0	0.0	1.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.8	0.0	0.0	10.0	0.0	0.0	10.2	0.0	0.0	9.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.9	0.0	0.0	42.8	0.0	0.0	13.7	0.0	0.0	13.4	0.0	0.0
LnGrp LOS	D			D			B			B		
Approach Vol, veh/h		86			212			413			375	
Approach Delay, s/veh		35.9			42.8			13.7			13.4	
Approach LOS		D			D			B			B	

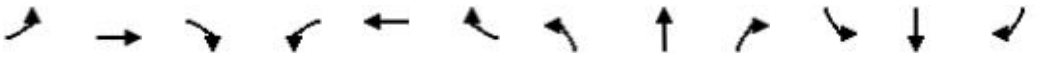
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0				
Change Period (Y+Rc), s		8.5		9.0		8.5		9.0				
Max Green Setting (Gmax), s		71.5		31.0		71.5		31.0				
Max Q Clear Time (g_c+I1), s		14.7		16.6		16.5		7.1				
Green Ext Time (p_c), s		6.0		1.2		6.5		0.5				

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		21.1
HCM 6th LOS		C



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	5	64	406	467
v/c Ratio	0.04	0.48	0.27	0.31
Control Delay (s/veh)	48.4	63.4	1.5	2.2
Queue Delay	0.0	0.0	0.2	0.5
Total Delay (s/veh)	48.4	63.4	1.7	2.7
Queue Length 50th (ft)	4	48	20	11
Queue Length 95th (ft)	16	70	40	107
Internal Link Dist (ft)	99	226	368	304
Turn Bay Length (ft)				
Base Capacity (vph)	277	271	1529	1526
Starvation Cap Reductn	0	0	516	634
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.24	0.40	0.52

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	5	10	0	35	0	345	25	15	400	10
Future Volume (veh/h)	0	0	5	10	0	35	0	345	25	15	400	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	0.91		0.89	1.00		0.91	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1870	1900	1900	1870	1870	1900	1900	1870	1900
Adj Flow Rate, veh/h	0	0	5	14	0	50	0	379	27	16	440	11
Peak Hour Factor	1.00	1.00	1.00	0.70	0.70	0.70	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	2	0	2	0	0	2	2	0	0	2	0
Cap, veh/h	0	0	159	56	16	128	0	1360	97	57	1391	34
Arrive On Green	0.00	0.00	0.11	0.11	0.00	0.11	0.00	0.79	0.79	1.00	1.00	1.00
Sat Flow, veh/h	0	0	1411	175	142	1134	0	1713	122	32	1752	43
Grp Volume(v), veh/h	0	0	5	64	0	0	0	0	406	467	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1411	1451	0	0	0	0	1835	1827	0	0
Q Serve(g_s), s	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.4	4.7	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0
Prop In Lane	0.00		1.00	0.22		0.78	0.00		0.07	0.03		0.02
Lane Grp Cap(c), veh/h	0	0	159	200	0	0	0	0	1457	1482	0	0
V/C Ratio(X)	0.00	0.00	0.03	0.32	0.00	0.00	0.00	0.00	0.28	0.32	0.00	0.00
Avail Cap(c_a), veh/h	0	0	259	299	0	0	0	0	1457	1482	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.91	0.69	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	47.4	49.3	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.9	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.2	3.3	0.0	0.0	0.0	0.0	4.3	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	47.5	50.2	0.0	0.0	0.0	0.0	3.7	0.4	0.0	0.0
LnGrp LOS			D	D					A	A		
Approach Vol, veh/h		5			64			406			467	
Approach Delay, s/veh		47.5			50.2			3.7			0.4	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	100.5	19.5	100.5	19.5
Change Period (Y+Rc), s	5.2	6.0	5.2	6.0
Max Green Setting (Gmax), s	86.8	22.0	86.8	22.0
Max Q Clear Time (g_c+I1), s	9.0	2.4	2.0	6.7
Green Ext Time (p_c), s	6.4	0.0	7.8	0.2

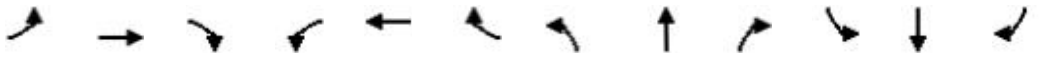
Intersection Summary	
HCM 6th Ctrl Delay, s/veh	5.5
HCM 6th LOS	A



Lane Group	EBL	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	178	439	590	85	301	17	61	378	67
v/c Ratio	0.52	0.60	0.66	0.23	0.55	0.03	0.15	0.67	0.13
Control Delay (s/veh)	32.8	26.5	33.2	19.4	37.0	0.1	12.3	28.4	1.8
Queue Delay	0.0	1.8	2.2	0.0	1.7	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.8	28.3	35.5	19.4	38.7	0.1	12.3	28.4	1.8
Queue Length 50th (ft)	60	136	130	32	165	0	22	151	3
Queue Length 95th (ft)	m102	236	230	55	234	0	40	194	11
Internal Link Dist (ft)		261	274		304			616	
Turn Bay Length (ft)				200		150	200		
Base Capacity (vph)	343	733	892	363	552	506	417	568	527
Starvation Cap Reductn	0	157	177	0	123	0	0	0	0
Spillback Cap Reductn	0	11	40	0	0	1	0	0	1
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.76	0.83	0.23	0.70	0.03	0.15	0.67	0.13

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	255	140	0	445	110	75	265	15	55	340	60
Future Volume (veh/h)	160	255	140	0	445	110	75	265	15	55	340	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.80	0.97		0.87	0.95		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1900	0	1885	1870	1885	1870	1900	1870	1870	1885
Adj Flow Rate, veh/h	178	283	156	0	473	117	85	301	17	61	378	67
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.88	0.88	0.88	0.90	0.90	0.90
Percent Heavy Veh, %	1	2	0	0	1	2	1	2	0	2	2	1
Cap, veh/h	243	457	252	0	749	182	377	555	413	373	570	423
Arrive On Green	0.10	0.43	0.43	0.00	0.09	0.09	0.03	0.10	0.10	0.19	0.61	0.61
Sat Flow, veh/h	1795	1071	590	0	2801	658	1795	1870	1394	1781	1870	1388
Grp Volume(v), veh/h	178	0	439	0	310	280	85	301	17	61	378	67
Grp Sat Flow(s),veh/h/ln	1795	0	1661	0	1791	1574	1795	1870	1394	1781	1870	1388
Q Serve(g_s), s	11.9	0.0	24.7	0.0	20.0	20.6	3.8	18.4	1.3	2.4	15.9	2.5
Cycle Q Clear(g_c), s	11.9	0.0	24.7	0.0	20.0	20.6	3.8	18.4	1.3	2.4	15.9	2.5
Prop In Lane	1.00		0.36	0.00		0.42	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	709	0	495	435	377	555	413	373	570	423
V/C Ratio(X)	0.00	0.00	0.62	0.00	0.63	0.64	0.23	0.54	0.04	0.16	0.66	0.16
Avail Cap(c_a), veh/h	0	0	709	0	495	435	377	555	413	373	570	423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	26.8	0.0	48.5	48.8	26.5	46.4	38.7	21.9	19.4	16.8
Incr Delay (d2), s/veh	0.0	0.0	4.0	0.0	5.9	7.1	1.4	3.8	0.2	0.9	6.0	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	15.6	0.0	15.7	14.6	3.3	15.0	0.9	2.0	9.8	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	30.8	0.0	54.4	55.9	27.9	50.1	38.9	22.8	25.3	17.5
LnGrp LOS			C		D	E	C	D	D	C	C	B
Approach Vol, veh/h		617			590			403			506	
Approach Delay, s/veh		21.9			55.1			45.0			24.0	
Approach LOS		C			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	46.0	18.0	39.0	18.0	45.0		57.0				
Change Period (Y+Rc), s	6.5	9.4	5.8	5.8	6.6	9.4		5.8				
Max Green Setting (Gmax), s	10.5	36.6	12.2	33.2	11.4	35.6		51.2				
Max Q Clear Time (g_c+I1), s	5.8	17.9	13.9	22.6	4.4	20.4		26.7				
Green Ext Time (p_c), s	0.1	4.7	0.0	2.7	0.1	2.9		3.0				

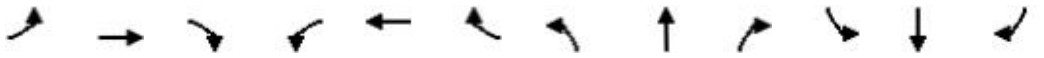
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			36.1									
HCM 6th LOS			D									



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	73	185	118	182	128	399	59	539
v/c Ratio	0.18	0.38	0.28	0.41	0.28	0.53	0.18	0.44
Control Delay (s/veh)	24.6	9.7	28.3	40.0	16.7	24.0	13.6	45.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.6	9.7	28.3	40.0	16.7	24.0	13.6	45.1
Queue Length 50th (ft)	30	24	60	114	48	191	11	185
Queue Length 95th (ft)	61	37	97	172	m81	248	28	205
Internal Link Dist (ft)		1162		364		616		402
Turn Bay Length (ft)	40		140		75		150	
Base Capacity (vph)	417	485	424	439	465	749	337	1235
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.38	0.28	0.41	0.28	0.53	0.18	0.44

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	35	130	100	125	30	120	315	60	45	315	95
Future Volume (veh/h)	65	35	130	100	125	30	120	315	60	45	315	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.94	0.98		0.90	0.97		0.90	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1900	1870	1900	1900	1870	1870	1885	1870	1870	1870	1870
Adj Flow Rate, veh/h	73	39	146	118	147	35	128	335	64	59	414	125
Peak Hour Factor	0.89	0.89	0.89	0.85	0.85	0.85	0.94	0.94	0.94	0.76	0.76	0.76
Percent Heavy Veh, %	2	0	2	0	0	2	2	1	2	2	2	2
Cap, veh/h	398	80	298	389	345	82	481	631	121	333	965	286
Arrive On Green	0.09	0.24	0.24	0.09	0.24	0.24	0.09	0.42	0.42	0.08	0.74	0.74
Sat Flow, veh/h	1781	333	1248	1810	1448	345	1781	1507	288	1781	2615	775
Grp Volume(v), veh/h	73	0	185	118	0	182	128	0	399	59	279	260
Grp Sat Flow(s),veh/h/ln	1781	0	1582	1810	0	1793	1781	0	1794	1781	1777	1613
Q Serve(g_s), s	0.0	0.0	12.1	0.0	0.0	10.3	0.0	0.0	20.0	0.0	7.2	7.5
Cycle Q Clear(g_c), s	0.0	0.0	12.1	0.0	0.0	10.3	0.0	0.0	20.0	0.0	7.2	7.5
Prop In Lane	1.00		0.79	1.00		0.19	1.00		0.16	1.00		0.48
Lane Grp Cap(c), veh/h	398	0	377	389	0	428	481	0	752	333	656	595
V/C Ratio(X)	0.18	0.00	0.49	0.30	0.00	0.43	0.27	0.00	0.53	0.18	0.43	0.44
Avail Cap(c_a), veh/h	398	0	377	389	0	428	481	0	752	333	656	595
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	0.0	39.5	39.7	0.0	38.8	25.7	0.0	26.1	34.8	10.9	10.9
Incr Delay (d2), s/veh	1.0	0.0	4.5	2.0	0.0	3.1	1.4	0.0	2.7	1.2	2.0	2.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.4	0.0	9.0	5.8	0.0	8.6	5.1	0.0	14.1	2.6	4.8	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.7	0.0	44.0	41.7	0.0	41.9	27.0	0.0	28.8	36.0	12.9	13.2
LnGrp LOS	D		D	D		D	C		C	D	B	B
Approach Vol, veh/h		258			300			527			598	
Approach Delay, s/veh		42.2			41.8			28.4			15.3	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	53.0	15.0	35.0	11.3	59.0	15.0	35.0
Change Period (Y+Rc), s	6.3	8.6	4.0	6.3	6.3	* 8.6	4.0	6.3
Max Green Setting (Gmax), s	10.7	44.4	11.0	28.7	5.0	* 50	11.0	28.7
Max Q Clear Time (g_c+I1), s	2.0	9.5	2.0	12.3	2.0	22.0	2.0	14.1
Green Ext Time (p_c), s	0.1	7.7	0.1	0.9	0.0	5.4	0.2	1.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	28.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	WBR	NBT	SBT
Lane Group Flow (vph)	10	400	577
v/c Ratio	0.02	0.31	0.44
Control Delay (s/veh)	0.0	4.7	9.9
Queue Delay	0.0	0.9	4.0
Total Delay (s/veh)	0.0	5.6	14.0
Queue Length 50th (ft)	0	133	267
Queue Length 95th (ft)	0	188	256
Internal Link Dist (ft)		402	352
Turn Bay Length (ft)			
Base Capacity (vph)	643	1310	1319
Starvation Cap Reductn	0	623	643
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.02	0.58	0.85

Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	5	365	15	5	445
Future Volume (veh/h)	0	5	365	15	5	445
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.93	0.99	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1900	1900	1870
Adj Flow Rate, veh/h	0	10	384	16	6	571
Peak Hour Factor	0.50	0.50	0.95	0.95	0.78	0.78
Percent Heavy Veh, %	0	0	2	0	0	2
Cap, veh/h	354	315	1264	53	34	1323
Arrive On Green	0.00	0.20	0.71	0.71	0.23	0.23
Sat Flow, veh/h	1810	1610	1777	74	6	1860
Grp Volume(v), veh/h	0	10	0	400	577	0
Grp Sat Flow(s),veh/h/ln	1810	1610	0	1851	1865	0
Q Serve(g_s), s	0.0	0.6	0.0	9.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.6	0.0	9.5	31.5	0.0
Prop In Lane	1.00	1.00		0.04	0.01	
Lane Grp Cap(c), veh/h	354	315	0	1317	1358	0
V/C Ratio(X)	0.00	0.03	0.00	0.30	0.42	0.00
Avail Cap(c_a), veh/h	354	315	0	1317	1358	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	39.0	0.0	6.4	25.3	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.6	1.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.5	0.0	6.8	22.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	39.2	0.0	7.0	26.3	0.0
LnGrp LOS		D		A	C	
Approach Vol, veh/h	10		400			577
Approach Delay, s/veh	39.2		7.0			26.3
Approach LOS	D		A			C

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		91.0		29.0		91.0
Change Period (Y+Rc), s		5.6		5.5		5.6
Max Green Setting (Gmax), s		85.4		23.5		85.4
Max Q Clear Time (g_c+I1), s		33.5		2.6		11.5
Green Ext Time (p_c), s		9.9		0.0		6.2

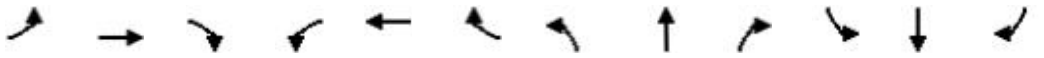
Intersection Summary		
HCM 6th Ctrl Delay, s/veh		18.6
HCM 6th LOS		B



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	35	126	11	344	41	684
v/c Ratio	0.11	0.37	0.03	0.28	0.07	0.58
Control Delay (s/veh)	22.6	45.0	15.6	16.7	2.6	4.2
Queue Delay	0.0	0.0	0.0	1.3	0.0	0.2
Total Delay (s/veh)	22.6	45.0	15.6	18.1	2.6	4.4
Queue Length 50th (ft)	9	85	4	134	3	58
Queue Length 95th (ft)	26	79	m16	217	m10	145
Internal Link Dist (ft)	365	478		352		685
Turn Bay Length (ft)			100		150	
Base Capacity (vph)	323	344	394	1209	607	1187
Starvation Cap Reductn	0	0	0	647	0	51
Spillback Cap Reductn	0	0	0	0	0	73
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.37	0.03	0.61	0.07	0.61

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	5	15	5	45	15	10	310	10	30	450	50
Future Volume (veh/h)	5	5	15	5	45	15	10	310	10	30	450	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.91	0.94		0.91	1.00		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1870	1900	1900	1870	1900	1900	1870	1870
Adj Flow Rate, veh/h	7	7	21	10	87	29	11	333	11	41	616	68
Peak Hour Factor	0.70	0.70	0.70	0.52	0.52	0.52	0.93	0.93	0.93	0.73	0.73	0.73
Percent Heavy Veh, %	0	0	0	0	2	0	0	2	0	0	2	2
Cap, veh/h	77	81	183	44	254	80	406	1178	39	663	1078	119
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	205	405	915	58	1272	398	769	1796	59	1044	1643	181
Grp Volume(v), veh/h	35	0	0	126	0	0	11	0	344	41	0	684
Grp Sat Flow(s),veh/h/ln	1524	0	0	1728	0	0	769	0	1855	1044	0	1824
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	9.4	2.1	0.0	24.8
Cycle Q Clear(g_c), s	2.1	0.0	0.0	7.4	0.0	0.0	25.7	0.0	9.4	11.5	0.0	24.8
Prop In Lane	0.20		0.60	0.08		0.23	1.00		0.03	1.00		0.10
Lane Grp Cap(c), veh/h	341	0	0	378	0	0	406	0	1217	663	0	1197
V/C Ratio(X)	0.10	0.00	0.00	0.33	0.00	0.00	0.03	0.00	0.28	0.06	0.00	0.57
Avail Cap(c_a), veh/h	341	0	0	378	0	0	406	0	1217	663	0	1197
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.3	0.0	0.0	41.4	0.0	0.0	18.5	0.0	8.7	11.1	0.0	11.4
Incr Delay (d2), s/veh	0.6	0.0	0.0	2.4	0.0	0.0	0.1	0.0	0.6	0.2	0.0	2.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	0.0	6.3	0.0	0.0	0.3	0.0	7.1	0.9	0.0	15.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.9	0.0	0.0	43.7	0.0	0.0	18.6	0.0	9.3	11.3	0.0	13.4
LnGrp LOS	D			D			B		A	B		B
Approach Vol, veh/h		35			126			355			725	
Approach Delay, s/veh		39.9			43.7			9.6			13.2	
Approach LOS		D			D			A			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		87.0		33.0		87.0		33.0				
Change Period (Y+Rc), s		* 8.3		9.0		* 8.3		9.0				
Max Green Setting (Gmax), s		* 79		24.0		* 79		24.0				
Max Q Clear Time (g_c+I1), s		26.8		9.4		27.7		4.1				
Green Ext Time (p_c), s		13.6		0.5		5.2		0.1				

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		16.0
HCM 6th LOS		B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	57	260	175	70	268	19	558	78
v/c Ratio	0.14	0.51	0.30	0.23	0.28	0.04	0.58	0.10
Control Delay (s/veh)	20.7	21.2	29.7	15.3	14.9	23.5	40.0	16.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.7	21.2	29.7	15.3	14.9	23.5	40.0	16.7
Queue Length 50th (ft)	11	51	96	21	78	12	464	27
Queue Length 95th (ft)	m21	m92	102	31	86	30	494	61
Internal Link Dist (ft)		429	286		685		737	
Turn Bay Length (ft)				145		110		
Base Capacity (vph)	415	507	591	309	950	489	954	789
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.51	0.30	0.23	0.28	0.04	0.58	0.10

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	25	180	15	85	10	60	220	10	15	430	60
Future Volume (veh/h)	45	25	180	15	85	10	60	220	10	15	430	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.97	1.00		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1885	1900	1900	1870	1870	1885	1870	1870	1870	1900
Adj Flow Rate, veh/h	57	32	228	24	135	16	70	256	12	19	558	78
Peak Hour Factor	0.79	0.79	0.79	0.63	0.63	0.63	0.86	0.86	0.86	0.77	0.77	0.77
Percent Heavy Veh, %	0	2	1	0	0	2	2	1	2	2	2	0
Cap, veh/h	390	65	461	83	443	50	302	912	43	536	959	776
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	1255	189	1345	142	1294	145	792	1780	83	1104	1870	1514
Grp Volume(v), veh/h	57	0	260	175	0	0	70	0	268	19	558	78
Grp Sat Flow(s),veh/h/ln	1255	0	1533	1581	0	0	792	0	1864	1104	1870	1514
Q Serve(g_s), s	0.0	0.0	16.1	0.5	0.0	0.0	8.1	0.0	9.8	1.2	24.9	3.2
Cycle Q Clear(g_c), s	9.5	0.0	16.1	16.6	0.0	0.0	33.0	0.0	9.8	11.0	24.9	3.2
Prop In Lane	1.00		0.88	0.14		0.09	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	390	0	525	576	0	0	302	0	955	536	959	776
V/C Ratio(X)	0.15	0.00	0.50	0.30	0.00	0.00	0.23	0.00	0.28	0.04	0.58	0.10
Avail Cap(c_a), veh/h	390	0	525	576	0	0	302	0	955	536	959	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	0.0	31.2	28.7	0.0	0.0	31.8	0.0	16.7	19.8	20.3	15.0
Incr Delay (d2), s/veh	0.8	0.0	3.3	1.4	0.0	0.0	1.8	0.0	0.7	0.1	2.6	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	0.0	10.5	6.9	0.0	0.0	3.1	0.0	7.9	0.6	17.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.9	0.0	34.5	30.1	0.0	0.0	33.6	0.0	17.4	19.9	22.9	15.3
LnGrp LOS	C		C	C			C		B	B	C	B
Approach Vol, veh/h		317			175			338			655	
Approach Delay, s/veh		33.7			30.1			20.7			21.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		70.0		50.0		70.0		50.0				
Change Period (Y+Rc), s		8.5		8.9		8.5		8.9				
Max Green Setting (Gmax), s		61.5		41.1		61.5		41.1				
Max Q Clear Time (g_c+I1), s		26.9		18.6		35.0		18.1				
Green Ext Time (p_c), s		9.6		0.9		4.1		1.8				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			25.1									
HCM 6th LOS			C									



Lane Group	NBL	SET	NWT
Lane Group Flow (vph)	358	712	283
v/c Ratio	0.24	0.35	0.14
Control Delay (s/veh)	9.9	11.1	24.0
Queue Delay	0.0	0.2	0.0
Total Delay (s/veh)	9.9	11.3	24.0
Queue Length 50th (ft)	21	104	98
Queue Length 95th (ft)	25	108	126
Internal Link Dist (ft)	94	395	737
Turn Bay Length (ft)			
Base Capacity (vph)	1512	2029	2029
Starvation Cap Reductn	0	574	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.24	0.49	0.14

