

Memorandum

To: County of San Luis Obispo	Date: August 8, 2018
Attn: Dave Flynn	Project: Avila Beach Circulation Study
From: Rosanna Southern, E.I.T.	
Re: Impact of Special Events & TDM Recommendations	Job No.: 11151147
CC: Martin Inouye, Todd Tregenza AICP	File No.: C1917MEM008.DOCX

Introduction

The County of San Luis Obispo has contracted Omni-Means/GHD to analyze the impact of events at the Avila Beach Golf Resort and provide recommendations for travel demand management (TDM) measures related to large events at the golf course. As understood, the events at the golf course are not only ones that are related to golfing and weddings, but other larger events including concerts, car shows, festivals, and food related events. These events are frequent, particularly through the summer months and on weekends. The significance of increased traffic due to special events at the golf course is determined based on the estimated attendance at special events, the traffic count data from the permanent count station on Avila Beach Drive (located west of San Luis Bay Drive), and intersection multimodal (vehicle, pedestrian, and bicycle) peak hour traffic counts within the Avila area.

This memorandum will discuss the following:

- Background Traffic Volumes
- Special Events & Traffic Trends
- Impact of Special Events
- How can the County best manage events to minimize impacts for future growth?
- Emergency response considerations
- Avila downtown parking study
- Recommendations for Travel Demand Management (TDM) measures

The basis for this memorandum is Goal 2 and associated Objective 1, which pertain to special events, from the Avila Valley Circulation Study, updated in 2009, and is provided below.

“Goal 2: To ensure that special events in the Avila Valley provide adequate access management.”

“Objective 1” Obtain relevant information about past and scheduled future events and, upon consultation with pertinent entities, formulate any necessary recommendations for reduced impacts.”

Background Traffic Volumes

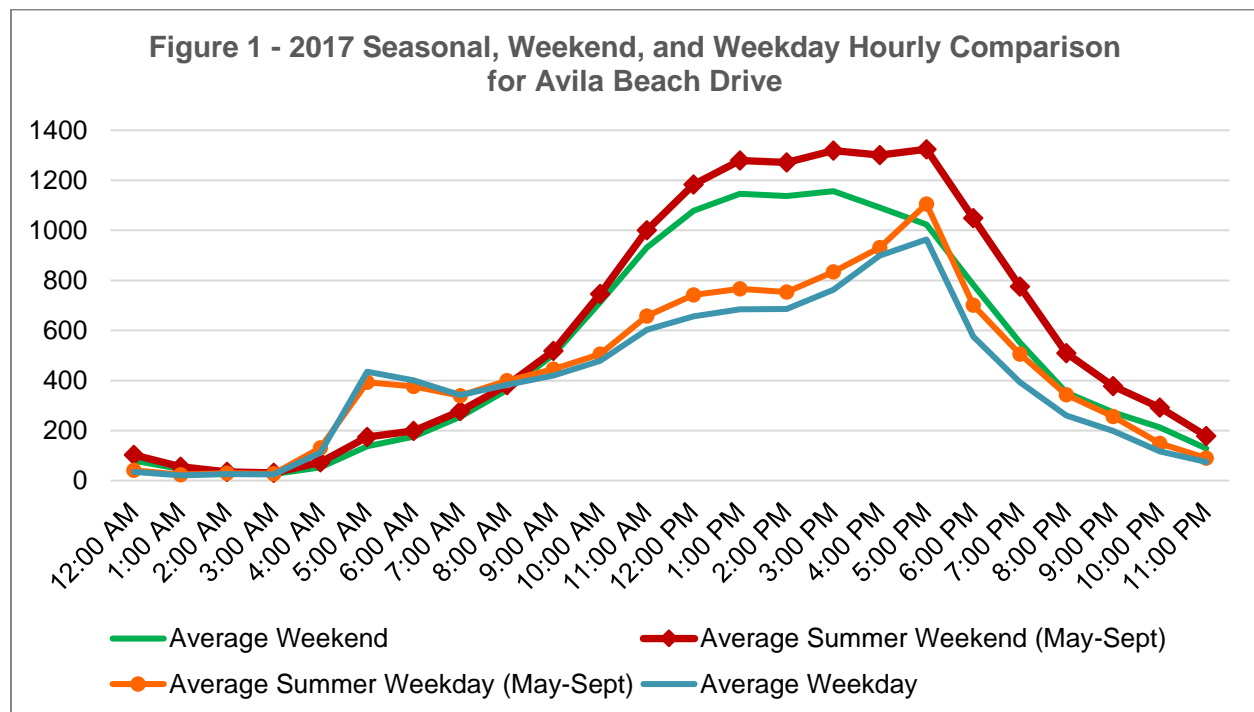
Omni-Means/GHD conducted peak hour intersection and daily roadway traffic counts in Avila in September 2014 and August 2016. Since the permanent count station was installed on Avila Beach Drive in January 2015, traffic volumes have become available on an hourly basis for 2015, 2016 and 2017. This data has been recorded, compared, and analyzed, specifically in the

“Avila Beach Drive Capacity Metric & LOS Policy Evaluation” memorandum dated June 13, 2018.

