APPENDIX A

Plan & Policy Review

INTRODUCTION

The Pedestrian Master Plan builds upon many local and regional planning and engineering efforts. The following provides a description of the citywide planning efforts, local programs and projects, and regional and adjacent city efforts that were available at the time of the writing (in 2021).

CITYWIDE PLANNING EFFORTS

Costa Mesa General Plan Circulation Element (2015)

The Costa Mesa General Plan (GP) was last updated in 2015. The Circulation Element of the General Plan includes goals, objectives, and policies that the City uses to make decisions about transportation network improvements. The Plan emphasizes expanding the travel ability for bicycles and pedestrians and implementing "complete streets" strategies in the city, in accordance with the California Complete Streets Act of 2008.

The Circulation Element advocates for pedestrians via the following methods:

- Safe, accessible, and well-maintained sidewalks.
- Sidewalk zones in commercial areas with frontage zone, pedestrian-through zone, street furniture zone, and enhancement/buffer zone.
- Properly designed, marked, and signed crossings.
- Street and intersection improvements for pedestrian safety (pedestrian refuge islands, advance stop and yield lines, flashing lights and beacons, raised crosswalks, etc.)

It also lays out Pedestrian Opportunity Zones, areas where pedestrian improvements should be targeted.

The Circulation Element includes the following goals related to pedestrian planning:

- Goal C-1: Implement "Complete Streets" policies on roadways in Costa Mesa
- Goal C-7: Promote a friendly active transportation system in Costa Mesa (initiating "First and Last Mile" Programs)
- Goal C-8: Create a safer place to walk and ride a bicycle
- Goal C-9: Integrate active transportation elements into circulation system and land use planning
- Goal C-10: Promote an active transportation culture
- Goal C-11: Promote the positive air quality, health, and economic benefits of active transportation
- Goal C-12: Monitor, evaluate, and pursue funding for the implementation of the Bicycle and Pedestrian Master Plan

Costa Mesa Active Transporation Plan (ATP) (2018)

The Costa Mesa Active Transportation Plan, adopted in 2018, provides strategies and actions that will improve the active transportation experience in Costa Mesa. It analyzes existing pedestrian and bicycle facilities in Costa Mesa, provides a policy framework behind the City's active transportation vision, and proposes facilities for future funding. The existing conditions analysis and recommendations emphasize analysis related to bicycle travel.

The Active Transportation Plan includes the following goals:

- Goal 1.0: Promote a friendly active transportation system in Costa Mesa
- Goal 2.0: Create a safer place to walk and ride a bicycle
- Goal 3.0: Integrate active transportation elements into the circulation system and land use planning

- Goal 4.0: Promote an active transportation culture
- Goal 5.0: Promote the positive air quality, health, and economic benefits of active transportation
- Goal 6.0: Monitor, evaluate, and pursue funding for implementation of the Active Transportation Master Plan.

Recommended pedestrian accommodations mirror those found in the General Plan, with an emphasis on sidewalks located within Pedestrian Opportunity Zones, including suggested routes to school:

Frontage Zone: Functions as an extension of a building, including entryways and sidewalk cafes.

Pedestrian Through Zone: Primary accessible pathway for pedestrians, 5-7 feet wide in residential settings and 8-12 feet wide in commercial areas.

Street Furniture Zone: Location of street furniture such as lighting, benches, utility poles, tree wells, and bicycle parking.

Enhancement/Buffer Zone: Space between street and sidewalk with curb extensions, parklets, or cycle tracks.

The Plan also recommends drought tolerant landscaping for shading and heat reduction, and the development of multiuse trails, which would accommodate both pedestrians and bicycles.

A list of proposed shared-use paths is also included. There is one proposed multiuse trail within a pedestrian opportunity zone along the Paularino Channel adjacent to the Bristol Street opportunity zone.

Complete Street Safety Assessment (2021)

The Complete Street Safety Assessment was completed as a collaboration between the City and SafeTREC at UC Berkeley. It reviewed six focus areas in the city and provided recommendations for improvements. The six corridors include:

- Placentia Avenue
- Placentia Avenue access to Joann Street Path
- Pomona Avenue between 19th Street and Wilson Street
- Wilson Street
- Del Mar Avenue, Newport Boulevard- Santa Ana Avenue
- Bristol Street, Irvine Avenue - Sunflower Avenue

Multi-Purpose Trails Plan (2016)

Completed in June 2016, the Costa Mesa Multi-Purpose Trails Plan analyzes the strategies needed to implement a multi-use trail system within the City, focusing on the area between the Santa Ana River Trail and Newport Bay (in the middle-third of the City). Two public workshops and two stakeholder meetings helped inform the recommendations.

While the proposed multi-use trails largely do not intersect the Pedestrian Opportunity Zones, new facilities are proposed on Tanager Drive and Adams Avenue adjacent to the zone surrounding Harbor Blvd. This includes pedestrian improvements, including sidewalk widening and enhanced crosswalks on Adams Avenue and traffic calming on Tanager Drive. "Project 12" provides an alternate (bicycle) route to Adams Avenue on Mesa Verda Drive, Harla Avenue, and Peterson Place.

Local Roadway Safety Plan (LRSP) (2022)

The City's Local Road Safety Plan identifies safety countermeasures for all travel modes including walking and bicycling. The Plan supports ongoing efforts to make safety improvements by analyzing crash data, selecting emphasis areas, and identifying countermeasures through public outreach and collaboration with diverse stakeholders.

LOCAL PROGRAMS & PROJECTS

Go Human Explore Merrimac (2018)

On April 21, 2018, Costa Mesa hosted a SCAG Go Human demonstration project on Merrimac Way, from Harbor Boulevard to Fairview Road, to explore potential improvements to bicycle and pedestrian safety. Temporary demonstrations included a protected bike lane, sidewalk seating and shade, and an activated community event hub. The project included engagement with Orange Coast College, and was advised by the Costa Mesa Bikeways and Walkability Committee and OCTA. The demonstration project attracted 400 participants.

The top three desired walking improvements (from 93 surveys collected at the event) were:

- Improved sidewalks
- Public space/parks
- Street lighting

Reimagining 19th Street

In the summer of 2020, the Costa Mesa Alliance for Better Streets (CMABS), a community organization, led the Reimaging 19th Street project. CMABS is a non-profit active transportation community group that facilitated and led grassroots activities. For the project, the organization planned and implemented a tactical urbanism demonstration to test out potential active transportation treatments, which included traffic circles, along the 19th Street Corridor. The organization also developed infrastructure recommendations for construction. The project received positive support from community members. However, following the project, the City of Costa Mesa received mixed reviews about the project, particularly regarding the traffic circles.

Costa Mesa Community Pedestrian & Bicycle Safety Training:

The Costa Mesa Planning Committee, California Walks, and the University of California at Berkeley's Safe Transportation Research and Education Center (SafeTREC) collaboratively led a training session on August 28, 2020. The session included walking and biking assessments along three key routes within the City: Newport Boulevard from 17th Street to 19th Street, 19th Street from the western city limit to Harbor Boulevard, and Fairview Boulevard from Baker Street to Fair Drive (adjacent to Orange Coast College). The first two corridors correspond to areas within the Pedestrian Opportunity Zones, which are prioritized as a part of the Pedestrian Master Plan. Following the training, recommendations were proposed for the three corridors.

PLANNED AND FUNDED ACTIVE TRANSPORTATION PROJECTS WITHIN COSTA MESA

Active Transportation Improvements

Several active transportation projects are proposed as part of the FY 2021-22 CIP. These include:

- Bicycle and pedestrian Infrastructure Improvements
- Citywide Bicycle Wayfinding Signage
- Citywide Class II, III, & IV Bicycle Projects
- Mesa Del Mar Multi-Modal Access and Circulation Improvements
- Mesa Drive and Santa Ana Avenue Bicycle Facility Improvements
- Mesa Verde Drive East/Peterson Place Class II Bicycle Facility
- Randolph Avenue Parking and Pedestrian Improvements
- West 18th Street and Wilson Street Crosswalks

The Merrimac Way project final design has been completed. The project create several improvements between Harbor Boulevard and Fairview Road, including cycle tracks, a multi-use path, and pedestrian crossing with pedestrian hybrid beacon. Construction is expected to be completed by end of July 2021.

Adams Avenue Improvements Project – This project will build a raised center median and Class I Multi-Use Path with landscaped buffer from Harbor Boulevard to the Santa Ana River.

Adams Avenue Bicycle Facility Project – This project will add new bike lanes on both directions from Harbor Boulevard to Fairview Road, as well as, provide new lighting on the south side of Adams Avenue.

Adams Avenue & Pinecreek Drive Intersection Project – The project will enhance the traffic patterns and accessibility of the area by adding an additional crosswalk across Adams Avenue, converting the northbound slip lane to a conventional right-turn-lane, reconstructing the eastbound slip lane to slow right-turning vehicular traffic, constructing a wider sidewalk and trail along the west edge of the south leg of the intersection, and providing a crosswalk across the eastbound right turn lane. The project will also include traffic signal modifications at the intersection to accommodate the improvements.

West 19th Street Bicycle Facility Improvements – This project will provide improved bicycle connectivity and multi-modal accessibility between Pomona Avenue and Marina View Park by adding Class II bicycle lanes, bicycle boxes, high-visibility bike lane markings, sharrows, and pedestrian crosswalks.

Project W, Transit stops – This project will improve transit stops and construct new transit shade structures at three locations: Fairview Road north of Arlington Drive, Harbor Boulevard north of Wilson Street, and Placentia Avenue south of 19th Street.

Traffic signals that are currently in construction:

- Fairview Road HSIP Project (at the intersection of Fairview Road & Village Way)
- Baker Street & Randolph Avenue
- VANS Headquarters driveway along Hyland Avenue
- The Press driveway along S. Coast Drive

Traffic signals and HAWK signals that are currently in design:

- HAWK signal at W. 18th Street between Lions Park and the Westside Police Substation.
- W. 19th Street & Wallace Avenue traffic signal.

Traffic Signal Synchronization Project (TSSP)

- Fairview Road TSSP (implementation complete and O&M underway).
- Bear Street TSSP (implementation is under construction).
- Red Hill Avenue TSSP (design is underway and implementation/construction beginning in 2021).
- Baker, Placentia, Victoria, and 19th Street TSSP – design phase to begin Sept 2021-time frame with construction/ implementation starting in 2022.

Roadway Resurfacing Projects

Wilson Street resurfacing project – construction to begin in 2021. The City has a FY 21-22 CIP project for a new pedestrian crossing (location to be determined) on Wilson Street near Wilson Park; improvement likely to include a HAWK signal (pedestrian hybrid beacon).

Neighborhood Traffic Improvements – This project features neighborhood traffic improvements including signs, approved

speed humps, crosswalk enhancements, and other landscape improvements to enhance the neighborhood character.

Randolph Avenue Improvements - This project will construct new signing, striping, and traffic calming improvements along Randolph Avenue and St. Clair Street between Bristol Street and Baker Street. A roundabout at the intersection of Randolph Avenue and St. Clair Street has been designed. The project includes speed cushions on Randolph Avenue, a mid-block raised crosswalk on Randolph Avenue, a Rectangular Rapid Flashing Beacon (RRFB) at the mid-block raised crosswalk, and new street lighting for pedestrian crossings. The project will increase available on-street parking, encourage slower traffic speeds on Randolph Avenue, improve circulation, and improve pedestrian crossings.

Citywide Street Improvements – Several streets in the Westside and Eastside neighborhoods of Costa Mesa were improved as part of this project. Major streets improved over the current fiscal year include Bear Street, Santa Ana Avenue and Hamilton Street. A total of 1.14 million square feet of pavement was reconstructed as part of this project.

REGIONAL AND ADJACENT CITY EFFORTS

OC Active: Orange County's Bike and Ped Plan (2019)

OC Active: Orange County's Bike and Ped Plan aims to enhance walking and biking countywide. The Plan contains seven primary goals:

- Reduce pedestrian and bicyclist collisions
- Advance strategic walking and biking network
- Enhance walking and biking access to transit
- Improve high-need pedestrian areas
- Strengthen stakeholder partnerships
- Incorporate diverse community perspectives
- Leverage funding opportunities

Pedestrian focus area maps were established for the entire county, emphasizing the areas with the greatest activity and demand for pedestrian travel. They were based on a GIS-based analysis of generators, barriers, and attractors. Results from the analysis indicate that pedestrian improvements should be concentrated in the area southwest of Wilson Street and Newport Boulevard.

OC Supervisorial District Bikeway Plan:

OCTA created bikeways strategies by district to promote cross-jurisdictional and regional bicycle corridors. Costa Mesa was included in the OCTA Districts 1 and 2 Bikeways Strategy. This plan primarily focuses on the region's bicycle network rather than pedestrian improvements.

Connect SoCal (2020)

Connect SoCal is the 2020 Regional Transportation Plan/ Sustainable Communities Strategy from the Southern California Association of Governments (SCAG). The Plan includes a technical report outlining the existing state of active transportation and the impacts of investments in active transportation within the SCAG region. The Plan contains ten goals for active transportation in the region:

- Encourage regional economic prosperity and global competitiveness.
- Improve mobility, accessibility, reliability, and travel safety for people and goods.
- Enhance the preservation, security, and resilience of the regional transportation system.

- Increase person and goods throughput and travel choices within the transportation system.
- Reduce greenhouse gas emissions and improve air quality.
- Support healthy and equitable communities.
- Adapt to a changing climate and support an integrated regional development pattern and transportation network.
- Leverage new transportation technologies and data-driven solutions that result in more efficient travel.
- Encourage development of diverse housing types in areas well supported by multiple transportation options.
- Promote conservation of natural and agricultural lands and restoration of critical habitats.

City of Newport Beach Bicycle Master Plan (2014)

The Newport Beach Bicycle Master Plan guides the development and maintenance of a comprehensive bicycle network and set of programs until 2034. Class I Shared-Use Paths are present within the City allowing joint pedestrian and bicycle use for a total of 18.9 miles. There were 93 miles of bikeways in 2014, including 26 miles of sidewalks that allow bicycling

Major existing connections (Class I Shared-Use Paths) are made from Newport Beach, which is geographically southeast of Costa Mesa, at the following streets/shared-use paths: Back Bay Open Space Trail and the Santa Ana River Trail. The Santa Ana River Trail is maintained and operated by the County of Orange.

City of Irvine Strategic Active Transportation Plan (2020)

The 2020 Plan seeks to balance new technologies and innovative pedestrian and bicycle transportation options to establish an environment that is comfortable and convenient for users. The vast array of off-street facilities is complimented by a complete on-street mobility network. On-street facility connections are made via Red Hill Avenue and along Main Street.

City of Huntington Beach Bicycle Master Plan (2013)

The Bicycle Master Plan discusses opportunities for pedestrian travel via off-street shared-use paths. Connections are made to Costa Mesa via the Santa Ana River Trail. The Santa Ana River Trail is maintained and operated by the County of Orange.

City of Santa Ana Active Transportation Plan (2019)

The goal of the Santa Ana Active Transportation Plan (2019) document is to create a City which provides multi-modal access for walking, biking, and rolling. Santa Ana forms the northern boundary with the City of Costa Mesa along Sunflower Avenue.

City of Fountain Valley General Plan Update (Forthcoming)

The City is currently working on updating its General Plan, and it may include discussions on active transportation. The City shares a small border with Fountain Valley.

APPENDIX B

Walk Audit Event Summaries

INTRODUCTION

In the spring of 2021, the project team hosted walk audits to collect participant feedback on existing street conditions and desired improvements. The input collected helped inform the recommendations development for the Costa Mesa Pedestrian Master Plan. The walk audits allowed community members to explore major pedestrian corridors in the city, as identified in the General Plan as Pedestrian Opportunity Zones.

Community members were provided opportunities to conduct the walk audits in-person or virtually through an online platform. In response to the COVID-19 pandemic, in-person walk audit events were restricted to a small number of participants who registered on a first-come-first-served basis. For the virtual walk audits, community members were directed to an event website with instructions on how to share their input through an online mapping tool. The website was both in English and Spanish in order to properly include the Hispanic population in the planning process.

This section discusses the findings from the in-person walk audits. Comments received from the virtual walk audits were incorporated into the findings for the overall community engagement efforts, which were discussed in Chapter 2, Community Engagement.

IN-PERSON WALK AUDITS

The in-person walk audits had 39 participants who provided a wealth of input for the Plan. The dates and locations of each in-person walk audit are as follows:

- Wednesday, March 31, 2021 (1pm-3pm) – The triangle
- Saturday, April 3, 2021 (10am-12pm) – 19th Street Commercial
- Wednesday, April 7, 2021 (1pm-3pm) – N. Harbor Commercial (Merrimac)
- Saturday, April 10, 2021 (10am-12pm) – N. Harbor Commercial (Baker)
- Wednesday, April 14, 2021 (1pm-3pm) – S. Harbor Commercial (Wilson)
- Thursday, April 15, 2021 (9am-11am) – LAB Anti Mall

Event Activities

Each in-person walk audit was comprised of three activities: event overview, the walk, and the event debrief.

Event Overview: Participants were introduced to the planning effort for the Costa Mesa Pedestrian Master Plan, the walk audit process, and the walking route.

The Walk: Event attendees took a walk along the pre-determined route. Along the way, participants pointed out areas of concern and brainstormed potential solutions.

Event Debrief: Following The Walk, participants discussed common infrastructure and behavioral themes that they saw on the walk and discussed next steps.

EVENT SUMMARY
WALK AUDIT #1

THE TRIANGLE

WEDNESDAY, MARCH 31, 2021

1:00 PM – 3:00 PM

7 ATTENDEES

OVERVIEW

On Wednesday, March 31, 2021, the project team conducted the first scheduled walk audit, held at The Triangle area in Downtown Costa Mesa, which includes Newport Boulevard, 19th Street, and Harbor Boulevard. The event had 7 attendees, excluding the project team and city staff.

The following section documents the key findings and observations discussed at the walk audit.

KEY FINDINGS

- Pedestrian clearance intervals at some locations should be extended to accommodate adequate time for senior pedestrian crossings.
- Tree planters are raised and interfere with the effective width of the sidewalks.
- The pedestrian experience is noisy along major corridors.
- At driveways/intersections, vehicles were observed to block pedestrian crossings.
- Landscaped buffer is more preferred by participants than a wider sidewalk with no buffer.
- Vehicles were observed to make right turns on red without coming to a complete stop.
- Some intersections had high visibility ladder-style crosswalks while others did not.
- Pedestrians were observed crossing outside of marked crosswalks at several mid-block locations.

CORRIDORS

Corridor #1 (19th Street)

- Utility wires create obstructions on the sidewalk network.
- The sidewalk has obstructions due to raised tree planters.
- The corridor is noisy.
- The sidewalk is approximately 6 feet wide and does not have a landscaped area along the curb to provide a buffer between pedestrians and vehicles.
- At driveways/intersections, vehicles were observed to block pedestrian crossings.

Corridor #2 (Newport Boulevard)

- Participants expressed positive feedback for the wide sidewalk with buffer along the corridor.
- The majority of crosswalks are decorative.

Corridor #3 (Harbor Boulevard)

- The corridor has high vehicular volumes.
- Participants expressed positive feedback for the wide sidewalk with buffer along the corridor.
- Vehicles turning in and out of signalized driveways presented some conflict with pedestrian crossings

Corridor #4 (Park Avenue)

- The sidewalk is approximately 6 feet wide.

Corridor #5 (Rochester Street)

- Pedestrians were observed to cross mid-block outside of crossing designations to travel to and from the park and facilities to the south of Rochester Street.

INTERSECTIONS

Intersection #1 (19th Street & Park Avenue)

- Crosswalk markings are not high-visibility style crosswalks.
- Pedestrian countdown signals are present at intersection.

Intersection #2 (19th Street & Anaheim Avenue)

- Crosswalk markings at the intersection are faded.
- High volume of vehicles lined up for the In-N-Out, creating poor visibility of pedestrians crossing the intersection.

Intersection #3 (Newport Boulevard & 19th Street)

- In conversations with community members, drivers have to make quick decisions at the southbound approach of 19th Street coming off the freeway.
- The pedestrian clearance interval is not long enough to accommodate pedestrians.
- The traffic signal does not have pedestrian countdown signals.
- The intersection has high vehicular volumes.
- Location is along Caltrans' right-of-way.

Intersection #4 (Newport Boulevard & Broadway)

- The intersection has decorative crosswalks.

Intersection #5 (Newport Boulevard & Harbor Boulevard)

- The intersection has decorative crosswalks.
- The pedestrian clearance interval is not long enough to accommodate pedestrians.

Intersection #6 (Newport Boulevard & Rochester Street/ Park Avenue)

- Westbound merge lane limits visibility of pedestrians crossing east/west at Park Avenue.
- The crosswalks are not high visibility.