Intersection Summary



Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	325	5	555	0	0	235
Future Volume (vph)	325	5	555	0	0	235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7		8.2			8.2
Lane Util. Factor	0.94		0.95			0.95
Frt	1.00		1.00			1.00
Flt Protected	0.95		1.00			1.00
Satd. Flow (prot)	4996		3539			3539
Flt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	4996		3539			3539
Peak-hour factor, PHF	0.92	0.92	0.78	0.78	0.83	0.83
Adj. Flow (vph)	353	5	712	0	0	283
RTOR Reduction (vph)	1	0	0	0	0	0
Lane Group Flow (vph)	357	0	712	0	0	283
Heavy Vehicles (%)	2%	1%	2%	0%	0%	2%
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	36.3		68.8			68.8
Effective Green, g (s)	36.3		68.8			68.8
Actuated g/C Ratio	0.30		0.57			0.57
Clearance Time (s)	6.7		8.2			8.2
Lane Grp Cap (vph)	1511		2029			2029
v/s Ratio Prot	c0.07		c0.20			0.08
v/s Ratio Perm						
v/c Ratio	0.24		0.35			0.14
Uniform Delay, d1	31.4		13.7			11.9
Progression Factor	0.31		0.77			1.99
Incremental Delay, d2	0.3		0.4			0.1
Delay (s)	10.0		11.0			23.8
Level of Service	A		B			C
Approach Delay (s/veh)	10.0		11.0			23.8
Approach LOS	A		B			C

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.9
Intersection Capacity Utilization	34.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

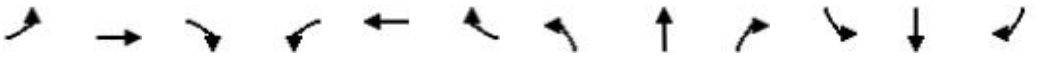
Build II Results

(Geo + Volume Shift): PM



Lane Group	EBT	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	1098	831	445	115	423
v/c Ratio	0.48	0.53	0.31	0.20	0.37
Control Delay (s/veh)	27.1	45.2	44.3	33.1	40.4
Queue Delay	0.0	0.9	0.3	0.0	1.0
Total Delay (s/veh)	27.1	46.1	44.6	33.1	41.4
Queue Length 50th (ft)	193	304	178	59	150
Queue Length 95th (ft)	243	372	229	121	180
Internal Link Dist (ft)	687	429	482		263
Turn Bay Length (ft)				215	
Base Capacity (vph)	2295	1573	1429	563	1131
Starvation Cap Reductn	0	445	0	0	450
Spillback Cap Reductn	0	41	479	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.48	0.74	0.47	0.20	0.62

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	935	75	0	715	50	0	405	105	40	280	65
Future Volume (veh/h)	0	935	75	0	715	50	0	405	105	40	280	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.90	0.99		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1841	1900	1870	1885	1900	1885	1870	1900	1870	1870
Adj Flow Rate, veh/h	0	1016	82	0	777	54	0	445	115	44	308	71
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	4	0	2	1	0	1	2	0	2	2
Cap, veh/h	0	2202	177	0	1518	105	0	1433	573	133	901	210
Arrive On Green	0.00	0.45	0.45	0.00	0.30	0.30	0.00	0.40	0.40	0.13	0.13	0.13
Sat Flow, veh/h	0	5047	393	0	3454	233	0	3676	1432	241	2251	524
Grp Volume(v), veh/h	0	720	378	0	411	420	0	445	115	214	0	209
Grp Sat Flow(s),veh/h/ln	0	1729	1811	0	1777	1817	0	1791	1432	1476	0	1542
Q Serve(g_s), s	0.0	17.3	17.4	0.0	22.9	22.9	0.0	10.2	6.3	6.1	0.0	14.8
Cycle Q Clear(g_c), s	0.0	17.3	17.4	0.0	22.9	22.9	0.0	10.2	6.3	16.3	0.0	14.8
Prop In Lane	0.00		0.22	0.00		0.13	0.00		1.00	0.21		0.34
Lane Grp Cap(c), veh/h	0	1562	818	0	803	821	0	1433	573	626	0	617
V/C Ratio(X)	0.00	0.46	0.46	0.00	0.51	0.51	0.00	0.31	0.20	0.34	0.00	0.34
Avail Cap(c_a), veh/h	0	1562	818	0	803	821	0	1433	573	626	0	617
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	22.8	22.8	0.0	30.9	30.9	0.0	24.7	23.5	37.7	0.0	37.7
Incr Delay (d2), s/veh	0.0	1.0	1.9	0.0	2.3	2.3	0.0	0.6	0.8	1.5	0.0	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	11.5	12.2	0.0	16.2	16.5	0.0	8.0	4.1	10.8	0.0	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	23.8	24.7	0.0	33.3	33.2	0.0	25.2	24.3	39.2	0.0	39.1
LnGrp LOS		C	C		C	C		C	C	D		D
Approach Vol, veh/h		1098			831			560			423	
Approach Delay, s/veh		24.1			33.2			25.0			39.2	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	63.0	57.0	63.0	57.0
Change Period (Y+Rc), s	8.8	9.0	8.8	9.0
Max Green Setting (Gmax), s	54.2	48.0	54.2	48.0
Max Q Clear Time (g_c+I1), s	24.9	18.3	19.4	12.2
Green Ext Time (p_c), s	11.0	3.1	16.5	3.9

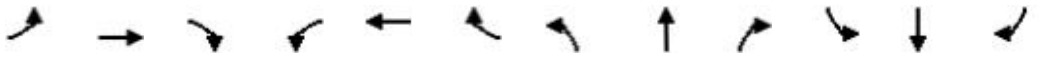
Intersection Summary	
HCM 6th Ctrl Delay, s/veh	29.1
HCM 6th LOS	C



Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	116	339	89	23	436	102	424
v/c Ratio	0.23	0.62	0.18	0.08	0.61	0.29	0.49
Control Delay (s/veh)	23.0	20.5	0.9	31.2	44.3	20.1	27.4
Queue Delay	0.0	0.0	0.0	0.0	56.9	0.0	0.4
Total Delay (s/veh)	23.0	20.5	0.9	31.2	101.2	20.1	27.7
Queue Length 50th (ft)	47	77	0	17	329	42	202
Queue Length 95th (ft)	81	m294	m2	m42	416	74	270
Internal Link Dist (ft)	703	436			263		452
Turn Bay Length (ft)						150	
Base Capacity (vph)	502	551	497	292	712	357	870
Starvation Cap Reductn	0	0	0	0	360	0	125
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.62	0.18	0.08	1.24	0.29	0.57

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	95	15	60	245	80	20	320	55	95	365	30
Future Volume (vph)	0	95	15	60	245	80	20	320	55	95	365	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.9			8.9	8.9	5.4	5.4		5.1	8.4	
Lane Util. Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes		0.98			1.00	0.74	1.00	0.96		1.00	0.96	
Flpb, ped/bikes		1.00			0.98	1.00	0.74	1.00		1.00	1.00	
Frt		0.98			1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected		1.00			0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1655			1829	1191	1333	1746		1787	1777	
Flt Permitted		1.00			0.81	1.00	0.51	1.00		0.28	1.00	
Satd. Flow (perm)		1655			1489	1191	723	1746		533	1777	
Peak-hour factor, PHF	0.95	0.95	0.95	0.90	0.90	0.90	0.86	0.86	0.86	0.93	0.93	0.93
Adj. Flow (vph)	0	100	16	67	272	89	23	372	64	102	392	32
RTOR Reduction (vph)	0	5	0	0	0	56	0	5	0	0	3	0
Lane Group Flow (vph)	0	111	0	0	339	33	23	431	0	102	421	0
Confl. Peds. (#/hr)	60		72	72		60	110		81	81		110
Confl. Bikes (#/hr)			1	1			2					2
Heavy Vehicles (%)	0%	11%	6%	2%	1%	1%	0%	2%	0%	1%	2%	0%
Turn Type		NA		pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		8		7	4			6		5	2	
Permitted Phases	8			4		4	6			2		
Actuated Green, G (s)		36.1			44.1	44.1	48.6	48.6		58.6	58.6	
Effective Green, g (s)		36.1			44.1	44.1	48.6	48.6		58.6	58.6	
Actuated g/C Ratio		0.30			0.37	0.37	0.41	0.41		0.49	0.49	
Clearance Time (s)		5.9			8.9	8.9	5.4	5.4		5.1	8.4	
Lane Grp Cap (vph)		497			561	437	292	707		342	867	
v/s Ratio Prot		0.07			c0.03			c0.25		0.02	c0.24	
v/s Ratio Perm					c0.20	0.03	0.03			0.13		
v/c Ratio		0.22			0.60	0.07	0.08	0.61		0.30	0.49	
Uniform Delay, d1		31.4			30.9	24.7	21.9	28.2		19.0	20.6	
Progression Factor		0.73			0.49	0.03	1.36	1.44		1.21	1.23	
Incremental Delay, d2		1.0			4.6	0.3	0.5	3.7		2.0	1.8	
Delay (s)		24.0			19.9	1.1	30.3	44.2		25.0	27.1	
Level of Service		C			B	A	C	D		C	C	
Approach Delay (s/veh)		24.0			16.0			43.5			26.7	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	22.4
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	250	38	43	326	11	434
v/c Ratio	0.58	0.09	0.10	0.31	0.03	0.40
Control Delay (s/veh)	70.3	25.2	4.6	4.9	4.4	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay (s/veh)	70.3	25.2	4.6	4.9	4.4	5.5
Queue Length 50th (ft)	175	15	5	37	1	40
Queue Length 95th (ft)	235	37	m9	52	m2	51
Internal Link Dist (ft)	730	415		452		358
Turn Bay Length (ft)			150		100	
Base Capacity (vph)	433	426	450	1058	435	1096
Starvation Cap Reductn	0	0	0	0	0	162
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.09	0.10	0.31	0.03	0.46

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	90	100	5	15	10	40	275	25	10	380	15
Future Volume (veh/h)	15	90	100	5	15	10	40	275	25	10	380	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.92		0.88	1.00		0.88	0.94		0.87	0.98		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1870	1900	1900	1870	1900
Adj Flow Rate, veh/h	18	110	122	6	19	12	43	299	27	11	418	16
Peak Hour Factor	0.82	0.82	0.82	0.80	0.80	0.80	0.92	0.92	0.92	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	2	0	0	2	0
Cap, veh/h	48	199	204	82	242	139	605	997	90	598	1064	41
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.60	0.60	0.60	1.00	1.00	1.00
Sat Flow, veh/h	60	762	783	180	927	531	911	1667	151	1054	1778	68
Grp Volume(v), veh/h	250	0	0	37	0	0	43	0	326	11	0	434
Grp Sat Flow(s),veh/h/ln	1605	0	0	1638	0	0	911	0	1817	1054	0	1846
Q Serve(g_s), s	1.3	0.0	0.0	0.0	0.0	0.0	2.4	0.0	10.5	0.2	0.0	0.0
Cycle Q Clear(g_c), s	16.1	0.0	0.0	2.0	0.0	0.0	2.4	0.0	10.5	10.7	0.0	0.0
Prop In Lane	0.07		0.49	0.16		0.32	1.00		0.08	1.00		0.04
Lane Grp Cap(c), veh/h	451	0	0	462	0	0	605	0	1087	598	0	1104
V/C Ratio(X)	0.55	0.00	0.00	0.08	0.00	0.00	0.07	0.00	0.30	0.02	0.00	0.39
Avail Cap(c_a), veh/h	451	0	0	462	0	0	605	0	1087	598	0	1104
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.7	0.0	0.0	33.5	0.0	0.0	10.2	0.0	11.8	0.8	0.0	0.0
Incr Delay (d2), s/veh	4.9	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.7	0.1	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.5	0.0	0.0	1.6	0.0	0.0	0.9	0.0	7.9	0.0	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.6	0.0	0.0	33.8	0.0	0.0	10.4	0.0	12.5	0.8	0.0	1.1
LnGrp LOS	D			C			B		B	A		A
Approach Vol, veh/h		250			37			369			445	
Approach Delay, s/veh		43.6			33.8			12.3			1.0	
Approach LOS		D			C			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0				
Change Period (Y+Rc), s		8.2		8.7		8.2		8.7				
Max Green Setting (Gmax), s		71.8		31.3		71.8		31.3				
Max Q Clear Time (g_c+I1), s		12.7		4.0		12.5		18.1				
Green Ext Time (p_c), s		7.0		0.2		5.4		1.3				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			15.6									
HCM 6th LOS			B									