Although traffic volumes inevitably vary on an annual, monthly, and weekly basis due to a wide variety of local, regional, and national factors, some specific factors that have been found to particularly influence travel demand in Avila include:

- Diablo Canyon Power Plant and other weekday commuter traffic
- Seasonal recreation and beach traffic during the summer, on weekends, and holidays
- Special event traffic throughout the year (festivals and concerts)
- Port San Luis Pier, Farmers Market, and other local/regional commercial uses
- Prevailing weather and beach conditions

These elements all measurably affect the travel demand in Avila, particularly when two or more elements coincide, such as a summer holiday weekend concert, for example (Memorial Day Jam). Based on the permanent count station data, the peak summer tends to occur between May and September. Weekend traffic throughout the year, especially during the summer, is mainly contributed by recreational, beachgoer, and tourist travel, and on average, generates a longer travel demand peak throughout mid-day and into the evening. Figure 1 shows the average weekday, average weekend, summer weekday, and summer weekend hourly traffic volumes on Avila Beach Drive over the course of the day, based on traffic volumes in 2017. Based on the hourly data, the PM peak hour regularly experiences the highest amount of traffic, but the start and duration of that peak differs by day of the week.



Special Events & Traffic Trends

In November 2017, Kirk Consulting provided a listing of on-going entertainment activities, including estimated attendance, which occurred at the Avila Beach Golf Resort since 2007. This listing, as well as available event listings on the Golf Resort’s website and Port San Luis Pier’s website, was used to identify which days special events occurred in Avila and how the traffic volumes were affected. For 2016 and 2017, events occurred May through November, with



concert attendance ranging between 2,000 and 5,000, and festival attendance ranging between 1,000 and 3,500. Table 1 presents the listing of special events for 2017. Similar events were experienced throughout 2016.