Participants attended a brief overview of the walk audit process prior to the walk

Traffic signal poles obstruct the sidewalk and crosswalk on 19th Street and Park Avenue

Participants crossed a decorative crosswalk on 19th Street and Harbor Boulevard

Vehicle parked on the crosswalk which blocked off access for pedestrians

Nice sidewalk infrastructure on Park Avenue adjacent to the Norma Hertzog Community Center

Transit stop at Broadway and 19th Street

EVENT SUMMARY
WALK AUDIT #2

19TH STREET COMMERCIAL AREA

SATURDAY, APRIL 3, 2021

10:00 AM – 12:00 PM

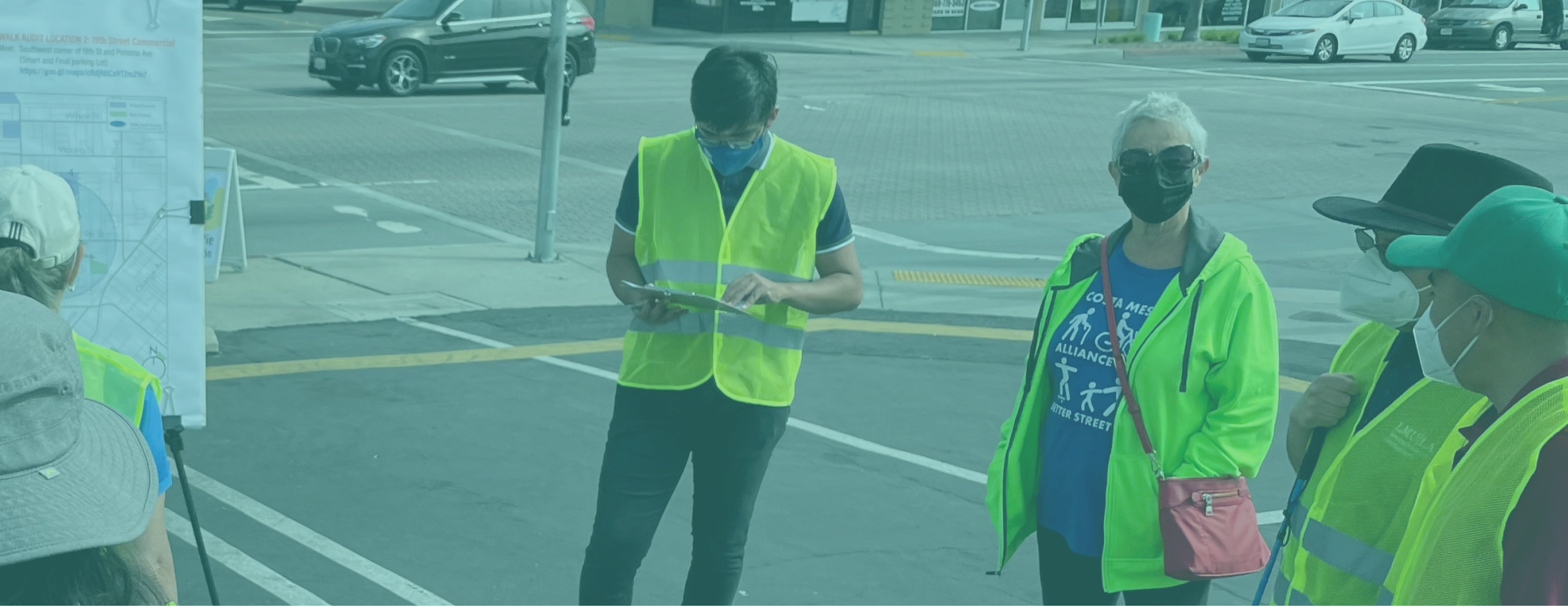
11 ATTENDEES

OVERVIEW

The project team conducted the second scheduled walk audit on Saturday, April 3 2021 at the 19th Street commercial area. The event had 11 participants who gave valuable feedback on how to improve the pedestrian experience of walking on 19th Street, Pomona Avenue, and Placentia Avenue. The following section documents the key findings and observations made at the walk audit.

KEY FINDINGS

- Several areas lack sidewalks, particularly near Pomona Elementary School.
- Signage around the schools is worn out and could be upgraded to include "yield to pedestrians" signs.
- Many locations do not feature enough separation between vehicular traffic and pedestrians.
- Pedestrians were observed to cross mid-block along 19th Street due to long stretches without designated crossings.
- 19th Street is a loud corridor.
- Participants noted a lack of street lighting along the minor streets that provide connectivity to 19th Street.
- Participants expressed concern that Santa Ana Avenue has a higher speed limit than desired as compared to other areas near schools.



CORRIDORS

Corridor #1 (19th Street)

- Sidewalks are not wide enough to allow two pedestrians to walk side-by-side, from Placentia Avenue to Pomona Avenue.
- Pedestrians crossed outside of marked crosswalks at several mid-block locations
- There are areas where the buffer between sidewalk and street is wider than sidewalk itself.
- Radar speed feedback signs are available to alert motorists of their speeds.
- There is sporadic landscaping (i.e. trees and shrubs) along the corridor.
- Bus stops exist along this corridor and are heavily used.
- E-bikes are allowed on sidewalks except in certain zones.

INTERSECTIONS

Intersection #1 (Meyer Place & 19th Street)

- The intersection has crossings on three sides.

Intersection #2 (Meyer Place & Surf Street)

- There is no sidewalk on either sides of Surf Street.

Intersection #3 (Meyer Place & Beach Street)

- There is no sidewalk on the north side of Beach Street.

Intersection #4 (Pomona Ave & 19th Street)

- Crosswalks are faded.

Intersection #5 (Wallace Avenue & 19th Street)

- A new signalized intersection is being considered at this location.

Intersection #4 (Placentia Avenue & 19th Street)

- The intersection may have sight distance issues that result in vehicles moving forward into the crosswalk and/or turning on red in front of pedestrians.
- The pedestrian clearance interval is not long enough to accommodate pedestrians.
- The intersection lacks shade and participants noted the high noise volumes.

OUTSIDE WALK AUDIT RADIUS

The project team received the following comments from walk audit participants about areas that were not within the walk audit radius.

Corridor (19th Street)

- Participants noted that motorists frequently speed.
- Many locations do not provide enough separation between vehicular traffic and pedestrians.
- This corridor contains wide driveways that interrupt the sidewalk infrastructure.
- Participants expressed the need to beautify and clean the sidewalks.
- The sidewalk has many obstructions that create obstacles for pedestrians.

Corridor (Monrovia Avenue)

- Participants noted that motorists frequently speed.
- There may be a lack of street lighting along Monrovia Avenue.

Corridor (Placentia Avenue)

- Bus stops along the corridor have no shade structure.

Corridor (Center Street)

- The corridor lacks street trees.
- Participants noted sidewalk improvements over the years.

Corridor (Ross Street)

- There are no sidewalks on either side of the street.

Corridor (Seal Street)

- There are no sidewalks on either side of Seal Street (near Meyer Place).

Intersection (Federal Ave & 19th Street)

- Participants noted that motorists frequently speed.

Intersection (Monrovia Ave & 19th Street)

- This is intersection has high pedestrian volumes and provides access to many bus stops.

Intersection (Placentia Ave & Center Street)

- Participants noted that motorists frequently speed.

Intersection (Monrovia Ave & Center Street)

- Participants observed pedestrians cross Monrovia Avenue despite the lack of designated markings or pedestrian facilities.

Intersection (Meyer Place & Cove Street)

- A utility pole and street light create an obstruction to the pedestrian path at the curb of the intersection.

The project team reviewed the walk audit route with participants

Sidewalk interrupted by driveway into a strip mall on 19th Street

Pedestrian crossing on a yellow light

Pedestrians at the intersection of 19th Street and Pomona Avenue

EVENT SUMMARY
WALK AUDIT #3

NORTH HARBOR COMMERCIAL AREA (ADAMS AVENUE)

WEDNESDAY, APRIL 7, 2021

1:00 PM – 3:00 PM

3 ATTENDEES

OVERVIEW

On Wednesday, April 7, 2021, the project team conducted the third scheduled walk audit. At the event, the participants walked along Harbor Boulevard, Adams Avenue, Merrimac Way, and Baker Street. The event had 3 attendees, excluding the project team and city staff. The following section documents the key findings and observations made at the walk audit.

KEY FINDINGS

- Adams Avenue has wide sidewalks that get narrower in each direction as you move away from Adams Avenue and Harbor Boulevard.
- ADA access could be improved as various driveways are not wheelchair accessible.
- Many roads and driveways show signs of deterioration, especially along Harbor Boulevard.
- Participants expressed support for having more street trees and landscaping along the corridors.
- Orange Coast College also has plans to make improvements that could benefit pedestrians traveling to and from the college.
- The roadways near the car sales lots could benefit from pavement rehabilitation.
- Several bus stops lack covered canopies.
- Participants observed bicyclists biking on the sidewalk due to the lack of bike lanes on the roadways.
- Participants observed pedestrians crossing Mesa Verde Drive mid-block between Harbor Boulevard and Harla Avenue to reach the shopping on the south side.

CORRIDORS

Corridor #1 (Adams Avenue)

- Several sections of the sidewalk are buckled.
- Participants provided positive feedback for the separation between vehicular traffic and pedestrians.

Corridor #2 (Harbor Boulevard)

- The sidewalk width north of Adams Avenue is narrower than that south of Adams Avenue.
- The Harbor-Ponderosa bus stop does not have a bus shelter.
- Participants noted that more trash cans are desired along Harbor Boulevard.
- Roads and driveways along Harbor Boulevard show signs of deterioration.
- Drainage issues were observed, north of Adams Avenue, along Harbor Boulevard's east sidewalk.

INTERSECTIONS

Intersection #1 (Adams Ave & Harbor Boulevard)

- Crossing times were observed to be insufficient and motorists were observed to violate the pedestrian right-of-way when turning at intersections.
- Crosswalks are faded.
- Curb ramps are not ADA compliant.

Intersection #2 (Adams Ave & Peterson Place)

- Pedestrians cross Peterson Place without a designated crosswalk.

Intersection #3 (Adams Ave & Royal Palm Drive)

- A countdown pedestrian signal is missing at the east leg.

OUTSIDE WALK AUDIT RADIUS

The project team received the following comments from walk audit participants about areas that were not within the walk audit radius.

Corridor (Harbor Boulevard)

- North of Adams Avenue, Harbor Boulevard has various sidewalks on the east side that are 3 feet wide.
- Many curb ramps are not ADA compliant.
- Participants reported an incorrectly placed curb ramp along the median island north of Dale Way.
- There is no separation between pedestrians and traffic on the east side of Harbor Boulevard between Dale Way and Village Way.

Corridor (Baker Street)

- This corridor has heavy pedestrian activity.

Corridor (College Avenue)

- Participants supported having more curbs painted red at intersections and more street trees to provide shade.
- The corridor has wide sidewalks.

Corridor (Pinecreek Drive)

- Curb ramps are missing on Pinecreek Drive, Village Way, and residential streets to the south of Village Way.

Intersection (Adams Avenue & Mesa Verde Drive)

- This intersection provides pedestrian crossings along the north, east, and south legs of the intersection. Crossing along the west leg is prohibited.

Intersection (Adams Avenue and Pinecreek Drive)

- The City is in the process of redesigning the intersection.
- Pedestrians cross mid-block along Adams Avenue, west of Pinecreek Drive.

Intersection (Harbor Boulevard & Village Way)

- The intersection lacks crosswalks in all directions.

Intersection (Mesa Verde Drive & Harla Avenue)

- Participants noted the popularity of the intersection for pedestrian and bicycle crossings.

Intersection (Baker Street & College Avenue)

- Participants noted the popularity of the intersection for pedestrian crossings.

Staff waiting for participants to arrive

Decorative crosswalk at Harbor Boulevard and Adams Avenue

Bicyclists ride on the sidewalk along College Avenue

Participants walk along the walk audit corridor

EVENT SUMMARY
WALK AUDIT #4

BAKER STREET & FAIRVIEW ROAD

SATURDAY, APRIL 10, 2021

10:00 AM – 12:00 PM

7 ATTENDEES

OVERVIEW

On Wednesday, April 10 2021, the project team conducted the fourth scheduled walk audit. Participants had an opportunity to walk along Baker Street, Fairview Road, and Adams Avenue, and discussed areas of concern and improvement with the project team. The following section documents the key findings and observations made at the walk audit.

KEY FINDINGS

- Sidewalk along the south side has no separation while the north side does have separation, along Baker Street.
- There are various obstructions (trees, signs, utility boxes) throughout the walk audit areas.
- Participants reported observing pedestrians cross mid-block on Fairview Road to get to and from commercial areas.
- At various intersections, traffic signal poles block the curb ramps and obstruct the pedestrian path.
- Where curb ramps are available, many are not ADA compliant.
- Many portions of the sidewalk along Fairview Road are buckled due to uprooted trees. However, participants expressed support for street trees since they provide shade.
- At the intersection of Fairview Road and Adams Avenue, curb ramps do not face the direction of crosswalks, and the north leg of the intersection does not have a crosswalk.
- Slip lanes on Adams Avenue create challenges for

pedestrians. Pedestrian push buttons are located on the pork chop islands; consequently, pedestrians first have to navigate through the slip lanes, which do not have instructions on how to safely do so.

- Along Fairview Road between Baker Street and Adams Avenue, the City is going install with new pedestrian upgrades which include a new traffic signal near Paularino Channel, as well as crosswalks and sidewalk improvements.
- Orange Coast College is planning new sidewalk improvements.

CORRIDORS

Corridor #1 (Baker Street)

- Baker Street contains narrow sidewalks that participants reported to feel narrower at locations with utility pole, guywires, utility boxes, and other obstructions.
- Certain sidewalk segments are buckled.
- Pedestrians cross mid-block between Fairview Road and McClintock Way to get to and from businesses and apartments on south side of Baker Street.
- Radar speed sign flashes during school hours.
- Participants noted that bicyclists and pedestrians use Donegal Place/Paularino Avenue and the residential neighborhoods to travel east/west as an alternative to using Baker Street.

Corridor #2 (Fairview Road)

- Participants observed high vehicular speeds.
- The corridor has sidewalks that are between 6-7 feet

wide. Participants reported sidewalk space feeling cramped especially in areas where pedestrians and bicyclists need to share the sidewalk.

- Trees, utility boxes, and street light poles obstruct the sidewalk and present challenges for pedestrians.
- Many sections of the sidewalk are buckled.
- Participants expressed concern for walking near the Paularino Channel at night due to insufficient lighting.
- Participants observed bicyclists riding on the sidewalk due to the lack of bicycle facilities on Fairview Road.
- Between the I-405 freeway and Paularino Avenue, there are no designated crossings for pedestrians to cross Fairview Road.
- The City is planning a new traffic signal near the Paularino Channel, south of Baker Street.

INTERSECTIONS

Intersection #1 (Baker Street & Fairview Road)

- Traffic signal poles and street furniture are located adjacent to non-ADA-compliant curb ramps that block pedestrians from accessing the crosswalks.
- The traffic signals do not have pedestrian countdown timers.
- The City will repaint the intersection and provide new stop bars at the intersection.

Intersection #2 (Baker Street & Coolidge Avenue)

- The pedestrian clearance interval is not long enough to accommodate pedestrians.
- The Baker-Coolidge bus stop is missing shaded cover.

Intersection #3 (Fairview Road & Paularino Avenue)

- The west leg of the crosswalk does not provide direct access to curb ramps.
- Pedestrian push buttons are located far away from the crosswalks.
- Participants reported high vehicular speeds.
- This intersection does not provide a crosswalk on the south leg.

Intersection #4 (Baker Street & Loren Lane)

- Participants identified this intersection as a high priority crossing; they observed heavy pedestrian and bicycle activity.

OUTSIDE WALK AUDIT RADIUS

The project team received the following comments from walk audit participants about areas that were not within the walk audit radius.

Corridor (Fairview Road)

- Buckled and uneven sidewalks that also have various obstructions along this corridor.
- Driveways along this corridor do not have standard ramps, based on City's Standard Plans for commercial and multi-use areas.
- The curb on Fairview Road, in front of Costa Mesa High School, has a curb cut but no crosswalk or signage to the north east.

Corridor (Paularino Avenue)

- Participants noted high vehicular speeds.
- The corridor has pedestrian signage around Paularino Park.

Corridor (Cheyenne Street)

- Sidewalks are buckled along the corridor.
- Intersections are uncontrolled and do not have crosswalks.

Intersection (Fairview Road & Adams Avenue-El Camino Drive)

- Curb ramps are not aligned with the crosswalks.

- The north leg of the intersection does not have a crosswalk.
- Slip lanes on Adams Avenue create challenges for pedestrians. Pedestrian push buttons are located on the pork chop islands; consequently, pedestrians first have to navigate through the slip lanes, which do not have instructions on how to safely do so.

Intersection (Fairview Road & Monitor Way)

- The north leg of the intersection does not have a crosswalk.

Intersection (Paularino Avenue & Coolidge Avenue)

- Pavement markings show signs of deterioration.

Intersection (Coolidge Avenue & Austin Street)

- Pavement markings shows signs of deterioration.

Walk audit participants walked along Fairview Road

Participants and the project team gathered for an overview of the walk audit

Bicyclist riding on the crosswalk

High wall gives the impression that the sidewalk feels narrower

Intersection with high visibility crosswalks and pedestrian signage

Residential street with landscape parkway between the sidewalk and the road

Participants discussed opportunities for pedestrian improvements on the roadways adjacent to Orange Coast College

A utility box creating an obstruction for pedestrians walking along the sidewalk on Fairview Road

A utility pole creating an obstruction for pedestrians walking along the sidewalk on Fairview Road

Bicyclist crossing mid-block on Fairview Road

EVENT SUMMARY
WALK AUDIT #5

HARBOR BOULEVARD & WILSON STREET

WEDNESDAY, APRIL 14, 2021

1:00 PM – 3:00 PM

5 ATTENDEES

OVERVIEW

On Wednesday, April 10 2021, the project team conducted the fifth scheduled walk audit. At the event, participants discussed challenges and opportunities for walking along Harbor Boulevard, Wilson Street, Victoria Street, and Maple Street. The event had 5 attendees, excluding the project team and city staff. The following section documents the key findings and observations made at the walk audit.

KEY FINDINGS

- Pedestrians were observed sharing the sidewalk with bicyclists, despite Wilson Street's designation as a bike route.
- Many intersections would benefit from new crosswalks which would help facilitate safer pedestrian crossings.
- Utility boxes and other street furniture create obstructions on the sidewalk.
- Many portions of the sidewalk facilities are buckled or uneven.
- Participants expressed the desire for improved pedestrian connectivity to Wilson Park.
- Pedestrian clearance intervals at some locations should be extended to better accommodate senior pedestrian crossings.

CORRIDORS

Corridor #1 (Harbor Boulevard)

- The sidewalk is uneven or buckled.
- Street furniture such as landscaping and utility boxes create obstructions on the sidewalk and reduce the sidewalk width.

- The bus stop at Harbor Boulevard and Wilson Street has no bus shelter.
- Participants noted that the driveway adjacent to the Motel Tahiti Inn does not provide enough space for pedestrian access.

Corridor #2 (Wilson Street)

- The corridor has "Watch for Peds" signs; however, it could benefit from additional pedestrian treatments to provide access to Wilson Park.
- Pedestrians were observed to share the sidewalk with bicyclists, despite Wilson Street's designation as a bike route.
- The Wilson-Anaheim and Wilson-College bus stops do not have bus shelters.
- The sidewalk has many obstructions from street furniture and is uneven or buckled at many locations.
- Participants observed high vehicular speeds.
- Many pedestrians travel along Wilson Street to reach the Harbor Center.
- Participants expressed desire for better street lighting, sidewalk infrastructure, and traffic calming measures.

Corridor #3 (Maple Street)

- Participants observed high vehicular speeds.
- The corridor could benefit from additional pedestrian and traffic calming treatments to provide access to Ketchum-Libolt Park. Participants showed support for speed bumps or signage.
- Participants noted that motorists who turn right on red encroach on the crosswalk to have improve their of oncoming vehicular traffic.

Corridor #4 (Victoria Street)

- The corridor has areas with adequate sidewalks and bicycle infrastructure; however, they are not continuous. Participants expressed the desire for more continuous pedestrian and bicycle infrastructure.
- The corridor contains widespread on-street parking which presents visibility concerns for pedestrians crossing the roadway.

INTERSECTIONS

Intersection #1 (Harbor Boulevard & Wilson Street)

- Curb ramps at all four corners may not be ADA-compliant.

Intersection #2 (Wilson Street & College Avenue)

- The roadway width transitions from 40 feet east of the intersection to 65 feet west of College Avenue.

Intersection #3 (Wilson Street & Center Way)

- The east leg has pedestrian countdown timers; however, the pedestrian clearance interval is not sufficient for pedestrians to safely cross Wilson Street.
- The south and west legs do not have marked crossings.
- The curb ramps on all corners may not provide truncated domes.

OUTSIDE WALK AUDIT RADIUS

The project team received the following comments from walk audit participants about areas that were not within the walk audit radius.

Corridor (Wilson Street)

- Portions of the sidewalk infrastructure are missing, uneven, or buckled.
- Street furniture such as landscaping and utility boxes create obstructions on the sidewalk and reduce the sidewalk width.
- Participants expressed support for parkways which act as a separation between motorists and pedestrians.
- The City has plans for pedestrian improvements along the corridor, south of Wilson Park.

Intersection (Wilson Street & Placentia Avenue)

- Traffic signals do not have pedestrian countdown timers.
- Participants noted that the curb ramps do not provide adequate space for pedestrian access.

Intersection (Wilson Street & Pomona Avenue)

- The intersection is a dog leg intersection which has a staggered cross street.
- The east intersection is signalized, while the west intersection is STOP-controlled on the southbound direction.
- The east intersection does not have a crosswalk on its east leg and the curb ramps may not be ADA-compliant.
- The west intersection does not have a marked crosswalk.

Intersection (Wilson Street & Meyer Place)

- The intersection is a dog leg intersection which has a staggered cross street.
- Both intersections are STOP-controlled on the north/southbound directions and do not have marked crosswalks in any direction.

Intersection (Wilson Street & Fordham Drive)

- The City is planning to provide pedestrian improvements.
- Participants expressed support for pedestrian treatments that facilitate access across Wilson Street and connect the residential area to Wilson Park.

Intersection (Wilson Street & Rutgers Drive)

- There are no marked crosswalks in any direction.
- Pedestrian signage is posted to warn motorists of pedestrian crossings.

Intersection (Wilson Street & Colgate Drive)

- The west leg has pedestrian signage to warn motorists of pedestrian crossings. The southwest corner also has a curb ramp. However, the intersection does not have a crosswalk on the west leg.
- There are no delineated crosswalks in any direction.

Intersection (Wilson Street & Avalon Street)

- Intersection is not ADA-accessible.
- South leg of intersection features a wide crossing but no crosswalk.

Intersection (Wilson Street & Columbia Drive)

- There are no marked crosswalks in any direction.

Intersection (Wilson Street & Fairview Road)

- Participants expressed support for curb ramps on the northwest and southwest corners. The corners each have two curb ramps that align with the crosswalks.
- Traffic signals do not have pedestrian countdown timers.