Lane Group	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	54	5	303	6	472
v/c Ratio	0.13	0.01	0.27	0.01	0.43
Control Delay (s/veh)	25.4	4.2	4.1	5.8	7.1
Queue Delay	0.0	0.0	0.3	0.0	0.2
Total Delay (s/veh)	25.4	4.2	4.4	5.8	7.2
Queue Length 50th (ft)	21	0	28	1	70
Queue Length 95th (ft)	50	m2	54	m2	93
Internal Link Dist (ft)	299		358		376
Turn Bay Length (ft)		100		100	
Base Capacity (vph)	402	365	1111	440	1099
Starvation Cap Reductn	0	0	344	0	126
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.13	0.01	0.40	0.01	0.49

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	15	15	15	5	280	5	5	405	20
Future Volume (veh/h)	0	0	0	15	15	15	5	280	5	5	405	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.91		0.91	0.95		0.88	0.98		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1752	1870	1900	1900	1885	1900
Adj Flow Rate, veh/h	0	0	0	18	18	18	5	298	5	6	450	22
Peak Hour Factor	0.50	0.50	0.50	0.83	0.83	0.83	0.94	0.94	0.94	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	10	2	0	0	1	0
Cap, veh/h	0	502	0	157	155	136	552	1102	18	624	1066	52
Arrive On Green	0.00	0.00	0.00	0.26	0.26	0.26	0.60	0.60	0.60	1.00	1.00	1.00
Sat Flow, veh/h	0	1900	0	443	588	516	817	1829	31	1074	1769	86
Grp Volume(v), veh/h	0	0	0	54	0	0	5	0	303	6	0	472
Grp Sat Flow(s),veh/h/ln	0	1900	0	1547	0	0	817	0	1860	1074	0	1855
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	9.3	0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	2.8	0.0	0.0	0.3	0.0	9.3	9.4	0.0	0.0
Prop In Lane	0.00		0.00	0.33		0.33	1.00		0.02	1.00		0.05
Lane Grp Cap(c), veh/h	0	502	0	449	0	0	552	0	1120	624	0	1118
V/C Ratio(X)	0.00	0.00	0.00	0.12	0.00	0.00	0.01	0.00	0.27	0.01	0.00	0.42
Avail Cap(c_a), veh/h	0	502	0	449	0	0	552	0	1120	624	0	1118
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	33.5	0.0	0.0	9.5	0.0	11.3	0.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.6	0.0	0.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	2.3	0.0	0.0	0.1	0.0	7.2	0.0	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	0.0	34.1	0.0	0.0	9.6	0.0	11.9	0.6	0.0	1.2
LnGrp LOS				C			A		B	A		A
Approach Vol, veh/h		0			54			308			478	
Approach Delay, s/veh		0.0			34.1			11.9			1.2	
Approach LOS					C			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	80.0	40.0	80.0	40.0
Change Period (Y+Rc), s	7.7	* 8.3	7.7	* 8.3
Max Green Setting (Gmax), s	72.3	* 32	72.3	* 32
Max Q Clear Time (g_c+I1), s	11.4	4.8	11.3	0.0
Green Ext Time (p_c), s	6.6	0.3	3.8	0.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	7.2
HCM 6th LOS	A

Notes

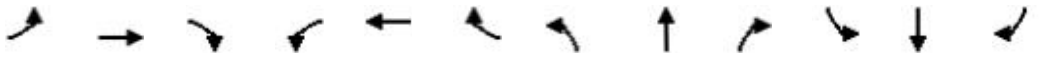
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	190	161	17	305	31	454
v/c Ratio	0.38	0.34	0.04	0.29	0.06	0.43
Control Delay (s/veh)	25.1	33.4	10.1	8.5	7.5	7.9
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.2
Total Delay (s/veh)	25.1	33.4	10.1	8.8	7.5	8.1
Queue Length 50th (ft)	97	103	2	42	3	48
Queue Length 95th (ft)	163	157	11	95	m13	108
Internal Link Dist (ft)	791	417		376		368
Turn Bay Length (ft)			100		100	
Base Capacity (vph)	494	474	391	1056	477	1051
Starvation Cap Reductn	0	0	0	292	0	148
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.34	0.04	0.40	0.06	0.50

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	130	30	15	80	40	15	265	10	30	420	15
Future Volume (veh/h)	15	130	30	15	80	40	15	265	10	30	420	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.86	0.98		0.86	0.95		0.88	0.99		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1900	1900	1856	1900	1870	1900	1900	1870	1900
Adj Flow Rate, veh/h	16	141	33	18	95	48	17	294	11	31	438	16
Peak Hour Factor	0.92	0.92	0.92	0.84	0.84	0.84	0.90	0.90	0.90	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	0	0	0	3	0	2	0	0	2	0
Cap, veh/h	54	394	87	65	304	143	580	1027	38	591	1028	38
Arrive On Green	0.29	0.29	0.29	0.10	0.10	0.10	0.58	0.58	0.58	1.00	1.00	1.00
Sat Flow, veh/h	73	1358	301	108	1050	492	901	1781	67	1076	1783	65
Grp Volume(v), veh/h	190	0	0	161	0	0	17	0	305	31	0	454
Grp Sat Flow(s),veh/h/ln	1732	0	0	1651	0	0	901	0	1848	1076	0	1848
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	10.0	0.5	0.0	0.0
Cycle Q Clear(g_c), s	10.3	0.0	0.0	10.6	0.0	0.0	1.0	0.0	10.0	10.6	0.0	0.0
Prop In Lane	0.08		0.17	0.11		0.30	1.00		0.04	1.00		0.04
Lane Grp Cap(c), veh/h	535	0	0	512	0	0	580	0	1065	591	0	1066
V/C Ratio(X)	0.36	0.00	0.00	0.31	0.00	0.00	0.03	0.00	0.29	0.05	0.00	0.43
Avail Cap(c_a), veh/h	535	0	0	512	0	0	580	0	1065	591	0	1066
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.9	0.0	0.0	43.3	0.0	0.0	11.0	0.0	12.9	0.8	0.0	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.0	1.6	0.0	0.0	0.1	0.0	0.7	0.2	0.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	0.0	0.0	8.8	0.0	0.0	0.4	0.0	7.8	0.1	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.7	0.0	0.0	44.9	0.0	0.0	11.1	0.0	13.6	0.9	0.0	1.2
LnGrp LOS	D			D			B		B	A		A
Approach Vol, veh/h		190			161			322			485	
Approach Delay, s/veh		35.7			44.9			13.4			1.2	
Approach LOS		D			D			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		77.0		43.0		77.0		43.0				
Change Period (Y+Rc), s		7.8		8.2		7.8		8.2				
Max Green Setting (Gmax), s		69.2		34.8		69.2		34.8				
Max Q Clear Time (g_c+I1), s		12.6		12.6		12.0		12.3				
Green Ext Time (p_c), s		7.6		0.9		4.6		1.1				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			16.4									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	61	51	11	337	494
v/c Ratio	0.17	0.15	0.03	0.31	0.45
Control Delay (s/veh)	21.4	20.8	12.7	14.1	6.7
Queue Delay	0.0	0.0	0.0	0.3	0.2
Total Delay (s/veh)	21.4	20.8	12.7	14.5	6.9
Queue Length 50th (ft)	8	15	4	115	37
Queue Length 95th (ft)	22	38	m10	132	130
Internal Link Dist (ft)	820	418		368	345
Turn Bay Length (ft)			100		
Base Capacity (vph)	355	351	394	1103	1108
Starvation Cap Reductn	0	0	0	326	171
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.17	0.15	0.03	0.43	0.53

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	25	5	15	20	10	295	5	0	445	15
Future Volume (veh/h)	15	0	25	5	15	20	10	295	5	0	445	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.83		0.76	0.85		0.76	0.95		0.88	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1826	1900	1870	1411	1900	1885	1900
Adj Flow Rate, veh/h	23	0	38	6	19	26	11	331	6	0	478	16
Peak Hour Factor	0.66	0.66	0.66	0.77	0.77	0.77	0.89	0.89	0.89	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	5	0	2	33	0	1	0
Cap, veh/h	149	15	201	60	161	194	584	1099	20	60	1085	36
Arrive On Green	0.27	0.00	0.27	0.27	0.27	0.27	0.60	0.60	0.60	0.00	1.00	1.00
Sat Flow, veh/h	403	55	758	98	605	730	871	1826	33	1060	1804	60
Grp Volume(v), veh/h	61	0	0	51	0	0	11	0	337	0	0	494
Grp Sat Flow(s),veh/h/ln	1216	0	0	1433	0	0	871	0	1859	1060	0	1864
Q Serve(g_s), s	0.8	0.0	0.0	0.0	0.0	0.0	0.6	0.0	10.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.1	0.0	0.0	3.1	0.0	0.0	0.6	0.0	10.6	0.0	0.0	0.0
Prop In Lane	0.38		0.62	0.12		0.51	1.00		0.02	1.00		0.03
Lane Grp Cap(c), veh/h	365	0	0	414	0	0	584	0	1118	60	0	1122
V/C Ratio(X)	0.17	0.00	0.00	0.12	0.00	0.00	0.02	0.00	0.30	0.00	0.00	0.44
Avail Cap(c_a), veh/h	365	0	0	414	0	0	584	0	1118	60	0	1122
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	33.8	0.0	0.0	33.5	0.0	0.0	9.6	0.0	11.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.6	0.0	0.0	0.1	0.0	0.7	0.0	0.0	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.7	0.0	0.0	2.2	0.0	0.0	0.2	0.0	8.1	0.0	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.8	0.0	0.0	34.1	0.0	0.0	9.7	0.0	12.3	0.0	0.0	1.3
LnGrp LOS	C			C			A		B			A
Approach Vol, veh/h		61			51			348			494	
Approach Delay, s/veh		34.8			34.1			12.2			1.3	
Approach LOS		C			C			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0				
Change Period (Y+Rc), s		7.8		8.1		7.8		8.1				
Max Green Setting (Gmax), s		72.2		31.9		72.2		31.9				
Max Q Clear Time (g_c+I1), s		2.0		5.1		12.6		6.1				
Green Ext Time (p_c), s		8.2		0.3		5.1		0.4				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			9.2									
HCM 6th LOS			A									