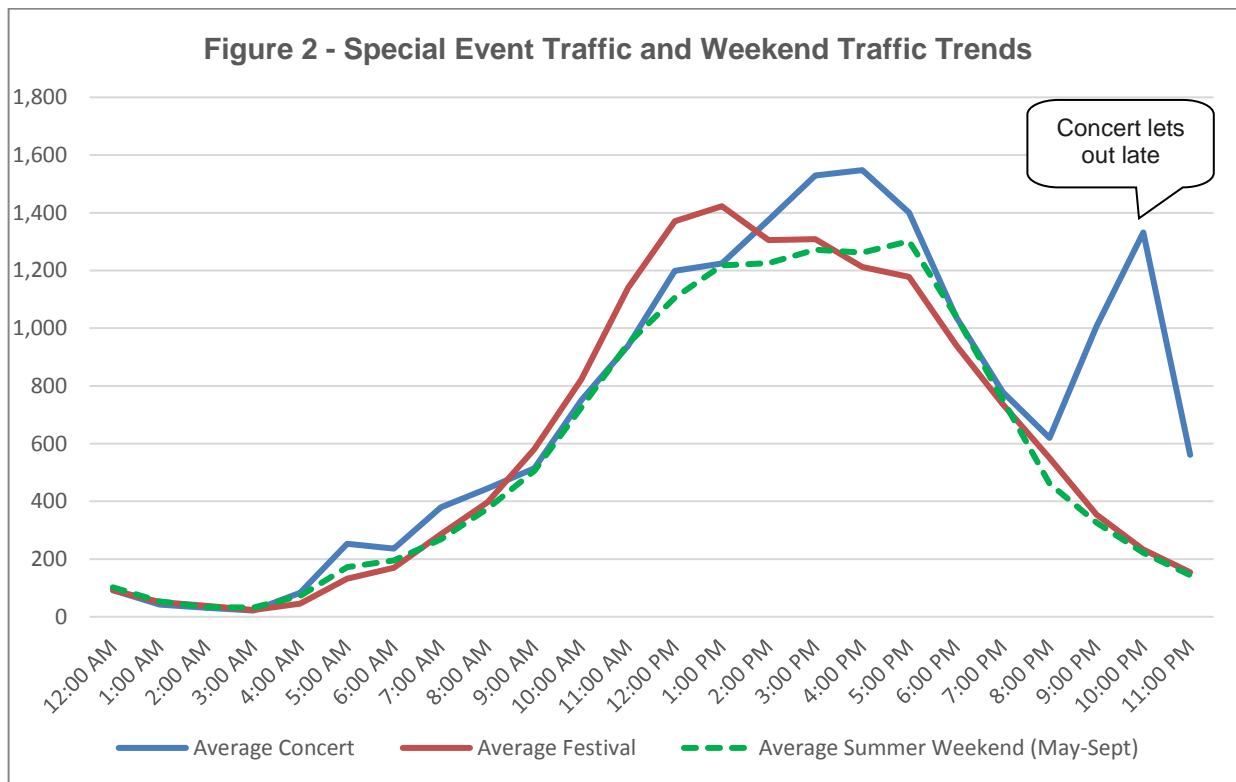
TABLE 1: CALENDAR OF SPECIAL EVENTS FOR 2017 AND ESTIMATED ATTENDANCE

Date	Event	Time	Attendance
Saturday, May 27, 2017	Tequila Festival	12:00 p.m. – 5:00 p.m.	3500
Sunday, May 28, 2017	Blues Festival	12:00 p.m.	2700
Monday, May 29, 2017	Memorial Day Jam	1:30 p.m.	1700
Saturday, June 10, 2017	Concert	6:00 p.m.	1700
Saturday, June 17, 2017	Concert	4:30 p.m.	5000
Saturday, June 24, 2017	Mac & Cheese Festival	2:00 – 6:00 p.m.	2000
Friday, June 30, 2017	Movie night	7:00 p.m.	
Friday, July 07, 2017	Concert	6:00 p.m.	2500
Saturday, July 08, 2017	Oyster Festival	12:00 – 8:00 p.m.	2000
Sunday, July 09, 2017	Yoga & Art Festival	12:00 – 5:00 p.m.	1000
Sunday, July 23, 2017	Brunch on Wheels	10:00 a.m. – 3:00 p.m.	
Sunday, August 06, 2017	Concert	4:00 p.m.	4500
Friday, August 18, 2017	Concert	6:00 p.m.	3000
Sunday, August 20, 2017	Brunch on Wheels	10:00 a.m. – 3:00 p.m.	
Friday, August 25, 2017	Concert	6:00 p.m.	2000
Sunday, September 10, 2017	Wine, Women & Shoes	2:00 – 6:00 p.m.	1500
Saturday, September 16, 2017	Oktoberfest	1:00 p.m. – 8:00 p.m.	1000
Sunday, September 17, 2017	Brunch on wheels	10:00 a.m. – 3:00 p.m.	
Saturday, October 07, 2017	Bubblyfest	11:00 a.m. – 5:00 p.m.	1000
Saturday, October 28, 2017	Autumn Jam Concert	12:00 p.m. – 5:00 p.m.	1500
Saturday, November 04, 2017	SLO Vintner's harvest benefit	10:00 a.m. – 5:00 p.m.	2000

Saturday, November 11, 2017	Beach party concert	5:00 p.m.	3000
Friday, November 17, 2017	Concert	5:00 p.m.	5000

The majority of events, especially larger events like concerts and festivals, occurred on the weekends at the Golf Resort, with parking available on the golf course via 1st Street/Avila Beach Drive. In 2017, the highest daily traffic volumes on Avila Beach Drive reached 20,980 vehicles per day (vpd) on Saturday, June 17 during which a large concert (5,000 attendance) was held. The impact of events however, is subject to many variables including time of day, month, beach and weather conditions, and the potential overlap of beachgoers, and eventgoers. For 2017, the average summer weekend traffic volumes, without events, were 13,811 vpd, and the average summer weekday traffic volumes without events were 10,545 vpd. Based on the traffic data for 2017, during the summer, average concert days experienced 16,843 vpd and average festival days experienced 15,405 vpd. Therefore, during the summer, on average, concert days were 22% higher, and festival days were 12% higher, than average summer weekend volumes without events. Figure 2 presents a comparison of hourly volumes for the average concert, festival, and summer weekend during the day.

The concerts tended to occur during the evening, and ending around 10:00 p.m., resulting in a mix of beachgoer and concertgoer traffic mid-day, and a “spike” of outbound volumes when the concert is over. The festivals tended to have a similar peak trend as the average weekends, because the festivals occurred during mid-day, with the highest volumes experienced during the middle of the day through the afternoon. The average daily volumes on Avila Beach Drive (west of San Luis Bay Drive) for concert days were 28% higher than the average weekend daily traffic volumes (12,247 vpd). The average daily volumes on Avila Beach Drive for festival days were 15% higher than the average weekend daily traffic.