Participants gathered at the beginning of the event to learn about the walk audit process

Participants walking on the sidewalk

Pedestrian signage adjacent to an intersection without crosswalks on Wilson Street

Speed feedback sign

Bus stop without a shelter

Pedestrians crossing a minor street without a marked crosswalk

Driveway ramp that hampers pedestrian using sidewalk

Sidewalk condition along Fordham Drive

Pedestrians walking across Wilson Street and College Avenue

Walk audit participants documenting the sidewalk condition

EVENT SUMMARY
WALK AUDIT #6

LAB ANTI- MALL AREA

THURSDAY, APRIL 15, 2021

9:00 AM – 11:00 AM

6 ATTENDEES

OVERVIEW

On Thursday, April 15, 2021, the project team hosted a walk audit at The LAB Anti-Mall area. The event site included Bristol Street, Randolph Avenue, Paularino Avenue, and Bear Street. The event had 6 attendees, excluding the project team and city staff. The following section documents the key findings and observations discussed at the time of the walk audit.

KEY FINDINGS

- Many portions of the sidewalk infrastructure along the corridors were buckled.
- Several intersections along Bristol Street (with marked crosswalks) have broken countdown pedestrian timers (participants were able to see numbers but the timers do not light up).
- The Camp and The LAB Anti-Mall could help encourage high pedestrian activity on the roadways adjacent to the attractors.
- The SR-73 underpass has dirt run-off that accumulates on the sidewalk which presents challenges for pedestrians using the facility.
- Many intersections have curb ramps; however, they do not connect or align directly to crosswalks.

ORRIDORS

Corridor #1 (Baker Street)

- Many portions of the sidewalk infrastructure were buckled.
- Has a bus stop on Baker Street and Randolph Avenue.
- Trees, utility boxes, and poles obstruct the south side of the sidewalk.

- Participants expressed support for the landscaped parkway by the Baker Fire Station 2.

Corridor #2 (Bristol Street)

- The corridor has wide sidewalks. However, various sections are uneven or buckled and/or have obstructions.
- Some commercial areas have steep driveways.
- Participants expressed support for the landscaped parkway in front of The LAB Anti-mall; however, they noted that the sidewalk is narrow.
- Participants also showed their support for street trees. But they acknowledged that tree roots could buckle the sidewalk.

Corridor #3 (Randolph Avenue)

- Participants reported insufficient street lights at night.
- The corridor provides access to several breweries, eateries, as well as The Camp and The LAB Anti-Mall.
- Many curb ramps may not be ADA-compliant.
- The City is working on new traffic calming, pedestrian, and bicycle facilities along the corridor.

INTERSECTIONS

Intersection #1 (Baker Street & Bristol Street)

- Traffic signal poles on the northeast corner create obstructions along the pedestrian path.
- The intersection has high vehicular traffic volumes.

Intersection #2 (Bristol Street & Paularino Avenue)

- The traffic signal poles on the west leg create obstructions along the pedestrian path.
- Participants noted that motorists turn right on the red light and do not respect the traffic signals.

- Curb ramps do not align with the crosswalks.

Intersection #3 (Baker Street & Randolph Avenue)

- The City is working on installing a traffic signal to connect the commercial area on the south side with residential communities on the north side.
- The curb ramps are not ADA-compliant.

Intersection #4 (Bristol Street & Sobeca Way)

- A crosswalk is not provided along the north leg of the intersection.
- Participants noted that the Camp driveway is uncomfortable to cross.
- Participants commented that pedestrians used the crosswalk to get between The Camp and The LAB Anti-Mall.

OUTSIDE WALK AUDIT RADIUS

The project team received the following comments from walk audit participants about areas that were not within the walk audit radius.

Corridor (Baker Street)

- Participants commented that pedestrians cross mid-block.
- The SR-73 underpass has dirt run-off that accumulates on the sidewalk which presents challenges for pedestrians using the facility.

Intersection (Baker Street & Jeffrey Drive)

- The intersection has wide curb radii and lacks curb ramps.

Intersection (Baker Street & Bear Street)

- The intersection does not have a crosswalk on the east leg.

Intersection (Bristol Street & Bear Street)

- The intersection does not have a crosswalk on the east leg.
- South of Bear Street, the corridor does not have sidewalk on the south side.

Participants gathered for an overview of the walk audit

Artistic utility box on Bristol Street

Faded crosswalks at the intersection of Bristol Street and Randolph Avenue

Construction workers installing new curb ramp

Sidewalk facility underneath SR-73 at Bristol Street

Sidewalk with a manicured landscape at the entrance to The LAB Anti-Mall

APPENDIX C

Community Workshop Summaries

COMMUNITY WORKSHOP #1 EVENT SUMMARY

EVENT INFORMATION

Date: Tuesday, July 27, 2021

Time: 6:00 PM – 7:00 PM

Location: Virtual via Zoom

EVENT OVERVIEW

The City of Costa Mesa organized a Virtual Workshop to gather input from community members for the Costa Mesa Pedestrian Plan. The workshop was held virtually via Zoom due to the COVID-19 pandemic. The Virtual Workshop had 26 participants that included community members, city staff, and members of the consultant team. The Participant List shown in Exhibit A documents the participants that were present during the Virtual Workshop. Community participants included elected officials, members of the Bikeway Walkability Committee, and Costa Mesa residents.

The Virtual Workshop was comprised of three parts: 1) PowerPoint presentation, 2) Q&A session, and 3) discussion of next steps. The PowerPoint presentation provided a project overview, status update of the stakeholder engagement efforts, highlights of findings from the Existing Conditions Analysis, and an overview of different preliminary pedestrian treatments recommended for the City. Following the presentation, the project team (which consisted of the consultant team and City Staff) fielded questions from community participants. Comments received will help guide the development of the recommendations to address community concerns.

SUMMARY OF COMMENTS

Community members provided input on many different topics. These include:

- Support for different pedestrian infrastructure treatments presented in the PowerPoint presentation
- Identified areas that could benefit from pedestrian infrastructure treatments
- Safety concerns in different areas within the city, such as the interaction between pedestrians and bicyclists, and high vehicular speeds
- Integration of the Plan with new planned developments
- Opportunities for tactical urbanism demonstrations or quick-build projects
- Overall vision for a more pedestrian-friendly city

COMMUNITY QUOTES

"When the OCC [Orange City College] starts again, there will be a lot of pedestrian activity."

"Thank you for hosting this workshop!"

"I really like the raised crosswalks, and pedestrian refuge island, especially on Newport Blvd."

"I am concerned about three-legged intersection; there are so many in Costa Mesa. I would like to see greater emphasis to finish intersections with four crosswalks."

"What makes for a good pedestrian experience? Big shade trees, bulb-outs, and traffic calming measures."

"I would love to see a design that is really pedestrian infrastructure in the city so that folks can really see what it can be."

Costa Mesa to Host Virtual Community Meeting for a Pedestrian Master Plan on July 27

Costa Mesa
Pedestrian Master Plan

Join us in making a more walk-friendly city with your input.

The development of a Pedestrian Master Plan for Costa Mesa is underway to serve as a road map to identify solutions to improve walkability in the City. The Plan will propose pedestrian infrastructure improvements aimed at connecting communities to schools, parks, businesses and other destinations in Costa Mesa. In the development of the Pedestrian Master Plan, six walk audits were conducted on Costa Mesa streets in March and April with Bikeway and Walkability Committee members, City staff, project consultant team members, and members of the community. In addition, an online survey was conducted in April and May for additional input to the Pedestrian Master Plan.

The community is invited to attend a Virtual Community Meeting to discuss solutions to improve walkability in the City on **July 27, 2021 from 6:00 p.m. to 7:30 p.m.** At the meeting, the City will present findings from community engagement and data collection efforts, offer opportunities to receive additional feedback from the community, and discuss next steps.

The goal of the Costa Mesa Pedestrian Master Plan is to make it easier, safer, and more comfortable to walk for recreation, commuting, and other daily needs, such as getting to schools or local businesses. The benefits of walking are numerous, such as boosting economic activity, improving health, and reducing greenhouse gas emissions as we drive less and walk more. The Plan fits community values around healthy lifestyles, sustainability, and economic vitality.

Virtual Community Meeting via Zoom

www.zoom.us

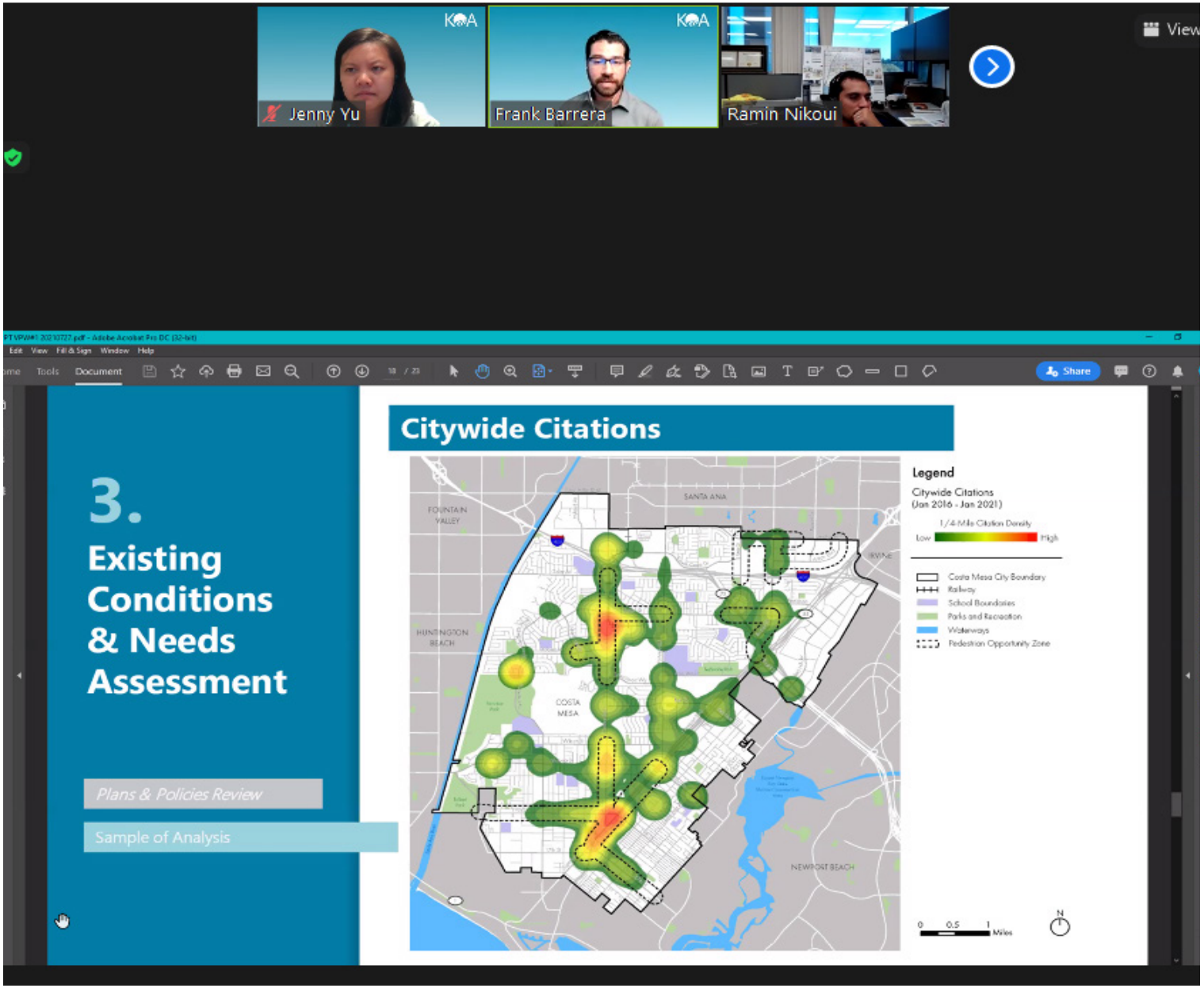
Or join by phone: 1-669-900-6833

Webinar ID: 982 5155 7097

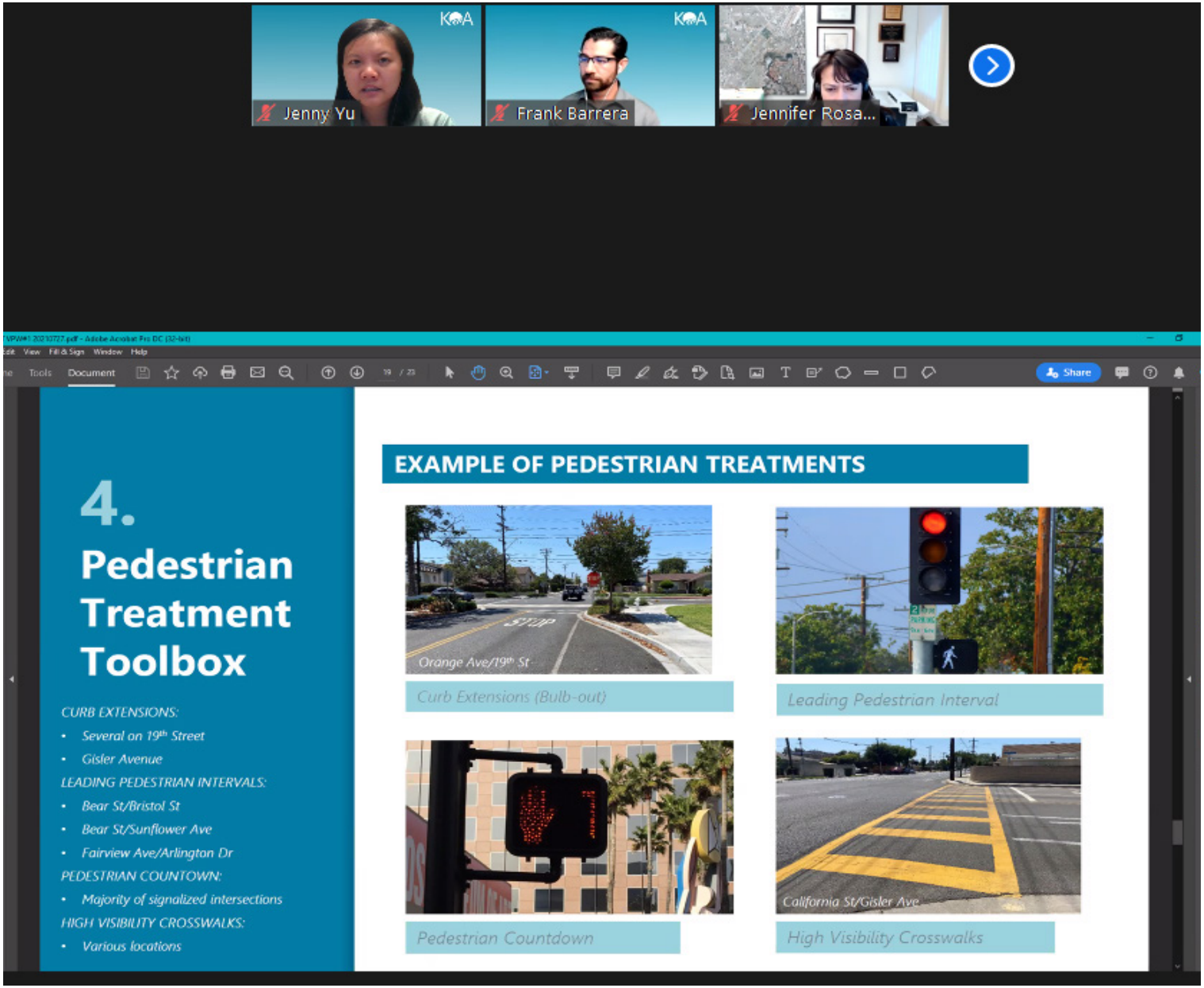
Passcode: 506054

Live Spanish interpretation will be provided.

Flyer of Community Workshop #1



Screenshot of Community Workshop #1 held via Zoom



Screenshot of Community Workshop #1 held via Zoom

COMMUNITY WORKSHOP #2 EVENT SUMMARY

EVENT INFORMATION

Date: Wednesday, October 6, 2021

Time: 6:00 PM – 7:00 PM

Location: Virtual via Zoom

EVENT OVERVIEW

On Wednesday, October 6, 2021, the City of Costa Mesa organized the second Virtual Workshop to solicit feedback from community members on the Costa Mesa Pedestrian Master Plan. The primary purpose of the workshop was to draft preliminary recommendations. The workshop was held virtually via Zoom due to the COVID-19 pandemic.

The Virtual Workshop had 22 attendees that included community members, city staff, and members of the consultant team. Community participants included elected officials, members of the Bikeway Walkability Committee, and Costa Mesa residents.

The Virtual Workshop had three parts: 1) PowerPoint presentation, 2) Q&A session, and 3) discussion of next steps. The primary focus of the PowerPoint presentation was to share the draft recommendations with the community. Following the presentation, the project team answered questions from workshop participants. Comments received were incorporated into the draft report.

SUMMARY OF COMMENTS

Community members shared a lot of feedback about the draft recommendations. Their comments are categorized into the following themes:

- Include discussions on new technology, such as the pedestrian scramble crossings and upgrading traffic signals to include APS systems (Accessible Pedestrian Signals)
- Provide bigger and bolder recommendations that contribute to a more walkable city
- Address right turn-on red vehicular movements, intersections with crosswalks on three out of four sides, , and obstructions along the sidewalk infrastructure
- Provide traffic calming infrastructure treatments where appropriate
- Add more street trees and landscaping
- Provide bicycle facilities so bicyclists won't ride on the sidewalk and conflicts with pedestrians
- Specific infrastructure improvements on certain corridors or locations such as Newport Boulevard and pedestrian refuge islands on Wilson Street.

COMMUNITY QUOTES

"Want to see more technology discussed, e.g. pedestrian scramble, and pedestrian push button."

"I'm in favor of slowing traffic as a tradeoff for better pedestrian safety."

"We need a bigger and bolder plan in a vision for a longer future."

"The City needs a grand vision, like closing down streets like Paris. We need more trees."

VIRTUAL COMMUNITY MEETING

Costa Mesa
Pedestrian Master Plan

Join us in making a more walk-friendly city with your input.

October 6, 2021, 6:00 PM - 7:30 PM

The development of a Pedestrian Master Plan for Costa Mesa is underway to serve as a road map to identify solutions to improve walkability in the City. The Plan will propose pedestrian infrastructure improvements aimed at connecting communities to schools, parks, businesses and other destinations in Costa Mesa. In the development of the Pedestrian Master Plan, six walk audits were conducted on Costa Mesa streets in March and April with Bikeway and Walkability Committee members, City staff, project consultant team members, and members of the community. In addition, an online survey was conducted in April and May for additional input to the Pedestrian Master Plan.

The City of Costa Mesa invites you to the second virtual community meeting to review Pedestrian Master Plan proposed recommendations.

- Learn about the feedback collected during the walk audits, online survey, and safety analysis.
- Provide input into proposed recommendations
- Learn about next steps

Virtual Community Meeting
Via Zoom

www. zoom.us

Or join by phone: +1-669-900-6833 or +1-346-248-7799 or +1-253-215-8782

Webinar ID: 982 5155 7097

Passcode: 506054

Live Spanish interpretation will be provided.

Flyer of Community Workshop #2

Costa Mesa
Pedestrian Master Plan

Join us in making a more walk-friendly city with your input.

October 6, 2021

Virtual Public Workshop

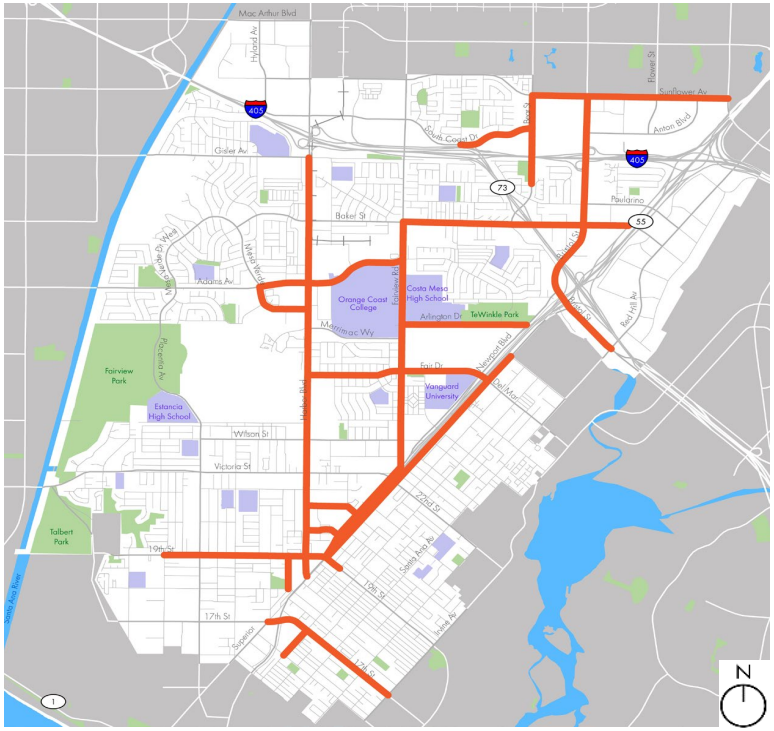
Meeting #2

Title Page of PowerPoint Presentation presented at the Community Workshop #2

3.
Draft
Recommendations

Citywide – High Visibility Crosswalk Markings

- Sunflower Avenue
- South Coast Drive
- Baker Street
- Adams Avenue
- Mesa Verde
- Arlington Drive
- Fair Drive
- Bay Street
- 19th Street
- 17th Street
- Harbor Boulevard
- Park Avenue
- Orange Avenue
- Fairview Road
- Bristol Street
- Newport Boulevard



Citywide Improvements

High-Visibility Crosswalks within commercial corridors and near schools, parks and regional attractors (OC Fairgrounds, etc.)*

11

** Parallel to the major street and across the minor street*

Slide of Draft Recommendations from PowerPoint Presentation presented at the Community Workshop #2

COMMUNITY WORKSHOP #3 EVENT SUMMARY

EVENT INFORMATION

Date: Wednesday, April 27, 2022

Time: 6:00 PM – 7:30 PM

Location: Virtual via Zoom

EVENT OVERVIEW

The City of Costa Mesa organized a third Virtual Workshop on Wednesday, April 27 to engage with the community about the Costa Mesa Pedestrian Master Plan (CM PMP). The primary focus of the event was to gather input for the Draft Costa Mesa Pedestrian Master Plan. The workshop was conducted virtually through Zoom.