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	89	129	18	359	33	473
v/c Ratio	0.25	0.35	0.05	0.33	0.07	0.41
Control Delay (s/veh)	35.0	37.2	4.5	4.8	2.6	3.4
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.2
Total Delay (s/veh)	35.0	37.2	4.5	5.1	2.6	3.6
Queue Length 50th (ft)	49	80	2	38	3	38
Queue Length 95th (ft)	97	m121	6	57	m6	49
Internal Link Dist (ft)	744	423		345		286
Turn Bay Length (ft)			100		100	
Base Capacity (vph)	357	364	391	1101	442	1147
Starvation Cap Reductn	0	0	0	276	0	172
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.35	0.05	0.44	0.07	0.49

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	50	20	5	70	35	15	265	40	30	405	30
Future Volume (veh/h)	10	50	20	5	70	35	15	265	40	30	405	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.81	0.90		0.81	0.95		0.88	0.99		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1856	1767	1885	1900	1870	1885	1900
Adj Flow Rate, veh/h	11	56	22	6	82	41	18	312	47	33	440	33
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.85	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	3	9	1	0	2	1	0
Cap, veh/h	58	250	90	37	243	116	587	1003	151	617	1096	82
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.64	0.64	0.64	1.00	1.00	1.00
Sat Flow, veh/h	111	1132	408	26	1099	524	824	1567	236	1012	1712	128
Grp Volume(v), veh/h	89	0	0	129	0	0	18	0	359	33	0	473
Grp Sat Flow(s),veh/h/ln	1651	0	0	1649	0	0	824	0	1803	1012	0	1841
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	10.7	0.6	0.0	0.0
Cycle Q Clear(g_c), s	5.1	0.0	0.0	7.9	0.0	0.0	1.0	0.0	10.7	11.3	0.0	0.0
Prop In Lane	0.12		0.25	0.05		0.32	1.00		0.13	1.00		0.07
Lane Grp Cap(c), veh/h	398	0	0	395	0	0	587	0	1154	617	0	1178
V/C Ratio(X)	0.22	0.00	0.00	0.33	0.00	0.00	0.03	0.00	0.31	0.05	0.00	0.40
Avail Cap(c_a), veh/h	398	0	0	395	0	0	587	0	1154	617	0	1178
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.4	0.0	0.0	39.5	0.0	0.0	7.9	0.0	9.7	0.8	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.0	2.2	0.0	0.0	0.1	0.0	0.7	0.2	0.0	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.2	0.0	0.0	6.3	0.0	0.0	0.3	0.0	7.8	0.1	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.7	0.0	0.0	41.7	0.0	0.0	8.0	0.0	10.4	1.0	0.0	1.0
LnGrp LOS	D			D			A		B	A		A
Approach Vol, veh/h		89			129			377			506	
Approach Delay, s/veh		39.7			41.7			10.3			1.0	
Approach LOS		D			D			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		85.0		35.0		85.0		35.0				
Change Period (Y+Rc), s		8.2		8.5		8.2		8.5				
Max Green Setting (Gmax), s		76.8		26.5		76.8		26.5				
Max Q Clear Time (g_c+I1), s		13.3		9.9		12.7		7.1				
Green Ext Time (p_c), s		8.2		0.6		5.8		0.4				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			12.1									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	170	76	11	285	63	490
v/c Ratio	0.39	0.19	0.03	0.26	0.15	0.46
Control Delay (s/veh)	41.8	26.8	6.0	6.5	2.9	3.4
Queue Delay	0.0	0.0	0.0	0.5	0.0	0.2
Total Delay (s/veh)	41.8	26.8	6.0	7.0	2.9	3.6
Queue Length 50th (ft)	110	35	2	46	4	32
Queue Length 95th (ft)	m155	78	m6	63	m8	40
Internal Link Dist (ft)	879	412		286		375
Turn Bay Length (ft)			100		75	
Base Capacity (vph)	431	394	394	1079	413	1069
Starvation Cap Reductn	0	0	0	424	0	132
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.19	0.03	0.44	0.15	0.52

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	110	25	10	25	30	10	245	15	60	430	40
Future Volume (veh/h)	20	110	25	10	25	30	10	245	15	60	430	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.85	0.97		0.85	0.94		0.87	0.98		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1856	1900	1900	1900	1900	1870	1900	1900	1885	1900
Adj Flow Rate, veh/h	22	121	27	12	29	35	11	269	16	62	448	42
Peak Hour Factor	0.91	0.91	0.91	0.85	0.85	0.85	0.91	0.91	0.91	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	3	0	0	0	0	2	0	0	1	0
Cap, veh/h	69	342	71	77	174	184	583	1043	62	635	1007	94
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.60	0.60	0.60	1.00	1.00	1.00
Sat Flow, veh/h	135	1317	274	162	668	709	869	1730	103	1087	1672	157
Grp Volume(v), veh/h	170	0	0	76	0	0	11	0	285	62	0	490
Grp Sat Flow(s),veh/h/ln	1726	0	0	1538	0	0	869	0	1833	1087	0	1829
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	8.8	0.9	0.0	0.0
Cycle Q Clear(g_c), s	9.3	0.0	0.0	4.4	0.0	0.0	0.6	0.0	8.8	9.7	0.0	0.0
Prop In Lane	0.13		0.16	0.16		0.46	1.00		0.06	1.00		0.09
Lane Grp Cap(c), veh/h	483	0	0	435	0	0	583	0	1105	635	0	1102
V/C Ratio(X)	0.35	0.00	0.00	0.17	0.00	0.00	0.02	0.00	0.26	0.10	0.00	0.44
Avail Cap(c_a), veh/h	483	0	0	435	0	0	583	0	1105	635	0	1102
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.3	0.0	0.0	34.5	0.0	0.0	9.6	0.0	11.2	0.6	0.0	0.0
Incr Delay (d2), s/veh	2.0	0.0	0.0	0.9	0.0	0.0	0.1	0.0	0.6	0.3	0.0	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.8	0.0	0.0	3.3	0.0	0.0	0.2	0.0	6.7	0.1	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.3	0.0	0.0	35.4	0.0	0.0	9.7	0.0	11.8	0.9	0.0	1.3
LnGrp LOS	D			D			A		B	A		A
Approach Vol, veh/h		170			76			296			552	
Approach Delay, s/veh		38.3			35.4			11.7			1.3	
Approach LOS		D			D			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0				
Change Period (Y+Rc), s		7.7		8.8		7.7		8.8				
Max Green Setting (Gmax), s		72.3		31.2		72.3		31.2				
Max Q Clear Time (g_c+I1), s		11.7		6.4		10.8		11.3				
Green Ext Time (p_c), s		8.9		0.4		4.2		0.9				

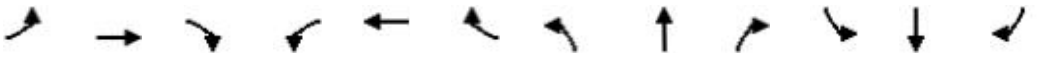
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			12.2									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	96	149	298	595
v/c Ratio	0.27	0.36	0.28	0.55
Control Delay (s/veh)	38.5	26.2	6.9	34.7
Queue Delay	0.0	0.1	0.0	55.1
Total Delay (s/veh)	38.6	26.3	6.9	89.7
Queue Length 50th (ft)	64	60	50	435
Queue Length 95th (ft)	108	111	72	m525
Internal Link Dist (ft)	989	252	375	264
Turn Bay Length (ft)				
Base Capacity (vph)	358	410	1060	1074
Starvation Cap Reductn	0	0	0	625
Spillback Cap Reductn	13	14	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.28	0.38	0.28	1.33

Intersection Summary

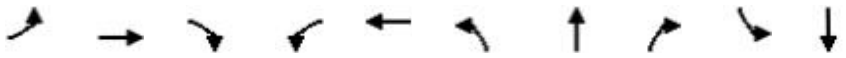
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	35	20	15	40	70	5	260	15	5	530	30
Future Volume (veh/h)	25	35	20	15	40	70	5	260	15	5	530	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.77	0.88		0.86	1.00		0.86	0.98		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1900	1900	1900	1900	1900	1900	1870	1900	1900	1885	1870
Adj Flow Rate, veh/h	30	42	24	18	48	83	5	277	16	5	558	32
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	4	0	0	0	0	0	0	2	0	0	1	2
Cap, veh/h	146	195	100	62	149	223	35	1026	59	33	1041	59
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	403	739	381	107	566	846	8	1718	98	4	1742	99
Grp Volume(v), veh/h	96	0	0	149	0	0	298	0	0	595	0	0
Grp Sat Flow(s),veh/h/ln	1522	0	0	1520	0	0	1824	0	0	1846	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.4	0.0	0.0	9.3	0.0	0.0	9.4	0.0	0.0	22.9	0.0	0.0
Prop In Lane	0.31		0.25	0.12		0.56	0.02		0.05	0.01		0.05
Lane Grp Cap(c), veh/h	440	0	0	434	0	0	1120	0	0	1133	0	0
V/C Ratio(X)	0.22	0.00	0.00	0.34	0.00	0.00	0.27	0.00	0.00	0.53	0.00	0.00
Avail Cap(c_a), veh/h	440	0	0	434	0	0	1120	0	0	1133	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	34.5	0.0	0.0	36.0	0.0	0.0	11.6	0.0	0.0	14.3	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.0	2.2	0.0	0.0	0.6	0.0	0.0	1.7	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.3	0.0	0.0	6.9	0.0	0.0	7.2	0.0	0.0	15.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.7	0.0	0.0	38.1	0.0	0.0	12.2	0.0	0.0	16.1	0.0	0.0
LnGrp LOS	D			D			B			B		
Approach Vol, veh/h		96			149			298			595	
Approach Delay, s/veh		35.7			38.1			12.2			16.1	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0				
Change Period (Y+Rc), s		8.3		8.4		8.3		8.4				
Max Green Setting (Gmax), s		71.7		31.6		71.7		31.6				
Max Q Clear Time (g_c+I1), s		24.9		11.3		11.4		7.4				
Green Ext Time (p_c), s		10.3		0.6		4.3		0.4				

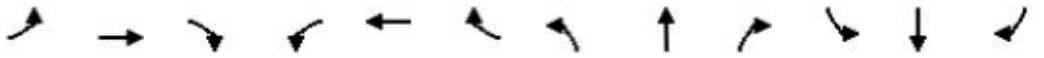
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			19.6									
HCM 6th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	127	601	101	33	397	43	277	27	223	617
v/c Ratio	0.38	0.98	0.26	0.25	0.42	0.24	0.48	0.07	0.50	0.87
Control Delay (s/veh)	14.7	56.0	1.6	19.5	15.7	21.2	41.0	0.4	21.3	45.1
Queue Delay	0.0	42.0	0.2	8.6	0.0	0.0	2.9	0.4	1.8	52.8
Total Delay (s/veh)	14.7	98.0	1.8	28.2	15.7	21.2	43.9	0.8	23.1	97.9
Queue Length 50th (ft)	24	463	0	8	36	21	180	0	112	401
Queue Length 95th (ft)	36	#556	0	m18	m75	44	256	0	m180	#644
Internal Link Dist (ft)		1129			389		264			487
Turn Bay Length (ft)	170		85	110		95		100	225	
Base Capacity (vph)	337	611	392	134	950	179	578	385	447	709
Starvation Cap Reductn	0	0	0	0	0	0	199	0	0	59
Spillback Cap Reductn	0	272	61	73	0	0	0	201	107	339
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	1.77	0.31	0.54	0.42	0.24	0.73	0.15	0.66	1.67