The Virtual Workshop had 33 attendees, with 22 community participants and 11 members of the project team. Community participants included elected officials, members of the Bikeway Walkability Committee, and Costa Mesa residents.

The event was comprised of three parts: 1) PowerPoint presentation, 2) Q&A session, and 3) discussion of next steps. For the presentation, the project team shared highlights of the Draft CM PMP. Following the presentation, the project team fielded questions from workshop participants. The public had an opportunity to continue providing feedback until the end of May.

SUMMARY OF COMMENTS

Community members gave many inputs about the Draft Costa Mesa Pedestrian Master Plan. Their comments are categorized into the following overarching themes:

- Overall appreciation for the updates to the CM PMP based on the previous workshop and input received from the Active Transportation Committee, formerly known as the Bikeway and Walkability Committee
- Connection between the CM PMP and changes to land use and urban design
- Placement of street trees and furniture along the roadway to increase pedestrian comfort
- Consistency between the CM PMP and other planning documents/ studies
- Opportunities to provide additional input for the Draft CM PMP
- Additional coordination between the Active Transportation Committee and the City

COMMUNITY QUOTES

"I appreciate that the Plan is really readable and easy to digest."

"Everyone in Costa Mesa is a pedestrian in the city and as we work to make the city more walkable and safe, it benefits everyone."

"It would be nice to have more references to Safe Routes to School in this plan."

VIRTUAL COMMUNITY MEETING

Costa Mesa
Pedestrian Master Plan

Join us in making a more walk-friendly city with your input.

Wednesday, April 27, 2022 at 6:00 PM

The City of Costa Mesa invites you to a virtual community meeting to review a Draft Pedestrian Master Plan developed with the participation of the Active Transportation Committee and community members.

The Draft Plan is ready for community review. The Plan proposes pedestrian improvements to connect communities to schools, parks, businesses and other key destinations.

To review the Draft Plan, visit:
https://www.costamesaca.gov/city-hall/commissions-and-committees/active-transportation-committee

We would love to hear your ideas for the plan!

The City of Costa Mesa invites you to a community meeting to review the Pedestrian Master Plan with proposed recommendations.

Virtual Community Meeting Via Zoom

www.zoom.us

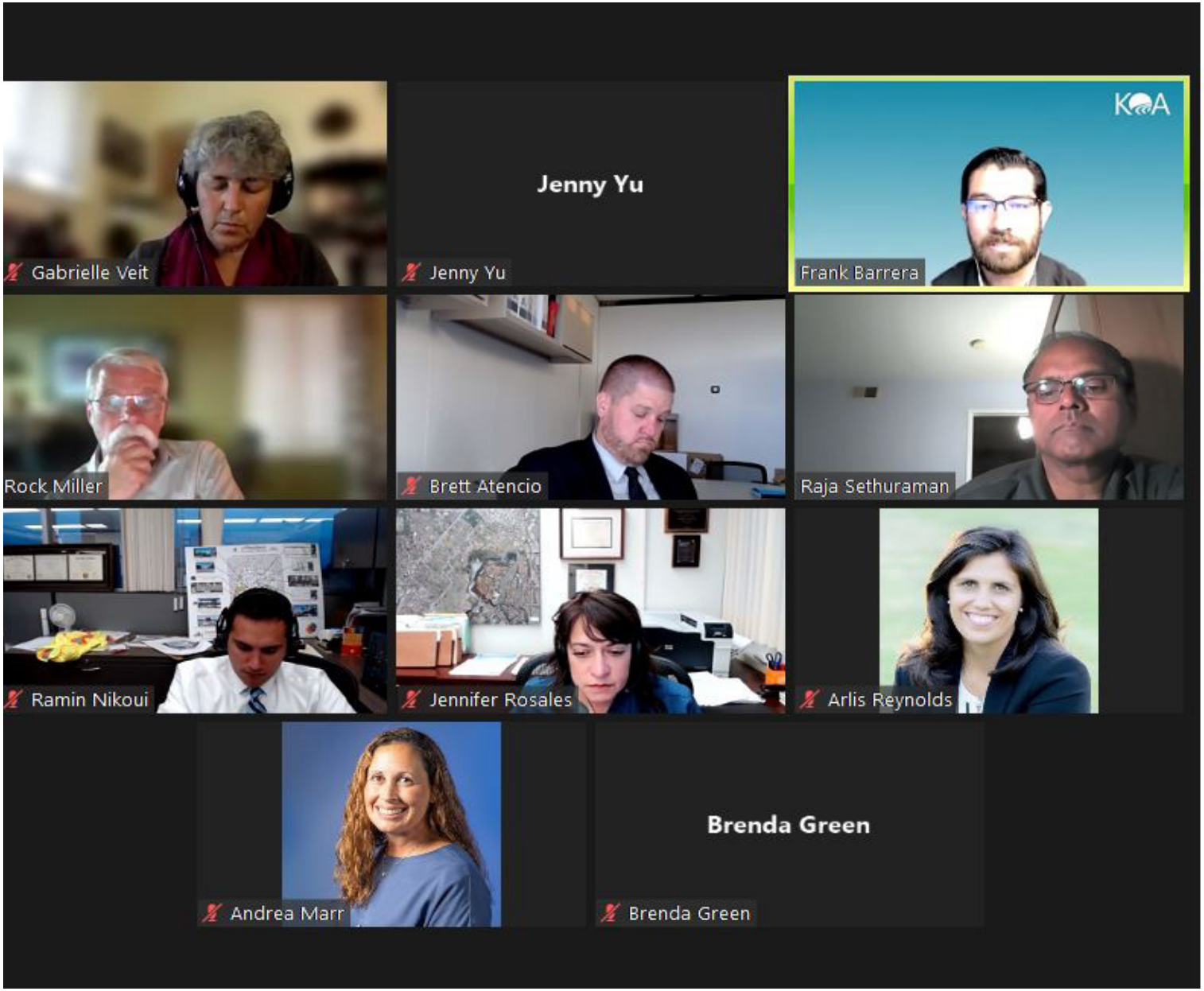
Or join by phone: (669) 900 6833

Webinar ID: 858 5073 7643

Passcode: 590594

Live Spanish interpretation will be provided.

Flyer of Community Workshop #2



Screenshot of Community Workshop #3 held via Zoom

2. Draft Pedestrian Master Plan

Opportunities for Community Engagement

- *Six (6) walk audits*
- *Three (3) Community workshops*
- *Five (5) Bikeway and Walkability Committee (BWC) presentations*
- *One (1) Project survey*
- *One (1) Online mapping tool*

Slide of PowerPoint Presentation presented at the Community Workshop #3

APPENDIX D

Project Survey

BACKGROUND AND PURPOSE

The Costa Mesa Pedestrian Master Plan (CMPMP) online survey was created as an opportunity to engage stakeholders who were unable to participate in the Walk Audits that were conducted in Spring 2021. The survey also provided stakeholders who participated in the Walk Audits with an opportunity to give additional detailed feedback.

The survey was hosted on the website developed for the project (cmpmp-wa.weebly.com). Stakeholders who visited the website landed on a welcome page that included links to the following:

- Project survey
- Walk audit sign ups
- Short video on how to use the Public Feedback Tool
- Public Feedback Tool

All materials were available in English and Spanish.

The survey was available on the website from February 18, 2021, to May 25, 2021. The following report summarizes the responses received.

SURVEY OVERVIEW

The survey had seven questions. Five of the seven survey questions were multiple choice and participants could select more than one response. Questions #3 and #7 were open-ended. In addition to the project-relevant questions, the survey included six optional questions to gather survey respondents' contact information.

PARTICIPANTS

A total of 64 responses were received. Of these, 63 participants provided their names and email addresses and 42 participants also provided a phone number. Four participants identified themselves as being part of the Costa Mesa Bikeway and Walkability Committee.

Zip codes were sourced from 58 participants. Participants live in the following zip codes: 92627 (34), 92626-2012 (22), 92663 (1), and 92704 (1).

Of the 63 responses, 96.8% selected English as their preferred language. Spanish and Other each accounted for 1.6%.

SUMMARY OF FINDINGS

Participants' responses to the key questions are presented below using their own words as much as possible.

QUESTIONS

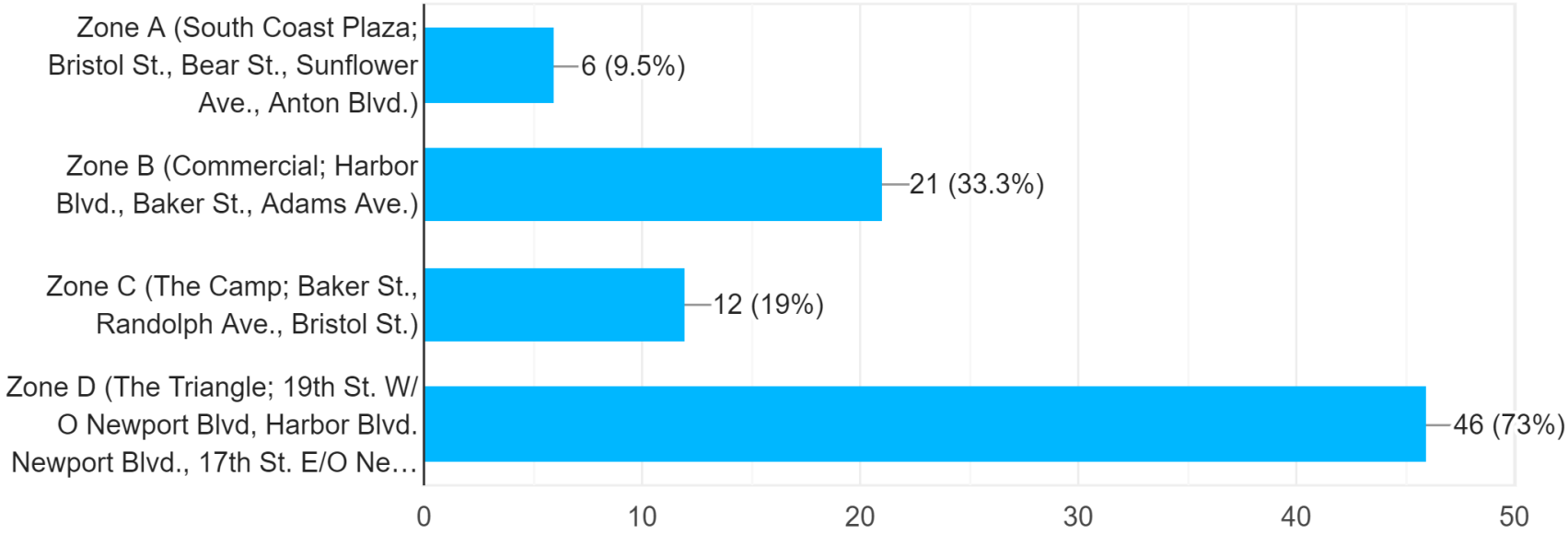
1. Do you live/work/attend school within ½ mile of a pedestrian zone?

Of the 63 responses, 88.9% said yes and 11.1% said no.

2. Which pedestrian zone(s) would you be most likely to use?

The pedestrian area most likely to be used by the respondents was Zone D (The Triangle). A total of 73% of participants selected this zone. This was followed by Zone B (Commercial, Harbor Boulevard, Baker Street, and Adams Avenue) with 33.3%. The least used areas were Zone C with 19% and Zone A with 9.5%. Figure C.1 Pedestrian Zone Preferences shows the breakdown of the survey responses.

Figure D.1 Pedestrian Zone Preferences



3. Please identify top pedestrian destinations within your selected pedestrian zone.

The most frequently selected top destinations within the selected pedestrian zone were:

- 17th Street
- 19th Street
- Harbor Boulevard
- Newport Boulevard

These were followed by:

- Ogle Street and Santa Ana Avenue
- Baker Street and Fairview Road
- Wilson Street-between Harbor Boulevard & Fairview Road
- E. Bay St/Newport Boulevard
- Bus stop on Harbor Boulevard and W. Bay Street
- Harbor Boulevard & Baker Street and Fairview Road & Baker Street
- Mesa Verde North to anywhere south of the 405
- Harbor Boulevard near Adams Avenue
- Gisler Avenue to get to the Santa Ana River Trail (SART)

The Triangle received the greatest number of comments as a top destination. This area was followed by Sprouts, parks (Lions Park, Canyon Park, Talbert Regional Park, Tanager Park, and Ketchum-Libolt Park), the Donald Dungan Library, Target, The Camp, Vons, and numerous stores located on both 17th Street and 19th Street.

Four schools were also mentioned by survey respondents:

- Ensign Middle School
- Harbor High School
- Newport Heights Elementary School
- Costa Mesa High School

4. How do you most frequently get around the pedestrian zone selected above?

Of the 63 responses collected, 74.6% selected walking as an option for how they most frequently get around. This was followed by 60.3% getting around by car. The third selection was bike at 41.3%. Lastly, only 3.2% of respondents selected scooter and bus as a travel mode preference. Figure C.2 Travel Mode Preferences in the Pedestrian Zones illustrates the survey responses.

5. What would most improve your walk within your selected pedestrian zone?

Answers to this question were spread out and divided among several options. The two options with the most responses were safe and visible street crossings, and accessible sidewalks, with 73% and 65.1% respectively. This was followed by 49.2% selecting street trees/shade and 47.6% choosing to regulate the speed of vehicles. The last group of responses were all in the 30% range and included traffic signal timing changes with 39.7%, a flashing beacon supported crossing systems (Rectangular Rapid Flashing Beacon or Pedestrian Hybrid Beacon) with 34.9%, accessible countdown pedestrian signal heads with 33.3%, and curb extensions with 30.2%. The two options with the lowest responses were pedestrian wayfinding signage with 17.5% and accessible sidewalk ramps with 11.1%. Survey responses to this question are illustrated in Figure C.3 Pedestrian Improvement Preferences in the Pedestrian Zones

Figure D.2 Travel Mode Preferences in the Pedestrian Zones

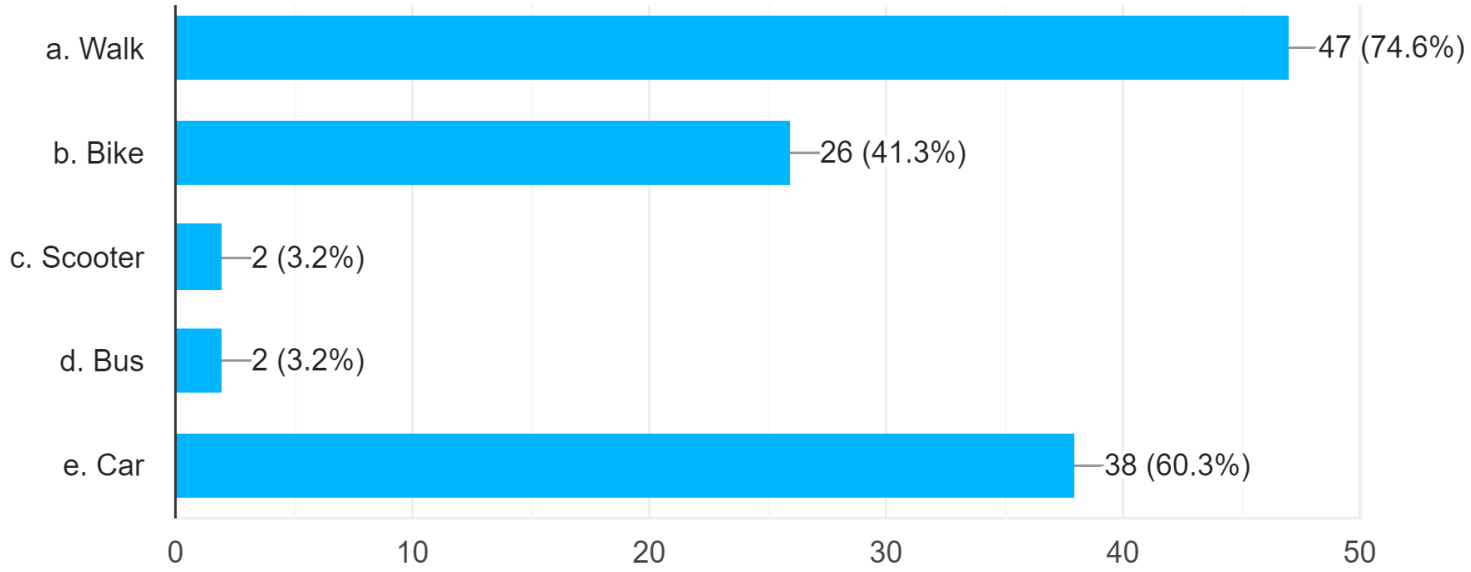
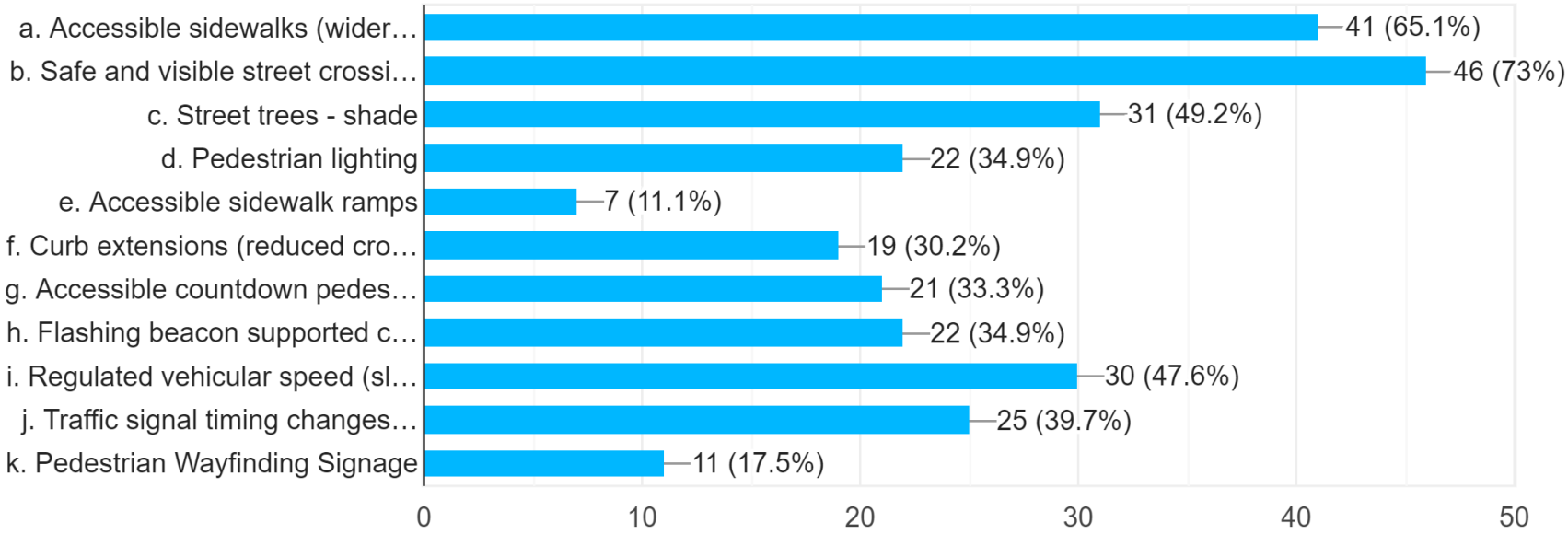


Figure D.3 Pedestrian Improvement Preferences in the Pedestrian Zones



6. What would make it easier to walk or roll from your home/neighborhoods within your selected pedestrian zone?

Survey participants identified safe street crosswalks and connected, safe sidewalks as their top treatments which would make it easier to walk or roll from their home/ neghborhood, both receiving 69.8% of selections. This was followed by sidewalks/pathways widening (49.2%); ramps, curb cuts, signage to remind people of the presence of wheelchair accessibility (28.6%); and sidewalk lighting (25.4%). Lastly, ADA accessibility received 12.7%.

Survey responses to this question are shown in Figure C.4 Pedestrian Treatments Preferences in the Pedestrian Zones.

7. Please provide any comments for us:

A total of 52 responses were submitted for this question. Received responses are listed below (in each respondent's own writing with minor grammar edits):

- Fear of getting hit by a car
- Concern over mailboxes on the sidewalks
- Speed limit signs should be posted
- Maintenance of sidewalks is needed
- Cleanliness/upkeep of sidewalks is needed
- Lighted street crossings are needed
- Sidewalks are missing, incomplete, and/or narrow
- High speed / reduce speed
- Right turns on red
- Lack of trees/shade
- No bike lanes
- Create more distance between roads and sidewalks
- There are a lot of blind spots from shopping center/ businesses' driveways
- Cars don't slow down near freeway ramps
- Add protection from automobiles
- Transient issues

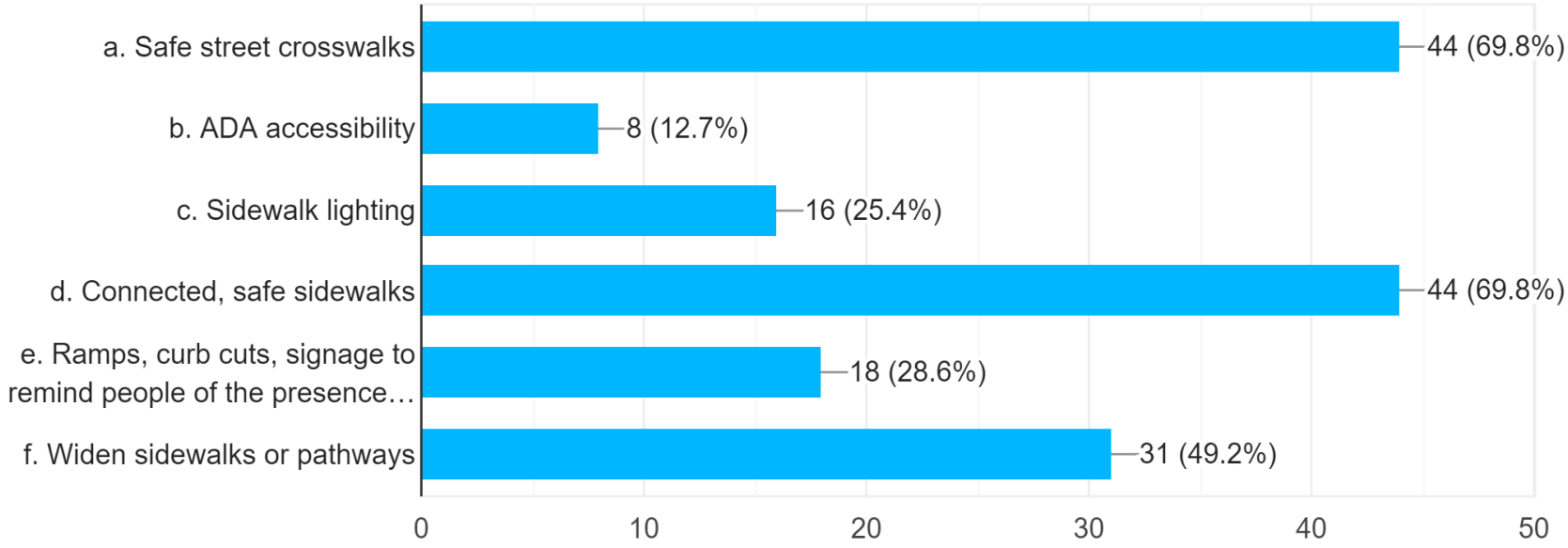
Locations outlined in the responses include:

- Wilson Street at Rutgers Drive
- Newport Boulevard
- Harbor Boulevard
- Rochester Street / West 18th Street
- Harbor Boulevard and Gisler Avenue
- Wallace Street
- Weelo Drive
- Fullerton Avenue
- I-405 at Bristol Street
- Bristol Street
- Baker Street
- Mesa Verde North
- Ogle Street and Santa Ana Avenue
- Irvine Avenue and 19th Street

Noteworthy:

- CM (Costa Mesa) has potential for pedestrian and biking activities
- Would like to see bicycle boulevards
- Shared bike paths
- The In-N-Out has generated a lot of traffic

Figure D.4 Pedestrian Treatments Preferences in the Pedestrian Zones



Excerpts:

- Eliminate free street parking on a street like Pomona Avenue and separate cars from pedestrians/cyclists OR make speed limits 15 miles per hour with up/down curbing on pedestrian-friendly streets.
- Walkability and bikeability need to go hand-in-hand. High density and low parking requirements should also be a part of this.
- My household enjoys walking to destinations in the Area B and Area C zones. We would like to walk more than drive for additional exercise as well as eliminating drinking and driving and need to call an Uber.
- Wide protected and continuous sidewalks along with friendly plantings would be a huge improvement for pedestrians... improve them and they will come. Walking spaces need to be inviting and safe.
- Bicycle space and accessibility are extremely poor, especially on Tustin Avenue between 17th Street and 15th Street where there is no space for cars and bikes. It would be best to remove parking on one side of the street or make it a one-way street with speed controls (such as on Broadway). More bike lanes everywhere!!!
- There are bricks over the grass on Superior Avenue and E 17th Street to walk to the Del Taco. However, there is no sidewalk or crosswalk to those bricks, and the street doesn't have lighting. There is one STOP sign with no crosswalk. There should be two crosswalks or a sidewalk.
- Create safe and highly visible bike lanes and bike crossing access.
- A protected path on Bear Street.

- It would be very nice if there was a protected bike route up to South Coast Plaza/Crystal Court/ Metro Pointe in addition to Area C.
- Need longer time to cross street (especially Harbor Boulevard and Gisler Avenue)
- Need to increase time for pedestrians to safely cross intersections
- We live in the Del Mesa neighborhood, and Paularino Avenue and Baker Street are busy/unsafe cross streets for pedestrians and cyclists. My son goes to CM High School and I am not comfortable with the bike lanes/access from our neighborhood to CM High School. I would really like to see Bristol Street/Baker Street/Paularino Avenue add much-needed wider bike lanes and signage.
- The ramps at the crosswalks force you to walk or ride your bike, stroller, scooter, etc into the green light traffic lanes in order to walk across the street that has the red light specifically on Irvine Avenue and 19th Street because that's the one we use most frequently
- More crosswalks would be great. There are no crosswalks on Wilson Street between Harbor Boulevard and Fairview Road. This makes it challenging to safely access Wilson Street Park for neighborhoods south of Wilson Street. It is also challenging to get across Newport Boulevard/ the 55 since crossings at 19th Street, Bay Street, 22nd St, Santa Isabel Avenue, Del Mar Avenue, and Bristol Street are at roughly 1/2 mile intervals.
- Wilson Street between Fairview Road and Harbor Boulevard, Fairview Road between Wilson Street and Fair Drive, and Fair Drive between Harbor Boulevard and Loyola Road are great examples of stretches that have FAR too much distance between crosswalks which causes people to dash across the street. It would be great to add some pedestrian-triggered crossing opportunities to them.
- Please provide better bike-ability and walkability in and around the Harbor Boulevard Corridor. Also, note the lack of a northbound Harbor Boulevard bus stop at Merrimac Way. This is a huge problem for my community as I have a lot of disabled neighbors who utilize what used to be the bus stop here, which is now moved to in front of the former Ace Hardware.

APPENDIX E

Toolbox Reference

E.1 INTRODUCTION

While Costa Mesa features several qualities that improve its walkability, and has won awards in recognition of its historical efforts for enhancing the pedestrian experience, improving walkability continues to be an ongoing goal of the City.

This appendix builds upon Chapter 5, Infrastructure Toolbox to include discussions of each tool's benefits and design considerations.

The tools were selected to help address many of the comments received from the community engagement process. They fall into three categories:

- Sidewalk-Related Treatments: Infrastructure that could enhance the pedestrian right-of-way on the sidewalk realm.
- Crossing-Related Treatments: Infrastructure that could improve pedestrian crossings on the roadway.
- General Traffic Behavior and Other: Discussions of strategies to address broader concerns that tangentially impact walkability in the city.

The guide consolidates information from various state, national, and well-recognized institution design standards. These include, but are not limited to, California Manual on Uniform Traffic Control Devices (CA MUTCD), Caltrans Design Standards and Specifications, and Caltrans Highway Design Manual. Additionally, many standards were referenced from the following organizations: Federal Highway Administration (FHWA), National Association of City Transportation Officials (NACTO), and American Association of State Highway and Transportation Officials (AASHTO).

The Design Guidelines do not contain discussions of additional infrastructure that may be needed to fully install the infrastructure. Examples of such infrastructure include signage, striping, and traffic signal modifications.

E.2 SIDEWALK-RELATED TREATMENTS

A large number of comments from the community engagement efforts refer to the general condition of sidewalks and the function of the overall sidewalk network. Many principles of sidewalk design can apply to all sidewalks, while others are applied based upon the land use in the area, with commercial, high-density residential, and heavily used sidewalks requiring more area for walking than lower density residential areas.

Wide sidewalk with street trees at the Donald Dungan Library

1

SIDEWALK NETWORKS

Sidewalks are perhaps the most important component of the pedestrian network. Whenever feasible, they should be provided on both sides of all roadways within the city. The Americans with Disabilities Act (ADA) sets minimum requirements for width and grades, but expanding sidewalk widths beyond this minimum requirement can improve walkability. Most of the city's roadways contain sidewalks, but the network has gaps in some neighborhoods, requiring pedestrians to walk off the sidewalk and along the roadway, resulting in discomfort and greater exposure to traffic. Many sidewalks have been constructed to a minimum width and are adjacent to the curb, which can require pedestrians to yield to pedestrians traveling in the opposite direction and also generally increases pedestrian discomfort. These barriers to the pedestrian experience can occur in areas with higher pedestrian activity or near transit stops.

Through retrofit of existing sidewalks or for new developments, widening the pedestrian right-of-way and limiting the size and frequency of curb cuts along major corridors can increase pedestrian comfort and reduce conflicts between pedestrians and drivers.

Benefits

A well-designed sidewalk network encourages walking, and also improves safety by discouraging walking on the roadway. Proper placement of sidewalks also ensures that potential obstructions to the pedestrian walkway are located between the sidewalk and the curb line of the roadway, known as the "parkway", and not within the direct travel route along the sidewalk.

Design Considerations

A minimum total width of 8 feet is desired from the curb face to the back of the sidewalk with a minimum sidewalk width of 4 feet. In residential areas, a planter strip should be located between the curb and the sidewalk (parkway), and the sidewalk should be continuous with minimum obstructions. Driveway ramps should be located between the roadway and the nearest edge of the sidewalk, to maintain a level sidewalk at driveways. Above ground utilities, sign posts, street trees, and other obstructions should be located in the parkway, if possible, and alternatively on the side of the sidewalk closest to the street. Residential driveway standards should be evaluated and modified as appropriate. Ensure that driveway flares rise only 4 feet from the nearest curb, in order to maintain a level sidewalk. Sidewalks should be level wherever possible.

Walkable commercial areas often provide areas for sidewalks that are wider than 8 feet. A 12-foot area can allow for street trees in two parallel rows, with one row adjacent to the street curb and a second row behind the sidewalk. When applied to north/south streets, this can provide shade for most typical sun angles. Many cities provide special treatments such as installing unique scoring patterns or tactile treatments such as bricks directly behind the curb. These treatments are most appropriate in commercial areas and are used as a cohesive design feature for place-making within the commercial areas and to provide a visual element for pedestrians as a separating buffer between the roadway and the sidewalk areas.

2

CLEAR CONTINUOUS SIDEWALK

Well-designed residential sidewalks provide for a minimum 4-foot-wide walking surface that is free of obstructions. For new construction, any required obstructions such as streetlights, utilities, poles, and other above-ground features should be located within the parkway area (street side) so that the sidewalk is generally continuous and does not require pedestrians to be alert to potential obstructions in their walking path. Placing required obstructions within the parkway area also provides greater separation between pedestrians and adjacent traffic, which further enhances the pedestrian experience.

Benefits

A straight and direct walking path minimizes travel time and effort for walking. Maintaining a clear 4-foot passage allows two people to walk side-by-side, which is preferable for walking together. Walkable communities strongly emphasize the need for direct walking routes. There are many places in the city where the walking route deviates from being immediately adjacent to the curb to being further from the roadway, separated by a parkway (and vice versa). This varied sidewalk design can provide for more interesting landscape architecture, but it can also increase the difficulty of walking to destinations, requiring pedestrians to be alert to obstructions and walk longer distances.

Design Considerations

As street and sidewalk design has evolved, the best practices from several decades are no longer appropriate to meet current active transportation and complete street goals. Sidewalks along streets and in walkable areas should have distinct and purposeful designs. They should follow new best practice design principles that make walking more accessible and enjoyable. Some sidewalk enhancements can include relocation of obstructions, widening of sidewalks, and realignment of sidewalks to provide more direct routes. On some streets, widening sidewalks may require relocating the curbs further into the street; however, this will be to detriment of other uses of the street area and studies may be needed to identify the optimal street configuration.

Program Considerations

In addition to the Design Considerations for new sidewalk facilities, it is recommended for City to develop several programs that could address obstructions on the sidewalk. These include:

- Study the potential to relocate street furniture, utility poles, access covers/vaults, and obstructions within the pedestrian right-of-way, with a goal to provide more direct walking routes by placing obstructions outside of the direct walking path.
- Update permitting requirements and enforcement policies for outdoor dining, construction zones, and temporary sidewalk closures to ensure the pedestrian right-of-way remains accessible and clear for pedestrians.

- E xpand education/outreach efforts focused on sidewalk maintenance for property owners and businesses.
- Coordinate with street cleaning and maintenance divisions to ensure that curb ramps, crossings and other pedestrian facilities are regularly maintained and kept clean, well-lit and in a state of good repair.
- Implement a sidewalk inspection program focused on pro-active efforts to identify and repair sidewalk and curb ramp damage.

3

SEPARATE BICYCLE FACILITY

To the detriment of pedestrians, bicyclists often use sidewalks to reach their destinations. Riding bicycles on sidewalks is legal except where signage prohibits the use, or where there is a dedicated on-street bicycle lane. Even with a dedicated bicycle facility, use of sidewalks by very young bicyclists is normal and expected. However, if used by older bicyclists, this usually indicates that the existing bicycle facility is unappealing or uncomfortable. To reduce the frequency of bicycle riding on sidewalks, it is necessary to examine and improve the bicycle network so that bicyclists of all ages and skill levels may be comfortable riding in the dedicated facilities.

Benefits (of separate bicycle facilities)

Bicycle use on sidewalks creates excessive and unnecessary conflicts with pedestrians, especially in commercial areas where sidewalk use by pedestrians is high. The walking experience is improved if bicyclists are drawn away from sidewalks in these areas. This provides a more comfortable and enjoyable pedestrian experience without the concern of potential conflicts with bicyclists on the sidewalks. Bicycle use on sidewalks, especially while riding opposite the direction of adjacent traffic, can cause safety concerns for bicyclists as motorists are less likely to observe a bicyclist moving against the adjacent flow of traffic especially while turning into or out of driveways and side streets.

Design Considerations

Class I Multi-Use Paths need to be carefully designed to ensure safe use for both bicyclists and pedestrians. If substantial frequencies of both modes are present, it is often more appropriate to separate their flows into parallel channels, which can be done through striping, signage, pavement textures, and/or physical separation. When separating the flows, the bicycle pathway is usually placed closer to the vehicular traffic.

Many arterials in the city have bicycle lanes, but many of the existing lanes currently provide the minimum width. There may be opportunities to widen existing bike lanes to provide buffers between the bikeway and the travel way. If travel way lanes are 11 feet or wider, a buffer may be feasible and may increase the attractiveness of the bicycle lanes.

Class IV bike lanes provide additional separation from vehicle travel lanes by placing flexible posts or other vertical elements in the buffer area to create more protected and inviting/attractive bicycle facility.

The City's Active Transportation Plan and proposed bicycle network goals align with providing separate bicycle facilities to reduce conflicts with pedestrians.

4

SIDEWALK CONNECTIVITY TO LAND USES

In its current state, the sidewalk network can often result in out-of-direction travel for pedestrians. A common example is the location of a landscaped strip near street corners, which requires pedestrians to travel a longer distance to reach destinations such as shopping areas. For example, commercial centers with landscaped strips along the street frontage - without any breaks or pedestrian access points- require pedestrians to walk from the street corner to the nearest driveway to access the commercial center, rather than providing pedestrians direct access to driveways located near the street corners, which creates a more direct walking route. When evaluating the site plans for development proposals, the length and directness of walking routes should be considered.

Benefits

This concept is very important to encourage transit usage and walking to destinations. While unintended, current walking routes can be up to three times longer than the direct distance because of failure to provide walking connections to buildings. Providing direct walking paths from street corners to the commercial areas can reduce the overall walking distances and time needed to travel to and from these destinations, while encouraging pedestrians to make more frequently walking trips.

Design Considerations

There may be limited opportunities to address these issues in residential areas, but improvements can be made to the commercial/business areas. Improving a sidewalk connection over a landscaped area that separates the sidewalk from the business parking lots can increase connectivity and access.

5

SIDEWALK NETWORK GAPS

Sidewalk gaps can discourage walking and expose pedestrians to traffic. The City's long-term goal should be to provide a continuous sidewalk network on all streets. During the Costa Mesa Pedestrian Master Plan (CM PMP) walk audits, community members identified several critical gaps in the system that should be prioritized for improvements, especially in commercial areas and areas that connect to commercial areas.

Benefits (of gap closures)

Filling sidewalk gaps, with special focus on walking routes to destinations, removes barriers to walking and eliminates the need for pedestrians to walk along the roadway to reach another sidewalk.

Design Considerations

The City should review and revise its standard plans for construction of sidewalks to ensure that it incorporates the best practices for sidewalk design. These include clear width, providing a separate zone for obstructions, and amenities. Filling of sidewalk gaps can be controversial in some neighborhoods or with some homeowners especially if the area is heavily landscaped.

Areas with minimal landscaping and worn paths ("goat tracks") may be high priorities for filling sidewalk gaps. Landscaping provides no value to pedestrians, but a worn path indicates that a significant walking demand is present.

6

BUCKLED AND LIFTED SIDEWALKS

Community outreach efforts resulted in many comments regarding sidewalks that were uneven, buckled, raised by tree roots, or other factors that made walking uncomfortable. In the past, the City allowed or provided street trees that were later discovered to have invasive roots that raised and damaged the sidewalk. Most of these trees have been replaced where the condition could not be corrected without removal of the trees. Sidewalk deficiencies can impact ADA compliance and can pose trip-and-fall hazards. However, it's important to note that street trees create a sense of enclosure/increased buffer to the street, as well as shade and are a major benefit to overall walkability.

Benefits

Continuous level sidewalks are more pleasant and desirable for walking. Efforts to address sidewalk condition should be a part of any program to improve walkability.

Design Considerations

Uplifted sidewalks of more than one inch are often considered to pose a safety hazard. Uplifted sidewalks of ¾ inch may also be an issue if the uplifted sidewalk limits a pedestrian's visibility of the elevation change. An effective program will monitor sidewalks citywide proactively to identify buckled and/or lifted sidewalk locations before they pose a safety hazard and to then schedule remedial repairs. In areas with ongoing tree root issues, the inspections may be required annually, but there should be a routinely scheduled inspection program.

Temporary ramping can address the uplifted sidewalk immediately but delaying correction can endanger trees if tree roots are involved and allowed to grow further. More aggressive removal and replacement of sidewalk sections may be effective to minimize damage to trees from root pruning. An arborist may be required to properly diagnose the effective remedy to preserving beneficial shade and trees.

7

RAISED CROSSWALK

A raised crosswalk is an internationally accepted design treatment that maintains a raised pedestrian path of travel across a minor street at midblock crossings. Traffic rises from street level over the raised pavement area and drops back to street level, similar to a speed hump. The design indicates that the pedestrian has the right-of-way over crossing vehicles.

Benefits

A raised crosswalk acts as a traffic calming measure, slowing vehicles as they approach from both sides. It makes pedestrians more visible since they are above road-grade. If constructed with asphalt and at sidewalk grade, raised crosswalks can be designed to allow pedestrians to cross a street along a continuous, level grade, without needing to drop down to street level while crossing.

Design Considerations

The treatment works best when the roadway volume is 9,000 daily vehicles or less for a 2 lane roadway or a 3 lane roadway with or without a raised median. The treatment can also be effective for creating a safe crossing for a separated Class IV bikeway adjacent to the walkway. Appropriate locations for raised crosswalks include residential roadways in school areas where mid-block crossings are provided or planned.

8

DRIVEWAY ISSUES

Every driveway that crosses a sidewalk is a potential location for conflict between motorists and pedestrians. Every driveway that causes pedestrians to travel down toward street level, move aside to walk on a level surface, or give apparent right-of-way to motorists increases pedestrian inconvenience, and hampers the walking experience. Pedestrians are supposed to have the right-of-way where sidewalks cross driveways, but the presence of street-type or alley-type entrances, especially with large intersection curb return radii, should be avoided, where possible.

Benefits

Walkability is best served when pedestrians are given the highest priority. Pedestrians should be provided sidewalks that are direct, level, and have a minimum number of conflicts with traffic.

Design Considerations

Driveways should be designed to be no wider than necessary. The rise from street level to curb level should be kept as short as possible, so that the walking surface can be preserved as a level surface (less than 2% crossfall). If the driveway rise can be accomplished to maintain a minimum 4-foot level sidewalk, the sidewalk condition will be improved. In some cases, where parking is allowed, the driveway can be extended out into the street using curb extensions to provide more distance to change grade.

Oftentimes street entrances are provided in conjunction with short deceleration lanes. This design along with signalized intersections where one of the legs is a driveway also causes misleading or confusing right-of-way assignments. Marked crosswalks should be installed along the sidewalk in the direction of foot travel, so that turning vehicles on the roadway understand that they must yield to pedestrians before turning into the driveway. The curb return radius should also be tight enough to require motorists to slow while making right turns.

9

BUS STOPS AND BUS SHELTERS

Bus stops are locations where sidewalks experience multiple uses, such as walking, waiting for buses, and bus boarding and alighting. Amenities are often provided at bus stops, including benches, shelters, trash disposals, and system service information.

Benefits

Transit trips often begin as walking, biking, riding scooters, and other non-motorized modes of travel. The vast majority of transit riders are a pedestrian at some point of their trip. Paying attention to conditions at or near bus stops can be especially important. A bus stop's condition and amenities can encourage (or discourage) transit usage. These conditions include both the surrounding sidewalk network and the design and provision of amenities at the stop.

Design Considerations

ADA space must be provided to access the bus stop area. This includes the ability to use the ADA lift so all users can access the bus. The walking path to the bus stop should generally be direct along the alignment of the sidewalk. Bus benches, shelters, and furniture should not obstruct the walkway and should also provide space in front of the bench or shelter for sitting as well as ADA access. Optimal design of a bus stop may require more space than is available in a typical 8-foot-wide parkway/sidewalk area. Many agencies are using curb extensions to widen the sidewalk area into the street, in part to maximize the area that can be used to meet bus stop needs. This also results in the bus stopping in the curb travel lane. This approach may not be feasible on most corridors, but should be explored where high pedestrian volumes are present and wider sidewalks would benefit the high pedestrian demand. This potentially increases the risk of rear-end or lane change collisions with following vehicles, but it improves travel time and reduces delay for the bus. It is normally a consideration on roadways with speeds of 35 mph or less.

Providing or maintaining space for bicycle infrastructure is also appropriate. This is often accomplished by providing a bikeway behind the bus stop area and a marked or raised crossing that connects the bus stop with the sidewalk.

10

STREET TREES

Street trees are typically located between the curb and the sidewalk within the landscaped parkway. They are typically planted at regular intervals in a consistent theme to help create a sense of place. Many varieties of street trees provide shade for sidewalk users.

Benefits

The benefits of street trees cannot be underestimated. They include shade, cooling, air quality, traffic calming, and property value enhancement. Street trees are a typical component of all well-designed streets.