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	475	80	30	250	115	40	255	25	210	490	90
Future Volume (veh/h)	100	475	80	30	250	115	40	255	25	210	490	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.71	1.00		0.71	1.00		0.67	0.93		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1870	1856	1885	1885	1885	1870	1900	1885	1885
Adj Flow Rate, veh/h	127	601	101	33	272	125	43	277	27	223	521	96
Peak Hour Factor	0.79	0.79	0.79	0.92	0.92	0.92	0.92	0.92	0.92	0.94	0.94	0.94
Percent Heavy Veh, %	1	0	1	2	3	1	1	1	2	0	1	1
Cap, veh/h	358	611	365	145	633	264	184	580	325	494	598	110
Arrive On Green	0.14	0.64	0.64	0.04	0.30	0.30	0.04	0.31	0.31	0.04	0.13	0.13
Sat Flow, veh/h	1795	1900	1135	1781	2134	890	1795	1885	1057	1810	1499	276
Grp Volume(v), veh/h	127	601	101	33	220	177	43	277	27	223	0	617
Grp Sat Flow(s),veh/h/ln	1795	1900	1135	1781	1763	1261	1795	1885	1057	1810	0	1775
Q Serve(g_s), s	5.8	36.9	4.6	1.5	12.0	13.8	1.9	14.3	2.2	9.2	0.0	40.9
Cycle Q Clear(g_c), s	5.8	36.9	4.6	1.5	12.0	13.8	1.9	14.3	2.2	9.2	0.0	40.9
Prop In Lane	1.00		1.00	1.00		0.71	1.00		1.00	1.00		0.16
Lane Grp Cap(c), veh/h	358	611	365	145	523	374	184	580	325	494	0	708
V/C Ratio(X)	0.35	0.98	0.28	0.23	0.42	0.47	0.23	0.48	0.08	0.45	0.00	0.87
Avail Cap(c_a), veh/h	358	611	365	145	523	374	184	580	325	494	0	708
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.8	21.1	15.3	31.8	33.9	34.5	29.9	33.7	29.5	23.8	0.0	49.1
Incr Delay (d2), s/veh	2.7	32.6	1.9	3.6	2.5	4.3	3.0	2.8	0.5	3.0	0.0	13.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.6	22.0	2.3	1.4	9.4	8.2	1.8	11.4	1.1	8.4	0.0	30.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.5	53.6	17.2	35.4	36.4	38.8	32.9	36.5	30.0	26.8	0.0	62.9
LnGrp LOS	C	D	B	D	D	D	C	D	C	C		E
Approach Vol, veh/h		829			430			347			840	
Approach Delay, s/veh		45.2			37.3			35.6			53.3	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	54.0	14.0	41.0	22.0	43.0	11.0	44.0
Change Period (Y+Rc), s	* 5.9	6.1	5.6	* 5.4	* 5.9	6.1	6.0	* 5.4
Max Green Setting (Gmax), s	* 5.1	47.9	8.4	* 36	* 16	36.9	5.0	* 39
Max Q Clear Time (g_c+I1), s	3.9	42.9	7.8	15.8	11.2	16.3	3.5	38.9
Green Ext Time (p_c), s	0.0	2.8	0.0	2.6	0.4	3.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	45.2
HCM 6th LOS	D

Notes

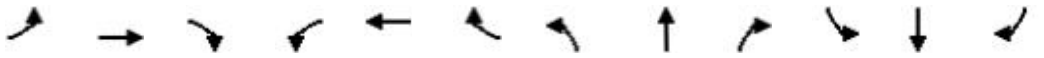
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	169	308	47	128	41	414	32	570
v/c Ratio	0.34	0.70	0.15	0.30	0.12	0.43	0.09	0.59
Control Delay (s/veh)	32.0	30.7	29.1	18.0	15.5	19.4	14.3	21.4
Queue Delay	0.0	1.6	0.1	0.0	0.0	0.5	0.0	0.7
Total Delay (s/veh)	32.0	32.3	29.2	18.0	15.5	19.9	14.3	22.1
Queue Length 50th (ft)	86	109	25	38	19	206	9	349
Queue Length 95th (ft)	129	171	51	82	m39	267	m15	410
Internal Link Dist (ft)	1144			417		487		393
Turn Bay Length (ft)		180	60		60		170	
Base Capacity (vph)	504	442	313	424	333	954	342	972
Starvation Cap Reductn	0	0	0	0	0	218	0	151
Spillback Cap Reductn	0	43	30	0	0	0	0	84
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.77	0.17	0.30	0.12	0.56	0.09	0.69

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	120	265	40	50	60	40	380	25	30	510	20
Future Volume (veh/h)	25	120	265	40	50	60	40	380	25	30	510	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.90		0.76	0.93		0.77	0.94		0.85	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1870	1885	1900	1885	1900	1870	1885	1900
Adj Flow Rate, veh/h	29	140	308	47	58	70	41	388	26	32	548	22
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.98	0.98	0.98	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	0	0	2	1	0	1	0	2	1	0
Cap, veh/h	103	475	386	279	207	249	486	916	61	444	948	38
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.53	0.53	0.53	1.00	1.00	1.00
Sat Flow, veh/h	217	1514	1228	891	658	794	803	1725	116	972	1785	72
Grp Volume(v), veh/h	169	0	308	47	0	128	41	0	414	32	0	570
Grp Sat Flow(s),veh/h/ln	1731	0	1228	891	0	1451	803	0	1840	972	0	1857
Q Serve(g_s), s	0.0	0.0	27.5	5.0	0.0	8.0	3.0	0.0	16.3	1.1	0.0	0.0
Cycle Q Clear(g_c), s	8.2	0.0	27.5	13.2	0.0	8.0	3.0	0.0	16.3	17.4	0.0	0.0
Prop In Lane	0.17		1.00	1.00		0.55	1.00		0.06	1.00		0.04
Lane Grp Cap(c), veh/h	579	0	386	279	0	456	486	0	977	444	0	986
V/C Ratio(X)	0.29	0.00	0.80	0.17	0.00	0.28	0.08	0.00	0.42	0.07	0.00	0.58
Avail Cap(c_a), veh/h	579	0	386	279	0	456	486	0	977	444	0	986
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.0	0.0	37.7	36.0	0.0	31.0	13.9	0.0	17.0	2.2	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	15.7	1.3	0.0	1.5	0.3	0.0	1.3	0.3	0.0	2.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.1	0.0	15.2	2.2	0.0	5.5	1.1	0.0	11.7	0.3	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.3	0.0	53.4	37.3	0.0	32.5	14.3	0.0	18.4	2.6	0.0	2.5
LnGrp LOS	C		D	D		C	B		B	A		A
Approach Vol, veh/h		477			175			455			602	
Approach Delay, s/veh		45.9			33.8			18.0			2.5	
Approach LOS		D			C			B			A	

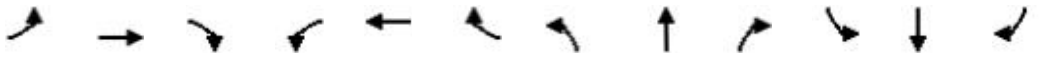
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		73.0		47.0		73.0		47.0				
Change Period (Y+Rc), s		9.3		9.3		9.3		9.3				
Max Green Setting (Gmax), s		63.7		37.7		63.7		37.7				
Max Q Clear Time (g_c+I1), s		19.4		15.2		18.3		29.5				
Green Ext Time (p_c), s		9.9		1.1		6.9		1.7				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			21.9									
HCM 6th LOS			C									



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	142	150	451	619
v/c Ratio	0.45	0.48	0.42	0.59
Control Delay (s/veh)	37.5	39.0	5.2	14.8
Queue Delay	0.0	3.1	0.1	0.2
Total Delay (s/veh)	37.5	42.2	5.3	15.0
Queue Length 50th (ft)	76	88	64	117
Queue Length 95th (ft)	142	142	92	316
Internal Link Dist (ft)	1407	172	393	369
Turn Bay Length (ft)				
Base Capacity (vph)	319	312	1083	1047
Starvation Cap Reductn	0	88	124	70
Spillback Cap Reductn	0	0	0	41
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.45	0.67	0.47	0.63

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	60	55	30	40	55	20	360	30	50	515	35
Future Volume (veh/h)	15	60	55	30	40	55	20	360	30	50	515	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.90		0.74	0.91		0.74	0.95		0.88	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1900	1900	1900	1885	1900	1900	1885	1870
Adj Flow Rate, veh/h	16	66	60	36	48	66	22	396	33	52	531	36
Peak Hour Factor	0.91	0.91	0.91	0.83	0.83	0.83	0.91	0.91	0.91	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	0	0	0	0	0	1	0	0	1	2
Cap, veh/h	51	164	133	94	119	139	62	1020	83	99	984	65
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.64	0.64	0.64	1.00	1.00	1.00
Sat Flow, veh/h	83	756	614	264	551	640	48	1600	130	105	1544	102
Grp Volume(v), veh/h	142	0	0	150	0	0	451	0	0	619	0	0
Grp Sat Flow(s),veh/h/ln	1454	0	0	1455	0	0	1778	0	0	1750	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.9	0.0	0.0	9.6	0.0	0.0	14.1	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.11		0.42	0.24		0.44	0.05		0.07	0.08		0.06
Lane Grp Cap(c), veh/h	348	0	0	352	0	0	1165	0	0	1148	0	0
V/C Ratio(X)	0.41	0.00	0.00	0.43	0.00	0.00	0.39	0.00	0.00	0.54	0.00	0.00
Avail Cap(c_a), veh/h	348	0	0	352	0	0	1165	0	0	1148	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	40.7	0.0	0.0	40.8	0.0	0.0	10.4	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	3.5	0.0	0.0	3.7	0.0	0.0	1.0	0.0	0.0	1.8	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.2	0.0	0.0	7.6	0.0	0.0	9.9	0.0	0.0	1.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.2	0.0	0.0	44.5	0.0	0.0	11.4	0.0	0.0	1.8	0.0	0.0
LnGrp LOS	D			D			B			A		
Approach Vol, veh/h		142			150			451			619	
Approach Delay, s/veh		44.2			44.5			11.4			1.8	
Approach LOS		D			D			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		85.0		35.0		85.0		35.0				
Change Period (Y+Rc), s		8.5		9.0		8.5		9.0				
Max Green Setting (Gmax), s		76.5		26.0		76.5		26.0				
Max Q Clear Time (g_c+I1), s		2.0		11.6		16.1		11.9				
Green Ext Time (p_c), s		12.0		0.8		7.4		0.7				

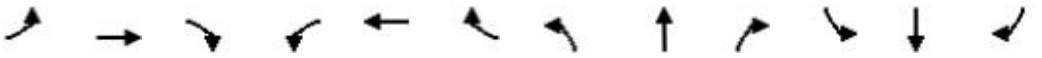
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			14.1									
HCM 6th LOS			B									



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	10	82	446	650
v/c Ratio	0.06	0.56	0.29	0.43
Control Delay (s/veh)	47.2	65.1	2.1	2.5
Queue Delay	0.0	0.2	0.2	0.6
Total Delay (s/veh)	47.2	65.2	2.2	3.1
Queue Length 50th (ft)	7	62	28	24
Queue Length 95th (ft)	13	105	61	m140
Internal Link Dist (ft)	146	143	369	321
Turn Bay Length (ft)				
Base Capacity (vph)	284	266	1536	1501
Starvation Cap Reductn	0	16	405	472
Spillback Cap Reductn	0	0	0	12
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.04	0.33	0.39	0.63