Design Considerations

Some tree species are more appropriate than others for planting alongside roadways. Much of the city was developed with Ficus trees. These trees have advantages, but their invasive roots are difficult to control to prevent damage to sidewalks. Tree varieties that are better suited to the street and sidewalk environment should be used for all new tree plantings. Palm trees grow well in the local climate, but they do not offer the shade benefits of other tree types. The City is recommended to select a sustainable palette of plants that a) provides shade for people walking or standing at gathering points, b) will not uplift or damage sidewalks with their root structures and c) plantings are large enough that they will provide shade canopy within a few years of being planted. Installation of tree well grates in commercial areas allow for maintaining sidewalk widths without requiring a parkway.

A landscape architect can provide advice on optimal street trees. Some cities have established detailed tree plans and employ an arborist on staff or contract.

Many streets considered to be "Great Streets" have dual rows of trees: A row behind the curb and a row between the sidewalk and private property. This treatment is most feasible if 12 feet or more is available behind the curb line.

11

LANDSCAPING

Landscaping is an important feature when located within or adjacent to the sidewalk. In addition to trees, landscaping may include turf or shrubs.

Benefits

Landscaping can provide walkability benefits when placed alongside of sidewalks. Landscaping is most beneficial when it is located between the curb and the sidewalk as it provides a buffer between vehicles and pedestrians. It also can be a positive amenity if located along the outside edge of the sidewalk within the public right-of-way or on private property.

Design Considerations

There can be a trade-off between landscaping and the providing an adequate width for walking. In commercial areas, sidewalks should be wide enough for pedestrians to pass and preferably wide enough for 3 pedestrians to walk side-by-side. Long sections of sidewalk that are continuously 8 feet wide or wider without poles, posts, or above ground utility equipment next to the curb can benefit from the introduction of landscaping adjacent to the curb. This increases pedestrian comfort especially if there is no curbside parking.

12

SIDEWALK CONDITION

During the walk audits, community members regularly commented on the condition of the city's sidewalks. These comments referred to cosmetic issues such as stains, discoloration, as well as physical defects such as cracks, lifted sections, and voids.

Benefits

Desirable sidewalks create desirable walking conditions. Maintenance can make a difference. This can include maintaining a level surface and ensuring the condition is appealing and appropriate for the location.

Design Considerations

It is important to have an inspection system and a program to manage the sidewalk surface, replacing sidewalk panels or entire sections that are cracked, chipped, or uplifted. Sidewalks in walkable commercial areas may also benefit from a cleaning program that can include sweeping as needed and deep cleaning via pressure washing to remove stains.

13

CURB RAMPS

Curb ramps are required by the ADA at all street corners where sidewalks are present, and pedestrians may cross. the ADA also has requirements for minimum dimensions

and maximum grades. Many curb ramps are located at the midpoint of curb returns at intersections. ADA guidelines encourage the placement of directional ramps at corners rather than a single diagonal curb ramp.

Benefits

Directional curb ramps allow better guidance for visually-impaired pedestrians and provide a level sidewalk surface for wheelchair users at sidewalk level. They also shorten the crosswalk distance for all users and increase the distance from the crosswalk to adjacent traffic lanes.

Design and Other Considerations

Retrofitting existing signalized corners with directional ramps can be difficult and costly. Existing traffic signal poles are often located at the desirable location for these ramps. Also, available space at these corners is often limited due to the radius of the corner curb or the right-of-way available behind the corner, which can make directional ramps impractical. Directional ramps are well suited for newly constructed corners or existing street corners that have been redesigned with curb extensions or bulbouts. Detectable warning surfaces (i.e. truncated domes) signal to the sight impaired/blind that they have entered or exited areas where there may be conflicts with vehicles and/or bicycles. These detectable warning surfaces should be used at curb ramps where width allows for their inclusion. Standard Plans should be reviewed for compliance with current ADA requirements and should provide directional ramps for all new construction projects.

14

CURB EXTENSIONS / BULBOUTS

Curb extensions / bulbouts generally narrow the roadway at intersections or at mid-block locations. They are especially appropriate on roadways where on-street parking is allowed or where the road travel way is wider than necessary. By providing only the width necessary to meet traffic needs, the sidewalks can be greatly expanded, leaving more room for walking. Crossing distances can also be reduced, which shortens the duration of time where a pedestrian is vulnerable to vehicular traffic.

Benefits

The primary benefits for pedestrians are to shorten the crossing length, widen sidewalks, and/or to slow down vehicular right turns. Bulbouts, in combination with other design considerations such as the reduction in curb return radii, can be beneficial for pedestrians because they decrease the crossing distance (which reduces the time pedestrians are in the roadway) and also slow down right turning traffic.

Design and Other Considerations

These improvements can pose design challenges for maintaining existing drainage facilities. They may require adjusting the street elevation or providing new catch basins and storm drain facilities. In other cases, the natural terrain or existing drains may allow for adjustment. When designing for roadways with bicycle facilities, care should be taken to preserve space for bicyclists and provide a continuous surface without requiring the bicyclist to cross onto the gutter in front of the new curb.

Mid-block crossing with pedestrian beacons, pedestrian island, and crosswalk with aesthetic treatment at Gisler Ave, east of California Ave

E.3 CROSSING-RELATED TREATMENTS

The community also discussed the general condition of crossings and the function of crossings overall in the pedestrian infrastructure network. Many principles of crosswalk design apply to all crossings, while others may be applied based upon the land use in the area. Heavily used pedestrian crossings require additional visibility and improvements than lower-density residential areas.

1

MARKED CROSSWALKS

Though not common knowledge for most motorists, the California Vehicle Code defines intersections as locations of legal crossing, whether or not a crosswalk is marked.

Benefits

Adding a crosswalk marking more clearly indicates that pedestrians have the right-of-way at intersections, and encourages more walking. Their presence may better remind drivers to watch for pedestrians, and there may be a traffic calming effect.

Design Considerations

Cities often mark crosswalks to highlight locations that are frequently crossed by pedestrians. The City may wish to adopt a clear policy on when to mark crosswalks which may include factors such as traffic volumes, lane configurations, pedestrian volumes, sight distance, and if a supplemental traffic control device would be required (RRFB, HAWK or signal) to facilitate safe crossing of the marked crossing. Marking unwarranted crosswalks at uncontrolled locations can lead pedestrians into a false sense of security. Pedestrians are usually more cautious and observant to oncoming vehicles when crossing a location without a marked crosswalk.

2

ADVANCE STOP BARS

Motorists occasionally stop too close to the crosswalk or their vehicle encroaches into the crosswalk when stopped at an intersection, crowding the pedestrians in the crosswalk.

Benefits

Advance stop bars help improve the visibility of pedestrians by motorists as it provides an indication of where the vehicle must stop at the intersection approach, before the crosswalk.

Design Considerations

Communities routinely include advance limit lines located approximately 5 feet in front of all continental style crosswalks. Costa Mesa has done this in some locations but in a few locations the setback distance is less than 4-5 feet. Advance limit lines tend to encourage motorists to stop further from the crosswalk and reduce vehicle encroachment into the crosswalk area.

Traffic loops are also set back to align with these new limit lines. This treatment can also allow for crosswalks to be shifted to better align with the wheelchair ramps, while the limit line continues to advise traffic on where to wait. Staggered advance stop bars can also be used to help combat the multiple-threat situation between stopped cars, pedestrians in the crosswalk, and fast-approaching right turn traffic with impacted sight distance of pedestrians.

3

HIGH-VISIBILITY CROSSWALKS

High-visibility ladder, continental, or triple four (double continental) crosswalks are crosswalk designs that provide greater visibility to motorists to help increase awareness of pedestrians crossings.

Benefits

High-visibility crosswalks are more likely to draw a motorist's attention and have been shown to improve yield behavior. These crosswalks also create a more comfortable crossing experience for pedestrians.

Design Considerations

Costa Mesa uses standard crosswalk markings and high-visibility (continental, ladder, and triple-four (or double continental)) depending on existing factors such as volumes, speeds, grades, available sight distance and surrounding context (schools, commercial areas, major arterials, etc.). These types of crosswalks are typically installed in areas with high pedestrian demand and high vehicle activity to increase the safety of pedestrians. The horizontal bars of a continental or ladder crosswalk should be aligned with the nearest lane alignment (upstream or downstream) to maximize the visual effectiveness of the treatment as motorists approach the crosswalk.

4

ADVANCED YIELD LINES

Advanced yield lines are roadway markings that provide guidance as to where drivers should wait while a pedestrian is crossing. They are placed in advance of a crosswalk to provide separation between the crossing pedestrians and vehicles.

Benefits

Advanced yield lines offer more visibility of pedestrians crossing the roadway and reduce the likelihood of multiple-threat crashes.

Design Considerations

These markings must be placed 20 to 50 feet in advance of the crosswalk and must include R1-5 or R1-5a MUTCD signage. These markings are typically used at mid-block crossings or at unsignalized slip lanes.

5

PEDESTRIAN CROSSING TREATMENTS

Recent pedestrian safety studies continue to indicate that marked uncontrolled pedestrian crossings can increase the risk of collisions with pedestrians, as well as rear-end and other types of collisions between motor vehicles.

Benefits

Pedestrian crossing treatments should be considered wherever an uncontrolled pedestrian crossing exists. These treatments can reduce the risk of collisions with pedestrian and other types of collisions between motor vehicles.

Design Considerations

An appropriate design will consider the surrounding context, roadway cross section, pedestrian crossing volume, vehicular ADT, and prevailing speeds. Reducing the number of travel lanes and crossing distance for an uncontrolled crossing helps reduce pedestrian exposure in the roadway. Other treatments include median refuge islands, advance yield lines, rectangular rapid flashing beacons (RRFB), pedestrian hybrid beacons (HAWK), signalized crosswalks, and special traffic signal operations. The California MUTCD provides minimum guidance on use thresholds for some of these facilities, and guidance for FHWA is also available for selection of crossing treatments. It is also important to note that recent studies have indicated that crosswalk collisions are far more likely during darkness. Evaluation or enhancement of street lighting may be appropriate in locations where uncontrolled crosswalks exist or are planned.

6

MID-BLOCK CROSSING

Mid-block crosswalks facilitate crossings to popular destinations that are not well-served by the existing traffic network. Mid-block crossings may be suitable in roadway segments where there is a large gap between signalized intersections and pedestrians are more likely to cross the roadway at a mid-block location, instead of traveling to one of the signalized intersecting and then crossing the roadway.

Benefits

Mid-block crossings can lessen the amount of walking needed for pedestrians to access a popular destination. These crossings help maintain a pedestrian travel network and minimize the number of mid-block crossings that occur throughout different parts of the block by attracting pedestrians to a marked crossing where there is high pedestrian demand or anticipated demand.

Design Considerations

When considering mid-block crossings, pedestrian demand should be considered for optimal placement and usage. Controlled mid-block crossings require pedestrian crossing treatments to improve visibility and safety. The design of these crossings needs to consider stopping sight distances, effects of grade, cross slope, need for lighting, and other factors.

7

MAINTENANCE OF CROSSWALK MARKINGS

Many community member comments from the walk audits were related to worn or poorly maintained markings. The community is concerned that poorly marked or maintained locations may be less safe than properly and clearly marked sites.

Benefits

Crosswalk markings that are in good condition (free form major cracks, chips or faded color), can maintain conspicuity of the crossing, especially from a long distance. Crosswalks that are properly installed will also retain their retro-reflectiveness.

Design Considerations

Since pedestrians in California have similar rights at both marked and unmarked crossings, the condition of markings is not a large factor in litigation, but poorly marked locations are often noted as a cause of a collision. Gaps in thermoplastic markings are often created by utility trenches or pavement spot repair. Existing pavement quality needs to be accounted for before installing crosswalk markings. Poor pavement quality such as asphalt with major cracks and chips are not ideal for thermoplastic installation as the thermoplastic will then also crack and chip easily. Thermoplastic is also not ideal for installation over existing painted asphalt, or over concrete where a side street has a concrete swale/cross gutter across the street. Thermoplastic should be allowed to properly dry prior to motor vehicle travel, especially for high-visibility crosswalks, which will cause indentations and scuff marks by motor vehicles that cannot be removed.

8

SIGHT DISTANCES AT CROSSWALKS AND INTERSECTION CORNERS

During the walk audits, community members often noted that they witnessed sight distance issues at crosswalks and at intersection corners, generally due to on-street parking near an intersection. It is not necessary to paint red curb around curb returns to provide adequate sight distance, but this treatment is often omitted on the opposite site of the street at T-intersections. Prohibiting parking on the approach to marked uncontrolled crosswalks is also normally encouraged to ensure that motorists and pedestrians can observe each other before the pedestrian enters the roadway.

Benefits

Parking management and providing adequate sight distances is important where pedestrian crossings are expected or encouraged. The key benefit of this practice is safety.

Design Considerations

Providing adequate sight distance at all crossing locations in residential areas is a good practice. This can be accomplished by prohibiting parking along the curb approaching the crosswalk. Sight distance can also be improved by providing a curb extension that allows the pedestrian to step forward and improve their vision of approaching traffic without stepping into the street. Curb extensions also can provide a traffic calming effect that helps achieve more reasonable vehicle speeds in residential areas. General design considerations for curb extensions, including drainage impacts, and bus stop opportunities, are discussed in other sections of this toolbox.

9

ADDING MISSING CROSSWALKS AT TRAFFIC SIGNALS

Community feedback from the walk audits noted that crosswalk markings were not provided across all legs at many signalized intersections. The absence of crosswalk markings can increase the time and distance required to reach destinations. Crossings are typically prohibited where the efficiency of traffic signalization is improved by eliminating the pedestrian crossing or where allowing the crossing increases the potential for a collision. Typical locations include 4-way intersections with heavy turning movements from one leg of the intersection and light traffic on the opposite direction, such as Newport Boulevard at 19th Street, or Adams Avenue at Fairview Road; intersections that use "split phasing" and prohibit the crosswalk that would operate with the lightly used approach. Crossing movements are also often prohibited for one leg at T-intersections where left turns from the terminating street conflict with pedestrians using the crosswalk at the left leg of the intersection.

Benefits

Providing controlled pedestrian crossings reduces the amount of street crossings, since a pedestrian may be required to use three crosswalks because of a missing crosswalk leg. Many crosswalks are prohibited in commercial areas at this time, and these crossing prohibitions can be an impediment to walkability.

Design Considerations

Prohibiting crossings at signalized intersections should be carefully considered to verify that the prohibition is justified and that other countermeasures are not suitable. In some cases, the potential inefficiency of requiring increased pedestrian crossing time to travel around the prohibited crossing may not be significant. If the parallel and adjacent through traffic movement already regularly requires enough time to serve a pedestrian crossing, there may be limited justification for the prohibition.

In many cases the added time needed to add a pedestrian crossing can be easily incorporated into the existing signal operation. This may be most relevant at intersections with minor cross streets where surplus time is often available in the signal cycle to meet the needs of the added crossing. Some traffic signal design and phasing treatments can minimize the time lost for vehicles, by allowing non-conflicting traffic movements while the pedestrian crossing continues, including potentially other crosswalk movements or left turns that do not conflict with the crossing movement. While studying whether or not a missing crosswalk should be added, it is important to coordinate with emergency services. Pedestrian crossings can conflict with emergency vehicle preemption because the preemption cannot be triggered during an active and conflicting pedestrian phase.

10

PEDESTRIAN ISLANDS

Pedestrian islands are protected spaces placed in the center of the street to facilitate pedestrian crossings. The pedestrian islands help shorten the crossings especially at large intersections.

Benefits

Pedestrian islands can provide a protected space for pedestrians to wait for an acceptable gap in traffic. They reduce the overall crossing length and a pedestrian's exposure to vehicular traffic. The islands can decrease the amount of delay that a pedestrian will experience to cross a street by not requiring a pedestrian to find gaps in vehicular traffic in order to cross street safely.

Design Considerations

Pedestrian islands should be at minimum 4 feet wide and preferably 8 feet wide to accommodate pedestrian comfort and safety. At mid-block crossings, pedestrian islands, in combination with curb extensions/bulb-outs, can provide traffic calming benefits along with shorter crossings for pedestrians across each direction of travel way.

Detectable warning surfaces (i.e. truncated domes) signal to the sight impaired/blind to inform them that they have entered or exited areas where there may be conflicts with vehicles and/or bicycles. These detectable warning surfaces should be used at pedestrian islands where width allows for their inclusion.

11

CROSSWALK SCRAMBLE OPERATIONS

A crosswalk scramble operation is a special traffic signal operation and phasing design that stops motor vehicle traffic in all directions while allowing pedestrians to cross between all corners at the same time.

Benefits

By eliminating nearly all conflicts between vehicles and pedestrians, this technique can enhance safety at locations with a high number of pedestrians. It is appropriate in areas where pedestrian flows are so heavy that motorists may have difficulty turning through pedestrian streams. They are seeing increased usage in Southern California near beaches, colleges, and in busy walkable retail areas with heavy pedestrian volumes.

Design Considerations

While providing unique service to pedestrians, this technique can also increase delays to pedestrians, especially if a pedestrian can begin their crossing of two consecutive intersection legs as soon as one direction indicates a WALK signal. The time required to serve the crossing is lost to other traffic movements, so heavily used intersections can experience substantial delays and queuing. They are rarely implemented at heavily used intersections between multi-lane roadways.

12

IMPROVED PEDESTRIAN CROSSING TIMES

Community feedback from the walk audits often reported inadequate pedestrian crossing times. Minimum crossing times are specified in the California MUTCD. Providing less time can increase liability and increase the potential for a pedestrian collision. Often the minimum times are present and adequate, but pedestrians may need additional crossing time if they do not fully understand the operation. The use of countdown indications is discussed in this toolbox and is an effective solution for this concern.

Benefits

Providing adequate crossing times allows for the last pedestrian entering at the end of the "walk" cycle to clear the intersection safely before any conflicting vehicular movements begin. This reduces the potential for pedestrian-related collisions.

Design Considerations

The California MUTCD lowered the standard minimum walking rate from 4 feet per second (fps) to 3.5 fps over 10 years ago with an allowance that the times did not need to be implemented until other traffic signal work or retiming was required. In addition to the walking speed of 3.5 fps, the method of measuring the crossing distance greatly affects the crossing time. A conservative approach to measuring the crossing distance is to measure from the bottom of the curb ramps at both ends of the crossing, with the path measured through the center of the crosswalk. This is more conservative than MUTCD guidance and provides pedestrians with sufficient time to cross.

13

PEDESTRIAN COUNTDOWN SIGNALS

Pedestrian countdown signals indicate how many seconds of DON'T WALK remain before the traffic signal turns to yellow. The use of countdown indications is required for all signalized crosswalks except for extremely short crossings.

Benefits

Countdown pedestrian signals have greatly reduced concern that signals do not provide adequate time to complete a crossing. They are extremely useful in allowing pedestrians to gauge whether or not they have sufficient time to cross. Countdown pedestrian signals have significantly reduced collisions caused by pedestrians beginning to cross near the end of the pedestrian phase due to not knowing the remaining time. This type of incident was common prior to the emergence of countdown pedestrian signals.

Design Considerations

It is recommended that all remaining standard pedestrian signals be retrofitted to a pedestrian countdown signal.

14

PEDESTRIAN PUSH BUTTON LOCATIONS

Pedestrian Push Buttons (PPBs) are generally located near the crosswalk and at a location that meets ADA requirements, and per MUTCD guidelines, preferably near the level landing. The location should be intuitive and generally allow for activation while standing or waiting near the beginning of the crosswalk. PPBs located outside the crosswalk area may provide misleading information about the crossing location, especially to visually impaired pedestrians who may stand beside the push button and begin to cross outside of the crosswalk.

Benefits

Proper design of pedestrian push buttons reduces the chance that a visually-impaired pedestrian will cross against a WALK signal or outside the crosswalk area. This greatly reduces the potential that a pedestrian will be struck by a moving vehicle which then increases walkability.

Design Considerations

Traffic signal design guides and the California MUTCD provide guidance for the optimum location of pedestrian push buttons. Where possible, a 4′ x 2.5′ level landing should be provided in front of the pedestrian push button for ADA adherence. Push buttons should not be installed in ramp flares. Pedestrian push buttons with older style push buttons consisting of a ½ inch round button need to be replaced with ADA compliant push buttons. Older push buttons are too difficult to press for some and ADA- compliant pedestrian push buttons requires buttons to require less force to push.

A pedestrian will not have difficulty locating a pedestrian push button (PPB) if it is properly designed. Improperly located PPBs are often due to unusual placement of traffic signal poles, mounting the PPB on the wrong side of the pole, or the use of non-standard designs for traffic signals at street corners. Where there is concern for PPB placement, site research will normally confirm if the PPB is placed at a proper location. It may be necessary to install a separate push button and post closer to the crosswalk, but this installation is not as costly as attempting to move a large signal pole to a different location.

15

ACCESSIBLE PEDESTRIAN SIGNALS (APS) PUSH BUTTONS

Accessible Pedestrian Signal (APS) push buttons are devices that communicate information about the "WALK" and "DON'T WALK" intervals at signalized intersections, in non-visual formats (audible tones and vibrotactile surfaces) to pedestrians who are visually impaired.

Benefits

APS pedestrian push buttons benefit the visually-impaired by alerting them to the activation of a "WALK" interval as well as the status of the walk cycle.

Design Considerations

APS pedestrian push buttons should meet the current requirements of the MUTCD and should include features such as a "Locate Tone" that sounds once per second, which is intended to direct a visually impaired pedestrian to the location of the push button. APS pedestrian push buttons should also have a raised tactile arrow pointing in the direction of the crosswalk, which helps orient pedestrians in the direction of the crosswalk. The APS push buttons also emit an audible sound after the button is pushed, using sounding the word "Wait" each time the button is pushed.

16

PEDESTRIAN HYBRID BEACON (HAWK SIGNAL)

A pedestrian hybrid beacon, also known as a HAWK signal, is a traffic control device used to provide additional pedestrian protection to existing uncontrolled or newly proposed marked crosswalk locations. A HAWK signal is distinct from traffic signals and constant flash warning beacons because it is only activated by pedestrians when the push button is pressed.

Benefits

HAWK signals can lead to lower conflict and crash rates for pedestrians and vehicles. They clearly indicate that a crosswalk is being used and that all motorists must come to a complete stop. When the pedestrian phase of the HAWK signal ends, the HAWK signal goes dark until the next activation by a pedestrian.

Design Considerations

HAWK signals should be located outside the functional area of a signalized intersection. CA MUTCD allows for installation at intersections or driveways. In addition to the signal head displays, stop lines and marked crosswalks are required at HAWK signal crossings. Advance stop lines should be used on at crossings to reduce the potential for crashes.

17

RECTANGULAR RAPID FLASHING BEACONS (RRFB)

Rectangular Rapid Flashing Beacons (RRFB) are a traffic control device that uses a combination of a strobing LED light bar and pedestrian warning signs to help facilitate pedestrian crossing at marked crosswalks by informing motorists that there is someone in the crossing and that they must yield. The devices flash when activated through a pedestrian push button or by passive pedestrian detection.

Benefits

RRFBs promote safer driver yielding behavior at crossings because they use an irregular flash pattern similar to emergency flashes on police vehicles to bring awareness to pedestrians using the crosswalk.

Design Considerations

RRFBs should be used in combination with a marked crosswalk, ADA curb ramps, advance warning signs or pavement markings, and overhead lighting. Reserve the use of RRFBs for locations with significant pedestrian safety issues, as over-use of RRFB treatments may diminish their effectiveness.

18

LEADING PEDESTRIAN INTERVALS

This traffic signal operation technique provides pedestrians a head start for crossing, allowing them to leave the curb and establish presence in the crosswalk before adjacent traffic is signaled to proceed. They are most effective where vehicular right turns are frequent, and motorists are highly likely to enter the crosswalk during the first few seconds of WALK. Typical leading pedestrian intervals (LPIs) range from 3-7 seconds.

Benefits

Conflicts between pedestrians and right-turning vehicles are most likely to occur within the first few seconds, so the use of LPIs can be a great safety benefit. Agencies who use the treatment in downtown location or heavily-used crossings report significant reductions in reported pedestrian-related collisions. A reduction of 10-20 percent may arise, according to ongoing safety studies.

Design Considerations

LPI duration is an important consideration in the signal timing of an intersection. LPIs of 3 seconds may be too short to allow pedestrians adequate time to enter the roadway, and LPIs of 7 seconds may be too long and cause unnecessary delays for adjacent through movements where the right turn is not its own dedicated phase. Since motor vehicles are stopped during LPIs, implementing them on every intersection leg can cause significant delays to motorists, especially where pedestrian and vehicular demand is high. LPIs can also be programmed to be active during specific times of the day. This allows the LPI to serve the time period of the highest pedestrian demand, if demand varies throughout the day.

19

REGULATING RIGHT TURNS ON RED

Pedestrians occasionally mention right turns on red that conflict with pedestrian crossings. Motorists making right turns may not always observe pedestrians to their right because their vision is directed to traffic approaching from the left. The problem may be more pronounced at locations with designated right turn lanes or locations where most of the traffic in the curb lane turns right.

Benefits

Prohibiting right turns on red can improve safety for pedestrians. It is unknown how many pedestrian injuries occur due to allowing Right Turn on Red. However, there can be challenges to effective prohibitions.

Design Considerations

Motorists are highly accustomed to turning right on red and may resist measures without heavy enforcement. The use of red turn arrows or the use of extinguishable (blank out) message signs or regular message signs have been employed to seek better compliance. Prohibited locations normally have visibility issues that discourage motorists from trying to turn on red. Locations where the through lane limit line is set further back from the side street also see better compliance.

Right turn on red restrictions, however, need to be carefully studied before implementation because right turning movements with high volumes can lead to long queues that spill back to the main line which may cause other safety concerns.

20

FLASHING YELLOW ARROWS (FYA)

Flashing Yellow Arrows (FYA) are implemented on traffic signals for left/right turn movements. The FYA indicates to motorists that they may turn left/right only when there is no oncoming traffic and crosswalks are clear of pedestrians and bicyclists. During the flashing yellow arrow, the left/right turn movement becomes a permissive left/right turn and when the yellow arrow turns solid, vehicles should prepare to stop and not proceed into the intersection to turn left/right.

Benefits

Flashing yellow arrows help make motorists more aware of the permissive situation and makes them more alert to pedestrians. Depending on the traffic volumes and opposing through traffic conditions, the permissive green light may not allow more opportunities than a protected left turn arrow. Therefore, potential locations for flashing yellow arrows will need to be studied to determine the feasibility of this treatment.

Design Considerations

Flashing yellow arrows can be useful for intersections with permissive left/right turns where there is a high level of non-compliance of motorists yielding to pedestrians. Flashing yellow arrows are more conspicuous and bring greater attention to the required yield than a green light

21

REDESIGN OR REMOVE SLIP TURN LANES

Uncontrolled free right turn lanes, also known as slip lanes, are lanes that allow motorists to turn right at signalized intersections, often without stopping, even when the traffic signal is red for adjacent through traffic. They were designed at intersections to reduce the delays and queues of right turning movements with very large right turning volumes. Slip lanes are usually equipped with a large median "porkchop" island which is used by pedestrians as a refuge. Slip lanes usually require right turning traffic to either yield to cross-traffic or the slip lane has its own dedicated receiving lane which merges onto the side street mainline.

Benefits (of Redesign or Removal)

These types of lanes are not friendly to pedestrians, because they help vehicles make the turns at much higher speeds and divert motorists' attention away from the pedestrian crosswalk within the slip lane. Programs to remove or modify these turn lanes are common, and design approaches that minimize their future need are preferred.

Design Treatments

The most common design treatment is to remove the slip lane median island and, if necessary, reconstruct the corner curb adjacent to the slip lane. This removes the uncontrolled crosswalk across the slip lane and creates a conventional right turn condition. Where such lanes are needed to accommodate the traffic volumes, or where construction funds are limited, their designs can be modified. This can by done by redesigning the slip lane to have a more perpendicular approach to the cross-street which reduces the angle of a motorist's head turn needed to look for a gap in oncoming traffic. This allows for a better sight distance to pedestrians crossing from the right to the left of the slip lane, which would normally be in the motorist's blind spot as they are looking to the left. Another treatment is to remove the dedicated receiving lane of existing slip lanes. This would slow down vehicles as they approach the crosswalk because then motorists would need to yield to cross-traffic before turning.

22

PEDESTRIAN DELAY MANAGEMENT

Pedestrians experience substantial wait time when they want to cross the minor leg of the intersection, parallel to the major roadway, with a coordinated movement as the cycle lengths during the coordinated phase are longer.

Benefits

Turning on the "Pedestrian re-service" function on a signalized intersection controller, if a pedestrian arrives at the intersection and the coordinated phase has enough time to service the pedestrian phase, then the pedestrian phase will turn on. This prevents pedestrians from needing to wait until the cycle finishes and the coordinated phase starts back up.

Design Considerations

Alternative intersection types have greatly reduced pedestrian delays. These include all-way stops, roundabouts, and crossings of lightly traveled streets where no control is needed for pedestrians. When new traffic signals are being considered, equal consideration to alternative intersections should be included, especially if an alternative intersection can meet expected usage requirements of all users.

23

PEDESTRIAN LIGHTING

Street lighting can be an important amenity. Tall streetlights can provide adequate illumination to permit walking after dark, but lower-level lighting is often provided in commercial areas. These treatments increase the illumination level along the sidewalk and provide for a more constant level of illumination.

Benefits

Higher illumination is especially beneficial in commercial areas. It makes the area more attractive, and it better illuminates pedestrians as they walk along the sidewalk or across driveways. Illumination is less needed in residential areas, but it should be sufficient to allow for walking without carrying flashlights. It can also provide comfort and personal safety benefits for walking alone.

Design Treatments

Adequate lighting needs to be provided for sidewalks, trails/MUPs, and crossings. Lighting at crossings needs to be either adjacent to the crossing or upstream from the crossing as to not create a backlight contrast issue which only allows a silhouette of the pedestrian to be visible.

Pedestrian bridge on Bristol Street

E.4 GENERAL TRAFFIC BEHAVIOR AND OTHER CONCERNS

A majority of comments received from the community engagement process were either related to the sidewalk realm or pedestrian crossings. However, there were a handful of comments that pertain to general motor vehicle traffic behaviors or that are well beyond the scope of the Plan. The following tools could improve general traffic behavior on the roadway.

1

ROADWAY RECONFIGURATIONS

In many communities, multi-lane arterials have been modified to reduce the number of through travel lanes. It is especially common for roadways with 4-lanes undivided (no left turn lanes) to be reduced to 2 lanes (with left turn lane), where traffic needs are clearly met by fewer lanes. Roads that carry fewer than 20,000 vehicles per day and have no more than 4 lanes are the best candidates for reconfiguration.

Benefits

Roadway reconfigurations may create reduction in distance to cross active lanes, freeing space for bicycle lanes and other purposes, and slowing the flow of traffic by inhibiting passing, especially along roadways with high pedestrian activity, such as roadways near schools.

Design Considerations

Reducing roadways from 4 lanes to 2 lanes (with traffic volumes of less than 20,000 vehicles per day) can improve pedestrian safety, motorist safety, and result in traffic calming benefits. Furthermore, a traffic analysis may be appropriate for roadways in the 15-20,000 vehicle range to ensure that potential side effects are identified.

The need to initiate a roadway reconfiguration should be considered based upon the identification of safety issues or other needs that can be alleviated by reducing the width required for motor vehicle travel. A project that provides public enhancements will generally be treated more positively than a project which reduces travel lanes.

2

ROADWAY PAVEMENT REHABILITATION

The roadway pavement conditions was often discussed by community members during the walk audits. Paving in pedestrian crossing areas can be an important factor in providing a safe walking surface and pavement condition should be monitored. But when streets are repaved, it is an appropriate time to review issues regarding how the street is used.

Benefits

When walkability measures are incorporated strategically with pavement rehabilitation, the costs can be reduced substantially. Also the potential to reconstruct a feature that was recently constructed in its existing condition can result in expenditures that could be eliminated or reduced. Integrating potential street changes into the rehabilitation schedule, often a year or more in advance, can save funds or allow for more work with the same amount of funding.

Design Considerations

The marking treatment, alignment, and location of marked crosswalks is best addressed when the existing crosswalk is repaved. The crosswalk can be shifted to better align with wheelchair ramps, the marking treatment can be converted to high visibility, and advance limit lines can be provided to move motorists further from the crosswalk when stopping.

The feasibility of road diets should also be a consideration before and after pavement rehabilitation. The best time to restripe the roadway to a different configuration is when it is repaved. The best time to test a trial configuration is a few months to a year before it is repaved, if there is a potential that it would be changed back after a demonstration is completed.

If a roadway is being considered for modification to change the location of the curbs, either at an intersection or for a longer distance, consideration of including the curb change may be more affordable if done together with repaving.

There is often hesitancy to changing roadway soon after new pavement or other roadway features is completed. It is better to plan for the future of the roadway, and then undertake maintenance based upon moving toward the future plan.

3

SPEED FEEDBACK SIGNS

A dynamic message sign that uses radar or laser technology to determine the speed of an approaching vehicle and then displays the speed to the driver. If motorists are speeding, the sign flashes the exceeded speed along with "SLOW DOWN" or "YOUR SPEED".

Benefits

Speed feedback signs activate when drivers exceed posted speed limit by five miles per hour. These can be effective in reducing motorists' speeds on wide roadways or near high pedestrian areas such as schools.

Design Considerations

Physical constraints in installing speed feedback signs include requiring a special type of pole, space for footing, and if the signs are not solar – a source of electricity. Speed feedback signs should be strategically placed, where warranted, such as locations with historical speeding violations or collisions due to speeding.

4

TRANSIT ACCESS

Walking is an important consideration in encouraging or using transit. A typical walk shed, an area around a central destination that is reachable on foot by the average person, of ¼ mile is considered in transit planning around each bus stop. Special attention to the walkability for all potential routes to bus stops is appropriate. The walking route to high activity generators is especially important. Walking routes from bus stops to nearby shopping centers should be reviewed to ensure that the route is direct and relatively free of high traffic aisles.

Design Considerations

Bus stops should be carefully integrated into the walking environment. Bus stops and shelters can impede the direct travel path of pedestrians. If space is available, they should be located between the travel way of the sidewalk and the curb line. If the space is not adequate, the furniture should be located toward the back of, or behind, the sidewalk.

Costa Mesa has constructed bus bays to move buses out of the flow of vehicle traffic. Many communities are constructing curb extensions to locate transit stops further into the street area. This location improves bus speed and provides more space for bus stop amenities. It can increase conflicts between stopping buses and through traffic, but it can also discourage use of the curb lane, increasing the separation between walkers and heavy traffic. Often, the combination of bus stops, slowing for pedestrians crossing driveways and intersections can greatly reduce the use of the curb travel lane.

APPENDIX F

Pedestrian Counts

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Oct 5, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Garfield and Madison
EAST & WEST: Paularino

PROJECT #: SC3096
LOCATION #: 1
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	7:15 AM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	7:30 AM	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	7:45 AM	1	7	4	5	0	10	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	30
	8:00 AM	4	0	2	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	9
	8:15 AM	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	8:30 AM	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:45 AM	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	TOTAL AM	6	15	10	16	0	11	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	62
PM	04:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:15 PM	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:00 PM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	5:15 PM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:30 PM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	5:45 PM	1	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	TOTAL PM	3	3	6	7	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	20

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:15 AM	1	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	7:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:45 AM	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL AM	5	1	1	6	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
PM	04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	4:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:00 PM	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	TOTAL PM	4	2	2	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	11

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Oct 6, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Garfield and Madison
EAST & WEST: Paularino

PROJECT #: SC3096
LOCATION #: 1
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	7:15 AM	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	7:30 AM	1	4	1	2	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	12
	7:45 AM	2	5	3	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
	8:00 AM	2	2	1	2	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	10
	8:15 AM	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	8:30 AM	1	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	8:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	TOTAL AM	7	17	9	13	0	9	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	57
PM	04:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:30 PM	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	4:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:15 PM	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	TOTAL PM	3	2	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:30 AM	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	7:45 AM	0	2	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	8:00 AM	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL AM	3	3	2	3	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
PM	04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:45 PM	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	5:00 PM	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:15 PM	1	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	5:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL PM	5	3	3	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Sat, Oct 2, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Garfield and Madison
EAST & WEST: Paularino

PROJECT #: SC3096
LOCATION #: 1
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
MD	11:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
	11:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	11:30 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 PM	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	12:15 PM	0	0	1	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	1	1	2	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	TOTAL MD	2	1	6	3	0	0	1	2	0	3	0	0	0	0	1	0	0	0	0	0	0	0	19

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
MD	11:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	11:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:45 AM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	12:00 PM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	12:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	TOTAL MD	2	1	1	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Oct 5, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Jeffrey and Century
EAST & WEST: Baker

PROJECT #: SC3096
LOCATION #: 2
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
	8:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:15 AM	0	3	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5
	8:30 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	TOTAL AM	2	4	2	2	0	0	2	2	0	0	0	0	0	0	1	0	1	0	0	0	0	0	16
PM	04:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:00 PM	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	5
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5
	5:45 PM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	TOTAL PM	2	2	3	1	0	0	0	4	0	0	0	0	0	0	0	2	0	1	0	0	0	0	15

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:15 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:30 AM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
	TOTAL AM	3	1	1	1	0	0	3	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	12
PM	04:00 PM	0	1	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:00 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL PM	0	3	2	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Oct 6, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Jeffrey and Century
EAST & WEST: Baker

PROJECT #: SC3096
LOCATION #: 2
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:15 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:30 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:45 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
	8:00 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:15 AM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:30 AM	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:45 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	TOTAL AM	2	2	3	3	0	0	3	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	17
PM	04:00 PM	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:45 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	TOTAL PM	0	2	3	1	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:15 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:00 AM	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	TOTAL AM	2	0	1	0	0	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
PM	04:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:30 PM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	4:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:00 PM	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:15 PM	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:45 PM	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	TOTAL PM	5	4	2	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Sat, Oct 2, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Jeffrey and Century
EAST & WEST: Baker

PROJECT #: SC3096
LOCATION #: 2
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
MD	11:00 AM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	11:15 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	11:30 AM	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5
	11:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	4
	TOTAL MD	0	4	0	1	0	1	2	4	0	1	0	0	0	0	0	2	0	0	0	0	0	0	15

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
MD	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:15 AM	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	11:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	11:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	12:00 PM	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	12:15 PM	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	12:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	TOTAL MD	4	4	0	0	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Oct 5, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Maple and Miner
EAST & WEST: Wilson

PROJECT #: SC3096
LOCATION #: 3
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	7:45 AM	1	2	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	8:00 AM	2	2	1	3	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	10
	8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:30 AM	1	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	8:45 AM	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	TOTAL AM	4	7	8	6	3	1	1	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0	34
PM	04:00 PM	1	0	1	0	0	11	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	15
	4:15 PM	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4
	4:30 PM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
	4:45 PM	0	0	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4
	5:00 PM	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	7
	5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:30 PM	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4
	5:45 PM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
	TOTAL PM	2	2	5	6	2	11	1	4	0	1	1	0	0	0	0	2	1	2	0	0	0	1	41

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:15 AM	0	0	1	0	1	2	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7
	7:30 AM	0	5	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	7:45 AM	1	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	8:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:15 AM	3	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	6
	8:30 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:45 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	TOTAL AM	5	10	3	3	1	3	4	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	32
PM	04:00 PM	1	1	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	4:15 PM	1	0	0	0	1	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	4:30 PM	0	1	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	6
	4:45 PM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:15 PM	2	3	0	1	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	9
	5:30 PM	2	3	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	7
	5:45 PM	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	TOTAL PM	8	8	0	3	1	1	9	4	2	0	0	0	0	0	2	1	0	1	0	0	0	0	40

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Oct 6, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Maple and Miner
EAST & WEST: Wilson

PROJECT #: SC3096
LOCATION #: 3
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:45 AM	3	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	8:00 AM	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:15 AM	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4
	8:30 AM	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	5
	8:45 AM	1	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6
	TOTAL AM	8	1	3	5	6	1	1	1	0	0	0	0	0	0	0	0	1	0	0	1	1	0	29
PM	04:00 PM	2	2	2	0	1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	4:15 PM	1	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	6
	4:30 PM	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	6
	4:45 PM	2	1	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	5:00 PM	0	3	0	0	0	0	1	1	0	0	0	0	1	0	0	0	1	1	0	0	0	0	8
	5:15 PM	0	2	0	1	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	6
	5:30 PM	0	0	0	0	0	0	0	2	0	0	0	1	0	1	0	1	0	0	0	0	0	0	5
	5:45 PM	1	1	1	2	2	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	TOTAL PM	7	11	5	4	4	6	4	9	1	0	0	1	1	2	0	1	2	2	0	0	0	0	60

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	2	0	1	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	7:15 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:45 AM	0	1	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	8:00 AM	1	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	8:15 AM	1	2	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	8:30 AM	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	8:45 AM	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	TOTAL AM	7	9	6	6	0	1	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
PM	04:00 PM	1	2	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	4:15 PM	1	2	0	1	1	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	9
	4:30 PM	1	3	0	2	0	3	1	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	14
	4:45 PM	3	1	2	0	0	0	2	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	11
	5:00 PM	2	0	1	1	0	1	3	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	12
	5:15 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	4
	5:30 PM	0	2	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	5:45 PM	3	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	6
	TOTAL PM	11	10	5	6	1	5	10	6	2	2	2	1	0	0	1	1	1	2	0	0	0	0	66

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:			
Sat, Oct 2, 21	LOCATION:	Costa Mesa	PROJECT #: SC3096
	NORTH & SOUTH:	Maple and Miner	LOCATION #: 3
	EAST & WEST:	Wilson	CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
MD	11:00 AM	1	1	2	1	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	9
	11:15 AM	0	0	2	2	0	0	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	9
	11:30 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	11:45 AM	0	0	0	2	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
	12:00 PM	2	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	12:15 PM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4
	12:30 PM	1	0	0	2	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5
	12:45 PM	2	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	1	7
	TOTAL MD	7	4	6	8	0	0	2	8	1	5	0	0	0	0	1	2	1	0	0	0	1	1	47

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
MD	11:00 AM	1	0	1	4	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	8
	11:15 AM	0	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	11:30 AM	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4
	11:45 AM	2	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	6
	12:00 PM	2	2	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	12:15 PM	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5
	12:30 PM	1	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	6
	12:45 PM	1	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	6
	TOTAL MD	8	3	7	10	1	0	5	4	1	0	0	0	0	0	1	1	2	4	0	0	0	0	47

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Oct 19, 21

LOCATION: Costa Mesa
NORTH & SOUTH: College and Fordham
EAST & WEST: Wilson

PROJECT #: SC3096
LOCATION #: 4
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	7:15 AM	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL AM	3	1	5	2	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	15
PM	04:00 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	4:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:30 PM	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	4:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:15 PM	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	5:30 PM	1	1	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	6
	5:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	TOTAL PM	3	2	5	4	0	0	2	5	0	0	0	0	0	0	0	0	0	1	0	0	0	0	22

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:15 AM	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	7:30 AM	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	7:45 AM	1	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	8:00 AM	2	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	8
	8:15 AM	1	0	0	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	8:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL AM	7	10	3	7	0	0	3	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	32
PM	04:00 PM	2	1	2	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	4:15 PM	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	4:30 PM	3	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	4:45 PM	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	5:00 PM	2	2	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	7
	5:15 PM	1	0	1	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	5:30 PM	2	4	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	5:45 PM	2	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	TOTAL PM	15	8	12	7	0	0	4	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	52

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Oct 20, 21

LOCATION: Costa Mesa
NORTH & SOUTH: College and Fordham
EAST & WEST: Wilson

PROJECT #: SC3096
LOCATION #: 4
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	7:30 AM	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	7:45 AM	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:00 AM	0	1	1	1	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	8:15 AM	1	3	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	8:30 AM	2	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	TOTAL AM	7	9	4	4	1	0	0	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	31
PM	04:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	4:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:45 PM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
	5:30 PM	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	5:45 PM	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
	TOTAL PM	1	3	3	1	0	0	4	2	1	1	0	0	0	0	0	0	1	0	0	0	0	0	17