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	5	30	5	35	0	400	15	25	575	10
Future Volume (veh/h)	0	0	5	30	5	35	0	400	15	25	575	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.94		0.94	1.00		0.89	0.98		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1856	1900	1900	1900	1885	1841	1900	1885	1900
Adj Flow Rate, veh/h	0	0	10	35	6	41	0	430	16	27	612	11
Peak Hour Factor	0.50	0.50	0.50	0.86	0.86	0.86	0.93	0.93	0.93	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	3	0	0	0	1	4	0	1	0
Cap, veh/h	0	0	151	91	26	75	0	1450	54	66	1417	25
Arrive On Green	0.00	0.00	0.10	0.10	0.10	0.10	0.00	0.81	0.81	1.00	1.00	1.00
Sat Flow, veh/h	0	0	1513	487	266	753	0	1797	67	44	1756	31
Grp Volume(v), veh/h	0	0	10	82	0	0	0	0	446	650	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1513	1506	0	0	0	0	1864	1830	0	0
Q Serve(g_s), s	0.0	0.0	0.7	3.4	0.0	0.0	0.0	0.0	7.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.7	6.0	0.0	0.0	0.0	0.0	7.3	0.0	0.0	0.0
Prop In Lane	0.00		1.00	0.43		0.50	0.00		0.04	0.04		0.02
Lane Grp Cap(c), veh/h	0	0	151	193	0	0	0	0	1504	1508	0	0
V/C Ratio(X)	0.00	0.00	0.07	0.43	0.00	0.00	0.00	0.00	0.30	0.43	0.00	0.00
Avail Cap(c_a), veh/h	0	0	277	315	0	0	0	0	1504	1508	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.91	0.58	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	49.0	51.2	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.2	1.5	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.5	4.3	0.0	0.0	0.0	0.0	4.3	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	49.1	52.7	0.0	0.0	0.0	0.0	3.4	0.5	0.0	0.0
LnGrp LOS			D	D					A	A		
Approach Vol, veh/h		10			82			446			650	
Approach Delay, s/veh		49.1			52.7			3.4			0.5	
Approach LOS		D			D			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		102.0		18.0		102.0		18.0				
Change Period (Y+Rc), s		5.2		6.0		5.2		6.0				
Max Green Setting (Gmax), s		86.8		22.0		86.8		22.0				
Max Q Clear Time (g_c+I1), s		9.3		2.7		2.0		8.0				
Green Ext Time (p_c), s		7.2		0.0		12.9		0.3				

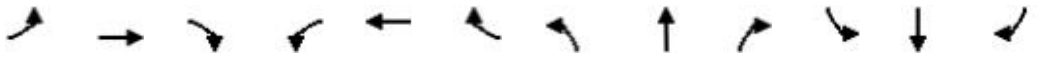
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			5.6									
HCM 6th LOS			A									



Lane Group	EBL	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	167	484	279	47	413	29	93	593	29
v/c Ratio	0.54	0.83	0.42	0.16	0.52	0.05	0.23	0.75	0.05
Control Delay (s/veh)	20.7	26.3	28.1	10.2	20.8	0.2	9.2	26.9	0.1
Queue Delay	0.0	1.5	0.0	0.0	1.6	0.0	0.0	0.1	0.0
Total Delay (s/veh)	20.7	27.8	28.1	10.2	22.4	0.2	9.2	27.0	0.1
Queue Length 50th (ft)	31	81	97	12	165	0	22	267	0
Queue Length 95th (ft)	52	#505	134	26	231	0	40	513	m0
Internal Link Dist (ft)		305	231		321			621	
Turn Bay Length (ft)				175		150	200		
Base Capacity (vph)	309	580	657	289	793	630	411	793	627
Starvation Cap Reductn	0	24	0	0	217	0	0	10	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.87	0.42	0.16	0.72	0.05	0.23	0.76	0.05

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	295	140	0	170	70	40	355	25	80	510	25
Future Volume (veh/h)	150	295	140	0	170	70	40	355	25	80	510	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.74	1.00		0.63	0.99		0.91	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	0	1885	1885	1900	1885	1826	1885	1885	1856
Adj Flow Rate, veh/h	167	328	156	0	198	81	47	413	29	93	593	29
Peak Hour Factor	0.90	0.90	0.90	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	1	0	1	0	1	1	0	1	5	1	1	3
Cap, veh/h	183	372	177	0	503	175	390	795	592	378	795	602
Arrive On Green	0.07	0.34	0.34	0.00	0.45	0.45	0.04	0.28	0.28	0.11	0.84	0.84
Sat Flow, veh/h	1795	1082	515	0	2313	772	1810	1885	1404	1795	1885	1427
Grp Volume(v), veh/h	167	0	484	0	153	126	47	413	29	93	593	29
Grp Sat Flow(s),veh/h/ln	1795	0	1597	0	1791	1201	1810	1885	1404	1795	1885	1427
Q Serve(g_s), s	11.5	0.0	34.3	0.0	6.8	8.7	1.7	22.1	1.8	3.4	15.9	0.4
Cycle Q Clear(g_c), s	11.5	0.0	34.3	0.0	6.8	8.7	1.7	22.1	1.8	3.4	15.9	0.4
Prop In Lane	1.00		0.32	0.00		0.64	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	548	0	406	272	390	795	592	378	795	602
V/C Ratio(X)	0.00	0.00	0.88	0.00	0.38	0.46	0.12	0.52	0.05	0.25	0.75	0.05
Avail Cap(c_a), veh/h	0	0	548	0	406	272	390	795	592	378	795	602
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	0.67	0.67	0.67	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	37.1	0.0	27.2	27.7	18.4	32.8	25.5	18.6	6.7	5.5
Incr Delay (d2), s/veh	0.0	0.0	18.3	0.0	2.7	5.6	0.6	2.4	0.2	1.5	6.3	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	22.3	0.0	5.2	4.7	1.4	16.7	1.1	2.7	7.7	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	55.4	0.0	29.9	33.3	19.0	35.2	25.7	20.1	13.0	5.6
LnGrp LOS			E		C	C	B	D	C	C	B	A
Approach Vol, veh/h		651			279			489			715	
Approach Delay, s/veh		41.2			31.4			33.1			13.6	
Approach LOS		D			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	60.0	14.0	33.0	13.0	60.0		47.0				
Change Period (Y+Rc), s	6.5	9.4	5.8	5.8	6.6	9.4		5.8				
Max Green Setting (Gmax), s	6.5	50.6	8.2	27.2	6.4	50.6		41.2				
Max Q Clear Time (g_c+I1), s	3.7	17.9	13.5	10.7	5.4	24.1		36.3				
Green Ext Time (p_c), s	0.0	9.4	0.0	1.6	0.0	5.6		1.4				

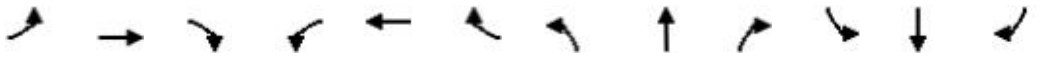
Intersection Summary	
HCM 6th Ctrl Delay, s/veh	28.8
HCM 6th LOS	C



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	34	169	208	149	110	571	5	500
v/c Ratio	0.09	0.44	0.55	0.39	0.27	0.72	0.02	0.37
Control Delay (s/veh)	35.1	34.2	39.2	40.1	14.0	27.7	3.4	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay (s/veh)	35.1	34.2	39.2	40.1	14.0	27.8	3.4	4.3
Queue Length 50th (ft)	16	63	116	90	35	230	1	0
Queue Length 95th (ft)	m34	121	150	128	59	327	m1	0
Internal Link Dist (ft)		1162		364		621		402
Turn Bay Length (ft)	75		140		75		150	
Base Capacity (vph)	395	383	376	379	415	789	285	1363
Starvation Cap Reductn	0	0	0	0	0	7	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	12
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.44	0.55	0.39	0.27	0.73	0.02	0.37

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	45	105	160	85	30	100	460	60	5	385	70
Future Volume (veh/h)	30	45	105	160	85	30	100	460	60	5	385	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.83		0.83	0.91		0.71	0.96		0.81	1.00		0.80
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1885	1870	1870	1856	1900	1856	1885	1870	1900	1885	1767
Adj Flow Rate, veh/h	34	51	118	208	110	39	110	505	66	5	423	77
Peak Hour Factor	0.89	0.89	0.89	0.77	0.77	0.77	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	1	2	2	3	0	3	1	2	0	1	9
Cap, veh/h	356	94	217	344	250	89	464	703	92	271	1220	218
Arrive On Green	0.09	0.21	0.21	0.09	0.21	0.21	0.07	0.44	0.44	0.06	0.56	0.56
Sat Flow, veh/h	1767	439	1015	1781	1170	415	1767	1585	207	1810	2912	520
Grp Volume(v), veh/h	34	0	169	208	0	149	110	0	571	5	257	243
Grp Sat Flow(s),veh/h/ln	1767	0	1454	1781	0	1585	1767	0	1792	1810	1791	1641
Q Serve(g_s), s	0.0	0.0	12.4	0.6	0.0	9.8	0.0	0.0	31.3	0.0	9.4	9.8
Cycle Q Clear(g_c), s	0.0	0.0	12.4	0.6	0.0	9.8	0.0	0.0	31.3	0.0	9.4	9.8
Prop In Lane	1.00		0.70	1.00		0.26	1.00		0.12	1.00		0.32
Lane Grp Cap(c), veh/h	356	0	311	344	0	339	464	0	795	271	750	688
V/C Ratio(X)	0.10	0.00	0.54	0.60	0.00	0.44	0.24	0.00	0.72	0.02	0.34	0.35
Avail Cap(c_a), veh/h	356	0	311	344	0	339	464	0	795	271	750	688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	0.0	42.1	45.8	0.0	41.1	24.6	0.0	27.3	38.1	17.6	17.6
Incr Delay (d2), s/veh	0.5	0.0	6.7	7.7	0.0	4.1	1.2	0.0	5.5	0.1	1.2	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	8.8	10.7	0.0	7.7	4.2	0.0	20.8	0.2	7.1	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.1	0.0	48.8	53.4	0.0	45.2	25.8	0.0	32.8	38.3	18.8	19.1
LnGrp LOS	D		D	D		D	C		C	D	B	B
Approach Vol, veh/h		203			357			681			505	
Approach Delay, s/veh		47.0			50.0			31.7			19.1	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	59.0	15.0	32.0	11.3	62.0	15.0	32.0
Change Period (Y+Rc), s	6.3	8.6	4.0	6.3	6.3	* 8.6	4.0	6.3
Max Green Setting (Gmax), s	7.7	50.4	11.0	25.7	5.0	* 53	11.0	25.7
Max Q Clear Time (g_c+I1), s	2.0	11.8	2.0	11.8	2.0	33.3	2.6	14.4
Green Ext Time (p_c), s	0.1	7.2	0.0	0.7	0.0	7.1	0.4	0.8

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	33.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	6	6	536	549
v/c Ratio	0.02	0.02	0.40	0.41
Control Delay (s/veh)	39.2	22.6	2.0	3.0
Queue Delay	0.0	0.0	0.2	0.1
Total Delay (s/veh)	39.2	22.6	2.2	3.2
Queue Length 50th (ft)	4	0	46	44
Queue Length 95th (ft)	15	11	49	53
Internal Link Dist (ft)	328		402	352
Turn Bay Length (ft)				
Base Capacity (vph)	353	291	1343	1325
Starvation Cap Reductn	0	0	252	174
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.49	0.48

Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	5	515	5	0	450
Future Volume (veh/h)	5	5	515	5	0	450
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.91	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1441	1900	1870
Adj Flow Rate, veh/h	6	6	531	5	0	549
Peak Hour Factor	0.81	0.81	0.97	0.97	0.82	0.82
Percent Heavy Veh, %	0	0	0	31	0	2
Cap, veh/h	354	315	1336	13	0	1331
Arrive On Green	0.20	0.20	0.71	0.71	0.00	1.00
Sat Flow, veh/h	1810	1610	1877	18	0	1870
Grp Volume(v), veh/h	6	6	0	536	0	549
Grp Sat Flow(s),veh/h/ln	1810	1610	0	1895	0	1870
Q Serve(g_s), s	0.3	0.4	0.0	13.6	0.0	0.0
Cycle Q Clear(g_c), s	0.3	0.4	0.0	13.6	0.0	0.0
Prop In Lane	1.00	1.00		0.01	0.00	
Lane Grp Cap(c), veh/h	354	315	0	1348	0	1331
V/C Ratio(X)	0.02	0.02	0.00	0.40	0.00	0.41
Avail Cap(c_a), veh/h	354	315	0	1348	0	1331
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.9	38.9	0.0	7.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.9	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	0.3	0.0	9.4	0.0	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	39.0	39.1	0.0	7.8	0.0	0.9
LnGrp LOS	D	D		A		A
Approach Vol, veh/h	12		536			549
Approach Delay, s/veh	39.0		7.8			0.9
Approach LOS	D		A			A

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		91.0		29.0		91.0
Change Period (Y+Rc), s		5.6		5.5		5.6
Max Green Setting (Gmax), s		85.4		23.5		85.4
Max Q Clear Time (g_c+I1), s		2.0		2.4		15.6
Green Ext Time (p_c), s		9.6		0.0		9.2

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	4.7
HCM 6th LOS	A



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	110	100	27	576	23	552
v/c Ratio	0.31	0.27	0.06	0.48	0.06	0.48
Control Delay (s/veh)	31.1	41.5	12.8	15.2	15.4	22.8
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay (s/veh)	31.1	41.5	12.8	15.4	15.4	22.8
Queue Length 50th (ft)	52	65	7	163	10	294
Queue Length 95th (ft)	79	95	23	249	m18	310
Internal Link Dist (ft)	365	478		352		685
Turn Bay Length (ft)			100		100	
Base Capacity (vph)	359	369	430	1204	417	1140
Starvation Cap Reductn	0	0	0	160	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.27	0.06	0.55	0.06	0.48

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	35	35	10	50	15	25	525	10	20	435	45
Future Volume (veh/h)	10	35	35	10	50	15	25	525	10	20	435	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.91	0.94		0.91	1.00		0.91	1.00		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1856	1856	1900	1900	1900	1856	1900	1900	1900	1870	1737
Adj Flow Rate, veh/h	14	48	48	13	67	20	27	565	11	23	500	52
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.93	0.93	0.93	0.87	0.87	0.87
Percent Heavy Veh, %	0	3	3	0	0	0	3	0	0	0	2	11
Cap, veh/h	58	171	151	61	273	75	469	1185	23	469	1054	110
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	111	788	696	125	1262	347	849	1853	36	850	1649	171
Grp Volume(v), veh/h	110	0	0	100	0	0	27	0	576	23	0	552
Grp Sat Flow(s),veh/h/ln	1596	0	0	1734	0	0	849	0	1889	850	0	1820
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	19.0	1.7	0.0	18.8
Cycle Q Clear(g_c), s	6.7	0.0	0.0	5.5	0.0	0.0	20.9	0.0	19.0	20.7	0.0	18.8
Prop In Lane	0.13		0.44	0.13		0.20	1.00		0.02	1.00		0.09
Lane Grp Cap(c), veh/h	380	0	0	410	0	0	469	0	1208	469	0	1163
V/C Ratio(X)	0.29	0.00	0.00	0.24	0.00	0.00	0.06	0.00	0.48	0.05	0.00	0.47
Avail Cap(c_a), veh/h	380	0	0	410	0	0	469	0	1208	469	0	1163
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.5	0.0	0.0	39.0	0.0	0.0	16.6	0.0	11.2	16.6	0.0	11.2
Incr Delay (d2), s/veh	1.9	0.0	0.0	1.4	0.0	0.0	0.2	0.0	1.4	0.2	0.0	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.3	0.0	0.0	4.8	0.0	0.0	0.8	0.0	12.9	0.7	0.0	12.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.4	0.0	0.0	40.4	0.0	0.0	16.9	0.0	12.6	16.8	0.0	12.6
LnGrp LOS	D			D			B		B	B		B
Approach Vol, veh/h		110			100			603			575	
Approach Delay, s/veh		41.4			40.4			12.8			12.8	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		85.0		35.0		85.0		35.0				
Change Period (Y+Rc), s		* 8.3		9.0		* 8.3		9.0				
Max Green Setting (Gmax), s		* 77		26.0		* 77		26.0				
Max Q Clear Time (g_c+I1), s		22.7		7.5		22.9		8.7				
Green Ext Time (p_c), s		9.9		0.5		10.4		0.5				

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		17.0
HCM 6th LOS		B

Notes

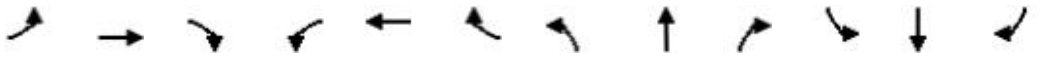
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	34	205	163	65	554	56	549	56
v/c Ratio	0.15	0.62	0.41	0.14	0.46	0.13	0.47	0.06
Control Delay (s/veh)	29.0	36.7	43.1	14.0	16.8	9.3	15.6	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.0	36.7	43.1	14.0	16.8	9.3	15.6	2.2
Queue Length 50th (ft)	9	54	107	23	201	16	162	0
Queue Length 95th (ft)	m29	m117	172	38	217	29	204	11
Internal Link Dist (ft)		429	286		685		737	
Turn Bay Length (ft)				145		110		
Base Capacity (vph)	232	330	402	460	1200	438	1176	899
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.62	0.41	0.14	0.46	0.13	0.47	0.06

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	55	125	5	130	10	60	500	15	45	445	45
Future Volume (veh/h)	30	55	125	5	130	10	60	500	15	45	445	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.91	0.99		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1870	1870	1900	1900	1900	1900	1900	1900	1856	1856	1900
Adj Flow Rate, veh/h	34	62	142	6	146	11	65	538	16	56	549	56
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.93	0.93	0.93	0.81	0.81	0.81
Percent Heavy Veh, %	5	2	2	0	0	0	0	0	0	3	3	0
Cap, veh/h	283	102	234	36	371	27	462	1169	35	473	1183	994
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	1179	471	1078	23	1706	125	828	1834	55	848	1856	1560
Grp Volume(v), veh/h	34	0	204	163	0	0	65	0	554	56	549	56
Grp Sat Flow(s),veh/h/ln	1179	0	1548	1855	0	0	828	0	1888	848	1856	1560
Q Serve(g_s), s	0.0	0.0	14.2	0.0	0.0	0.0	5.3	0.0	18.1	4.4	18.3	1.6
Cycle Q Clear(g_c), s	4.5	0.0	14.2	9.0	0.0	0.0	23.5	0.0	18.1	22.4	18.3	1.6
Prop In Lane	1.00		0.70	0.04		0.07	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	283	0	337	435	0	0	462	0	1204	473	1183	994
V/C Ratio(X)	0.12	0.00	0.61	0.38	0.00	0.00	0.14	0.00	0.46	0.12	0.46	0.06
Avail Cap(c_a), veh/h	283	0	337	435	0	0	462	0	1204	473	1183	994
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.5	0.0	42.3	40.2	0.0	0.0	17.3	0.0	11.2	16.9	11.2	8.2
Incr Delay (d2), s/veh	0.9	0.0	7.9	2.5	0.0	0.0	0.6	0.0	1.3	0.5	1.3	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	10.2	7.8	0.0	0.0	2.0	0.0	12.4	1.7	12.3	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.4	0.0	50.2	42.7	0.0	0.0	17.9	0.0	12.4	17.4	12.5	8.3
LnGrp LOS	D		D	D			B		B	B	B	A
Approach Vol, veh/h		238			163			619			661	
Approach Delay, s/veh		48.6			42.7			13.0			12.6	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		85.0		35.0		85.0		35.0				
Change Period (Y+Rc), s		8.5		8.9		8.5		8.9				
Max Green Setting (Gmax), s		76.5		26.1		76.5		26.1				
Max Q Clear Time (g_c+I1), s		24.4		11.0		25.5		16.2				
Green Ext Time (p_c), s		10.8		0.7		10.5		0.9				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			20.8									
HCM 6th LOS			C									



Lane Group	NBL	SET	NWT
Lane Group Flow (vph)	500	753	685
v/c Ratio	0.31	0.39	0.34
Control Delay (s/veh)	53.1	15.7	8.4
Queue Delay	0.0	0.7	0.0
Total Delay (s/veh)	53.1	16.5	8.4
Queue Length 50th (ft)	120	165	130
Queue Length 95th (ft)	156	164	132
Internal Link Dist (ft)	94	395	737
Turn Bay Length (ft)			
Base Capacity (vph)	1610	1951	1989
Starvation Cap Reductn	0	806	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.31	0.66	0.34

Intersection Summary



Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	475	15	565	0	0	610
Future Volume (vph)	475	15	565	0	0	610
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.7		8.2			8.2
Lane Util. Factor	0.94		0.95			0.95
Frt	1.00		1.00			1.00
Flt Protected	0.95		1.00			1.00
Satd. Flow (prot)	5038		3505			3574
Flt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	5038		3505			3574
Peak-hour factor, PHF	0.98	0.98	0.75	0.75	0.89	0.89
Adj. Flow (vph)	485	15	753	0	0	685
RTOR Reduction (vph)	3	0	0	0	0	0
Lane Group Flow (vph)	497	0	753	0	0	685
Heavy Vehicles (%)	1%	0%	3%	0%	0%	1%
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	38.3		66.8			66.8
Effective Green, g (s)	38.3		66.8			66.8
Actuated g/C Ratio	0.32		0.56			0.56
Clearance Time (s)	6.7		8.2			8.2
Lane Grp Cap (vph)	1607		1951			1989
v/s Ratio Prot	c0.10		c0.21			0.19
v/s Ratio Perm						
v/c Ratio	0.31		0.39			0.34
Uniform Delay, d1	30.9		15.0			14.6
Progression Factor	1.71		1.00			0.54
Incremental Delay, d2	0.4		0.6			0.4
Delay (s)	53.3		15.6			8.4
Level of Service	D		B			A
Approach Delay (s/veh)	53.3		15.6			8.4
Approach LOS	D		B			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.9
Intersection Capacity Utilization	38.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group