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:15 AM	3	2	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	7:30 AM	0	2	2	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:00 AM	2	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	8:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:30 AM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:45 AM	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	TOTAL AM	6	7	4	6	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
PM	04:00 PM	1	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	4:15 PM	0	2	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	6
	4:30 PM	3	1	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	4:45 PM	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	5:00 PM	2	1	2	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	5:15 PM	2	2	2	3	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	5:30 PM	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	5:45 PM	3	0	5	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	TOTAL PM	16	7	16	10	1	2	6	2	0	0	1	0	0	0	0	0	0	1	0	0	0	0	62

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Sat, Oct 23, 21

LOCATION: Costa Mesa
NORTH & SOUTH: College and Fordham
EAST & WEST: Wilson

PROJECT #: SC3096
LOCATION #: 4
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
MD	11:00 AM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	11:15 AM	1	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:45 AM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	12:00 PM	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	12:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
	12:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	12:45 PM	1	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	TOTAL MD	3	5	0	6	3	0	1	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	21

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
MD	11:00 AM	1	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	11:15 AM	1	3	2	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	9
	11:30 AM	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	11:45 AM	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	12:00 PM	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	12:15 PM	1	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	12:30 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	12:45 PM	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	TOTAL MD	6	9	8	7	1	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	35

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Oct 5, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Placentia
EAST & WEST: Wilson and Congress

PROJECT #: SC3096
LOCATION #: 5
CONTROL: NO CONTROL

EAST SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	
AM	7:00 AM	2	5	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	7:15 AM	2	4	2	1	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	7:30 AM	12	4	5	2	0	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
	7:45 AM	3	2	5	1	5	0	2	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	21
	8:00 AM	0	1	6	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
	8:15 AM	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4
	8:30 AM	2	1	0	2	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	7
	8:45 AM	1	0	3	3	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	10
	TOTAL AM	22	18	22	13	12	2	13	3	0	0	0	0	0	0	2	0	4	0	0	0	0	0	111
PM	04:00 PM	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	4:15 PM	1	3	0	2	0	1	2	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	11
	4:30 PM	1	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	1	7
	4:45 PM	1	3	1	2	0	5	2	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	17
	5:00 PM	3	0	2	0	5	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	12
	5:15 PM	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4
	5:30 PM	1	0	0	2	0	1	1	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	9
	5:45 PM	0	0	1	0	0	3	4	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	10
	TOTAL PM	9	8	6	6	5	10	13	3	0	2	1	1	0	0	0	1	3	5	0	0	0	1	74

WEST SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	
AM	7:00 AM	0	2	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	7:15 AM	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	7:30 AM	8	0	9	0	1	0	2	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	25
	7:45 AM	2	1	7	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
	8:00 AM	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	6
	8:15 AM	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	8:30 AM	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	8:45 AM	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
	TOTAL AM	11	5	21	5	8	0	5	5	0	1	0	0	0	0	0	0	6	0	0	0	0	0	67
PM	04:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
	4:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
	4:30 PM	0	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	4:45 PM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:15 PM	0	1	1	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	5:30 PM	1	1	1	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	5:45 PM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	TOTAL PM	1	4	6	5	0	0	1	10	0	0	0	0	0	0	0	0	1	1	0	0	0	0	29

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Oct 6, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Placentia
EAST & WEST: Wilson and Congress

PROJECT #: SC3096
LOCATION #: 5
CONTROL: NO CONTROL

EAST SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	
AM	7:00 AM	2	3	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	7:15 AM	3	4	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	7:30 AM	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	7:45 AM	1	1	1	0	2	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	8
	8:00 AM	5	1	7	3	8	3	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	29
	8:15 AM	11	0	9	1	4	0	5	0	0	0	3	0	0	0	0	0	2	0	1	0	0	0	36
	8:30 AM	3	1	3	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	8:45 AM	2	0	2	0	2	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	9
	TOTAL AM	29	10	26	7	16	5	11	2	0	0	3	0	0	0	3	1	3	0	1	0	0	0	117
PM	04:00 PM	1	1	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	4:15 PM	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	5
	4:30 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	4:45 PM	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
	5:00 PM	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	6
	5:15 PM	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5
	5:30 PM	1	1	1	0	1	1	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	8
	5:45 PM	1	2	1	3	0	2	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	12
	TOTAL PM	7	6	2	4	1	4	12	4	0	0	2	0	0	0	0	0	3	1	0	0	0	1	47

WEST SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	
AM	7:00 AM	0	1	0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	6
	7:15 AM	0	0	1	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	7:30 AM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	7:45 AM	1	0	3	0	4	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	10
	8:00 AM	3	1	4	5	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	18
	8:15 AM	2	0	3	1	2	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	10
	8:30 AM	0	0	0	0	0	0	1	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
	8:45 AM	1	1	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	TOTAL AM	7	3	14	8	12	0	5	9	0	1	0	0	0	0	0	0	2	2	0	0	0	0	63
PM	04:00 PM	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
	4:45 PM	1	1	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	5:00 PM	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4
	5:15 PM	0	0	1	1	0	1	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	6
	5:30 PM	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:45 PM	1	3	1	1	0	0	0	2	0	1	0	0	0	0	0	0	2	1	0	0	0	0	12
	TOTAL PM	2	7	3	4	7	1	0	5	1	2	0	0	0	0	0	0	2	3	0	0	0	0	37

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:			
Sat, Oct 2, 21	LOCATION:	Costa Mesa	PROJECT #: SC3096
	NORTH & SOUTH:	Placentia	LOCATION #: 5
	EAST & WEST:	Wilson and Congress	CONTROL: NO CONTROL

EAST SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	
MD	11:00 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	4
	11:15 AM	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	11:30 AM	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4
	11:45 AM	0	2	1	0	0	0	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	7
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	1	0	2	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	8
	12:45 PM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	4
	TOTAL MD	5	6	4	2	0	0	2	1	2	1	1	0	0	0	0	0	3	1	0	0	4	0	32

WEST SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	
MD	11:00 AM	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	11:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:45 AM	1	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	12:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
	12:15 PM	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
	12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	12:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	TOTAL MD	4	1	1	0	0	0	0	7	0	2	0	0	0	0	1	0	0	0	0	0	0	0	16

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Oct 5, 21

LOCATION: Costa Mesa
NORTH & SOUTH: San Michel and Maple
EAST & WEST: Victoria

PROJECT #: SC3096
LOCATION #: 6
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:15 AM	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	7:30 AM	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4
	7:45 AM	2	0	2	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	6
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	TOTAL AM	6	4	2	2	0	0	1	2	0	0	0	0	0	0	0	2	0	1	0	0	0	0	20
PM	04:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	4:45 PM	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:30 PM	2	1	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	5:45 PM	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	TOTAL PM	5	3	0	3	1	0	2	6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	21

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5
	7:15 AM	2	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	7:30 AM	1	1	1	2	0	0	1	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	9
	7:45 AM	1	0	1	0	1	0	2	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0	9
	8:00 AM	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	1	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	5
	8:45 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	TOTAL AM	5	7	2	6	6	1	5	2	0	1	0	1	0	0	5	0	1	0	0	0	0	0	42
PM	04:00 PM	1	2	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	4:15 PM	1	2	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	4:30 PM	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	4:45 PM	1	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	5:00 PM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:15 PM	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	5:30 PM	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:45 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	TOTAL PM	6	10	4	3	0	7	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Oct 6, 21

LOCATION: Costa Mesa
NORTH & SOUTH: San Michel and Maple
EAST & WEST: Victoria

PROJECT #: SC3096
LOCATION #: 6
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:45 AM	1	1	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5
	8:00 AM	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5
	8:15 AM	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	8:30 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL AM	2	7	4	2	0	0	1	2	0	0	0	0	0	0	1	2	0	0	0	0	0	0	21
PM	04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	4:15 PM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	4:30 PM	1	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	6
	4:45 PM	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	5:00 PM	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
	5:30 PM	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:45 PM	1	0	0	1	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	TOTAL PM	3	6	0	2	1	1	2	11	0	0	0	0	0	0	0	0	2	0	0	0	0	0	28

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4
	7:15 AM	0	0	1	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5
	7:30 AM	1	1	1	2	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	7
	7:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:00 AM	2	1	2	2	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	10
	8:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
	8:30 AM	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:45 AM	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5
	TOTAL AM	7	7	8	7	2	0	3	0	0	0	1	1	0	0	1	2	1	0	0	0	0	0	40
PM	04:00 PM	2	0	2	0	0	10	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	15
	4:15 PM	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	6
	4:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3
	4:45 PM	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	5:00 PM	1	2	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	10
	5:15 PM	3	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	8
	5:30 PM	2	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	5:45 PM	0	3	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	TOTAL PM	9	10	6	8	1	10	8	1	0	0	0	0	0	0	1	0	2	3	0	0	0	0	59

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Sat, Oct 2, 21

LOCATION: Costa Mesa
NORTH & SOUTH: San Michel and Maple
EAST & WEST: Victoria

PROJECT #: SC3096
LOCATION #: 6
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
MD	11:00 AM	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4
	11:15 AM	0	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0	1	0	0	0	0	7
	11:30 AM	0	0	0	0	0	0	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
	11:45 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	12:00 PM	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	12:15 PM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	12:30 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	12:45 PM	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	1	0	0	0	0	0	5
	TOTAL MD	2	0	0	0	0	0	4	20	0	3	0	0	0	0	0	1	1	1	0	0	0	0	32

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
MD	11:00 AM	1	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	11:15 AM	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	11:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	11:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	5
	12:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	12:15 PM	0	0	2	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5
	12:30 PM	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	5
	12:45 PM	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5
	TOTAL MD	4	2	2	3	0	0	6	3	1	1	0	0	0	0	1	3	1	2	0	1	0	0	30

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Oct 5, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Federal and Placentia
EAST & WEST: 19th

PROJECT #: SC3096
LOCATION #: 7
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:15 AM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:30 AM	5	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	7:45 AM	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	8
	8:00 AM	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	8:15 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:45 AM	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	TOTAL AM	15	12	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	32
PM	04:00 PM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	4:15 PM	0	1	1	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
	4:30 PM	1	1	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	4:45 PM	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:00 PM	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:15 PM	1	2	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	5:30 PM	3	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	7
	5:45 PM	1	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5
	TOTAL PM	9	8	5	4	0	0	3	5	2	2	0	0	0	0	1	1	0	0	0	0	0	0	40

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	7:15 AM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:30 AM	0	1	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	8:45 AM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	TOTAL AM	2	2	3	4	0	1	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18
PM	04:00 PM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	4:15 PM	1	0	2	4	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	10
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	5:00 PM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
	5:30 PM	0	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5
	5:45 PM	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	TOTAL PM	3	2	4	5	2	0	6	3	0	0	0	0	0	0	1	0	1	1	0	0	0	0	28

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Oct 6, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Federal and Placentia
EAST & WEST: 19th

PROJECT #: SC3096
LOCATION #: 7
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	7:30 AM	2	2	3	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	7:45 AM	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	8:00 AM	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	TOTAL AM	5	7	5	1	2	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24
PM	04:00 PM	3	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	4:15 PM	1	1	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	4:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:00 PM	1	1	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	5:15 PM	0	2	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	5:30 PM	2	5	2	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	5:45 PM	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	TOTAL PM	8	11	4	5	0	0	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:15 AM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:45 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3
	8:00 AM	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:30 AM	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	8:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
	TOTAL AM	3	4	3	0	0	0	3	1	1	0	0	0	0	0	0	0	1	0	0	1	0	0	17
PM	04:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:15 PM	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	4:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	4:45 PM	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:00 PM	0	1	2	1	0	0	3	0	0	0	1	0	0	0	1	0	0	2	0	0	0	0	11
	5:15 PM	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5
	5:30 PM	1	3	2	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	5:45 PM	0	1	0	1	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5
	TOTAL PM	4	5	4	8	1	2	6	3	0	0	1	0	0	0	1	1	1	2	0	0	0	0	39

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:			
Sat, Oct 2, 21	LOCATION:	Costa Mesa	PROJECT #: SC3096
	NORTH & SOUTH:	Federal and Placentia	LOCATION #: 7
	EAST & WEST:	19th	CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
MD	11:00 AM	0	1	0	0	0	0	0	4	0	2	0	0	0	0	0	0	0	1	0	0	0	0	8
	11:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	11:30 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	11:45 AM	1	0	0	1	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	12:00 PM	0	0	0	0	0	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	12:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
	12:30 PM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	12:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	5
	TOTAL MD	2	1	2	1	0	0	3	13	1	3	0	0	0	0	0	0	1	2	0	0	0	0	29

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
MD	11:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
	11:15 AM	0	0	0	1	0	0	2	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	7
	11:30 AM	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	11:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
	12:00 PM	1	0	0	0	0	0	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5
	12:15 PM	2	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	12:30 PM	0	3	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	12:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	TOTAL MD	5	5	2	3	0	0	9	4	0	0	0	0	0	0	2	1	0	2	0	0	0	0	33

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Oct 5, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Park and Harbor
EAST & WEST: 19th

PROJECT #: SC3096
LOCATION #: 8
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:15 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:30 AM	0	1	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	1	2	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	8:15 AM	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	8:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	TOTAL AM	2	6	0	4	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
PM	04:00 PM	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	4:15 PM	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	4:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:45 PM	2	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	5:00 PM	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	5:15 PM	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:30 PM	3	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	8
	5:45 PM	2	0	1	3	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	TOTAL PM	8	9	2	5	0	0	5	6	0	0	0	0	0	0	0	0	0	1	0	0	0	0	36

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	7:15 AM	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	7:30 AM	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	7:45 AM	6	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	8:00 AM	0	1	1	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	8:15 AM	2	4	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	8:30 AM	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	8:45 AM	0	4	2	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	TOTAL AM	16	13	8	6	0	0	7	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	53
PM	04:00 PM	3	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	4:15 PM	2	3	0	2	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	4:30 PM	0	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5
	4:45 PM	1	2	1	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	5:00 PM	2	0	4	1	0	0	1	2	1	1	2	2	0	0	0	0	0	0	0	0	0	0	16
	5:15 PM	4	3	1	3	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	14
	5:30 PM	0	5	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	5:45 PM	5	5	1	2	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
	TOTAL PM	17	22	9	14	0	0	10	10	1	1	2	2	0	0	0	0	2	0	0	0	0	0	90

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Oct 6, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Park and Harbor
EAST & WEST: 19th

PROJECT #: SC3096
LOCATION #: 8
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
	7:15 AM	3	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	7:30 AM	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	7:45 AM	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	8:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	TOTAL AM	8	4	4	1	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	20
PM	04:00 PM	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	4:15 PM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	4:30 PM	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL PM	3	3	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	11

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	7:15 AM	4	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	7:30 AM	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	7:45 AM	0	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	8:00 AM	3	1	2	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	9
	8:15 AM	3	4	2	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
	8:30 AM	4	3	3	4	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	20
	8:45 AM	2	4	5	11	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	23
	TOTAL AM	21	16	17	20	0	0	10	1	0	0	0	0	0	0	2	0	0	1	0	0	0	0	88
PM	04:00 PM	0	1	2	3	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	4:15 PM	4	3	5	4	0	0	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	20
	4:30 PM	4	6	2	3	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
	4:45 PM	1	1	0	2	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	5:00 PM	1	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	5:15 PM	2	3	2	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	5:30 PM	3	2	2	1	0	0	2	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	13
	5:45 PM	2	4	1	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	TOTAL PM	17	20	15	18	0	0	11	11	0	1	1	1	0	0	0	0	0	1	0	0	0	0	96

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Sat, Oct 2, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Park and Harbor
EAST & WEST: 19th

PROJECT #: SC3096
LOCATION #: 8
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
MD	11:00 AM	1	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	11:15 AM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
	11:30 AM	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	11:45 AM	1	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	12:00 PM	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	12:15 PM	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	12:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	12:45 PM	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	TOTAL MD	12	5	7	2	0	0	1	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	31

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
MD	11:00 AM	4	2	6	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
	11:15 AM	3	1	3	4	1	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	15
	11:30 AM	5	6	2	2	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	19
	11:45 AM	4	1	2	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	9
	12:00 PM	3	1	2	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	12:15 PM	3	3	2	2	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
	12:30 PM	4	6	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
	12:45 PM	1	3	3	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	TOTAL MD	27	23	21	13	1	1	10	6	0	0	0	0	0	0	1	1	2	0	0	0	0	0	106

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Oct 5, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Harbor
EAST & WEST: 19th and Newport

PROJECT #: SC3096
LOCATION #: 9
CONTROL: NO CONTROL

EAST SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	
AM	7:00 AM	1	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:45 AM	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:00 AM	0	1	0	1	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	8:15 AM	2	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	TOTAL AM	7	4	3	4	0	0	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24
PM	04:00 PM	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5
	4:15 PM	0	2	0	3	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	4:30 PM	1	3	2	1	1	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	11
	4:45 PM	1	1	5	4	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	14
	5:00 PM	3	4	1	1	1	1	0	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0	19
	5:15 PM	2	2	6	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
	5:30 PM	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:45 PM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	TOTAL PM	9	14	14	18	2	3	2	6	2	2	1	1	0	0	0	0	2	1	0	0	0	0	77

WEST SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	8:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:15 AM	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	TOTAL AM	1	0	0	2	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	11
PM	04:00 PM	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
	4:45 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:00 PM	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:15 PM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:30 PM	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:45 PM	2	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	TOTAL PM	3	7	3	1	0	0	3	4	0	1	0	0	0	0	0	0	0	1	0	1	0	0	24

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Oct 6, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Harbor
EAST & WEST: 19th and Newport

PROJECT #: SC3096
LOCATION #: 9
CONTROL: NO CONTROL

EAST SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	
AM	7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:15 AM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	7:30 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:45 AM	2	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	8:00 AM	1	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	8:15 AM	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:30 AM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	TOTAL AM	6	6	2	1	0	0	2	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	23
PM	04:00 PM	2	2	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	4:15 PM	3	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	4:30 PM	1	1	1	2	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	4:45 PM	4	7	1	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
	5:00 PM	1	1	0	4	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	5:15 PM	2	1	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	5:30 PM	1	3	1	3	0	1	0	1	0	0	0	0	0	0	2	1	0	1	0	0	0	0	14
	5:45 PM	3	6	3	3	0	0	1	0	1	0	0	0	0	0	0	0	1	2	0	0	0	0	20
	TOTAL PM	17	22	7	19	1	1	12	7	1	0	0	0	0	0	2	1	1	3	0	0	0	0	94

WEST SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:45 AM	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:15 AM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:30 AM	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:45 AM	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4
	TOTAL AM	1	6	1	1	0	0	0	8	0	0	0	0	0	0	0	0	0	1	0	0	0	0	18
PM	04:00 PM	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:30 PM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
	4:45 PM	3	0	6	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	12
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
	5:15 PM	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	5:30 PM	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:45 PM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	TOTAL PM	7	6	7	2	0	0	2	4	0	0	0	0	0	0	0	0	2	0	1	0	0	0	31

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:			
Sat, Oct 2, 21	LOCATION:	Costa Mesa	PROJECT #: SC3096
	NORTH & SOUTH:	Harbor	LOCATION #: 9
	EAST & WEST:	19th and Newport	CONTROL: NO CONTROL

EAST SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	
MD	11:00 AM	0	2	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	11:15 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	11:30 AM	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	11:45 AM	3	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	12:00 PM	1	2	2	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	12:15 PM	1	2	0	3	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	12:30 PM	2	2	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	12:45 PM	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	TOTAL MD	14	11	6	10	0	1	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	51

WEST SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	
MD	11:00 AM	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:30 AM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	11:45 AM	2	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	12:30 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	12:45 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	TOTAL MD	4	5	2	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Oct 5, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Orange and Westminster
EAST & WEST: 17th

PROJECT #: SC3096
LOCATION #: 10
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	7:15 AM	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	7:30 AM	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4
	7:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
	8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	TOTAL AM	4	3	1	0	0	0	2	2	1	0	0	0	0	0	0	0	1	0	1	0	0	0	15
PM	04:00 PM	1	1	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
	4:15 PM	1	1	1	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	4:30 PM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3
	4:45 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:00 PM	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	5:15 PM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:45 PM	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	TOTAL PM	5	8	3	5	0	1	1	3	0	2	0	0	0	0	0	0	0	1	0	0	0	0	29

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:45 AM	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL AM	1	1	2	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8
PM	04:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:00 PM	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:15 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	TOTAL PM	5	2	0	1	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Oct 6, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Orange and Westminster
EAST & WEST: 17th

PROJECT #: SC3096
LOCATION #: 10
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	7:45 AM	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	8:00 AM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:15 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	TOTAL AM	3	4	1	0	0	0	5	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	15
PM	04:00 PM	3	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	4:15 PM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5
	4:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3
	4:45 PM	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	5:00 PM	1	1	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	5:15 PM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:45 PM	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	TOTAL PM	9	5	7	4	0	0	3	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	32

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	TOTAL AM	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	5
PM	04:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3
	4:15 PM	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:45 PM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	TOTAL PM	2	3	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	10

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Sat, Oct 2, 21

LOCATION: Costa Mesa
NORTH & SOUTH: Orange and Westminster
EAST & WEST: 17th

PROJECT #: SC3096
LOCATION #: 10
CONTROL: NO CONTROL

NORTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
MD	11:00 AM	1	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	11:15 AM	2	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	11:30 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	11:45 AM	1	0	2	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	12:00 PM	1	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	12:15 PM	1	1	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
	12:30 PM	2	0	0	0	0	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	12:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
	TOTAL MD	9	8	6	4	0	0	3	13	0	2	0	0	0	0	0	0	0	1	0	0	0	0	46

SOUTH SIDE

		PEDS						BYCICLIST						WHEELCHAIR		STROLLERS		OTHER WHEELED DEVICE						TOTAL
		Male		Female		Child		Male		Female		Child						Male		Female		Child		
		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
MD	11:00 AM	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	11:15 AM	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	11:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	11:45 AM	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL MD	4	2	3	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15