Special Event Traffic Impacts

Figure 3 presents the weekend traffic volumes (Friday – Sunday) during the summer (May-September), and which days experienced a special event during 2017. Fridays were included in this comparison because many events occurred either Friday, Saturday, or Sunday. As shown, there were six concerts and seven festivals during the 22 weekends. Days in which a large (high attendance) or medium-sized concert occurred showed much higher volumes compared to non-event days. Similarly, festivals tended to have higher volumes, but there were also a couple outlier non-event days during the summer.

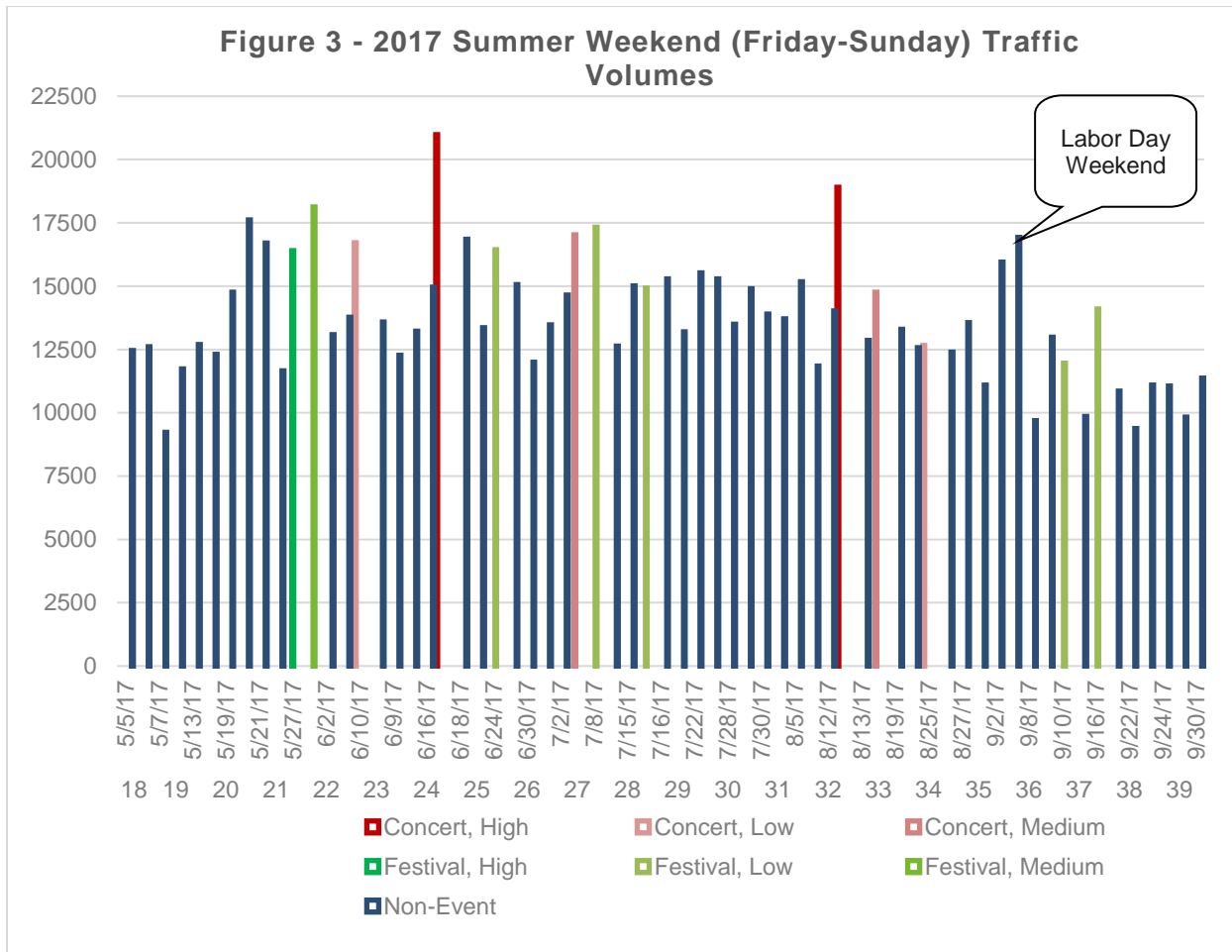
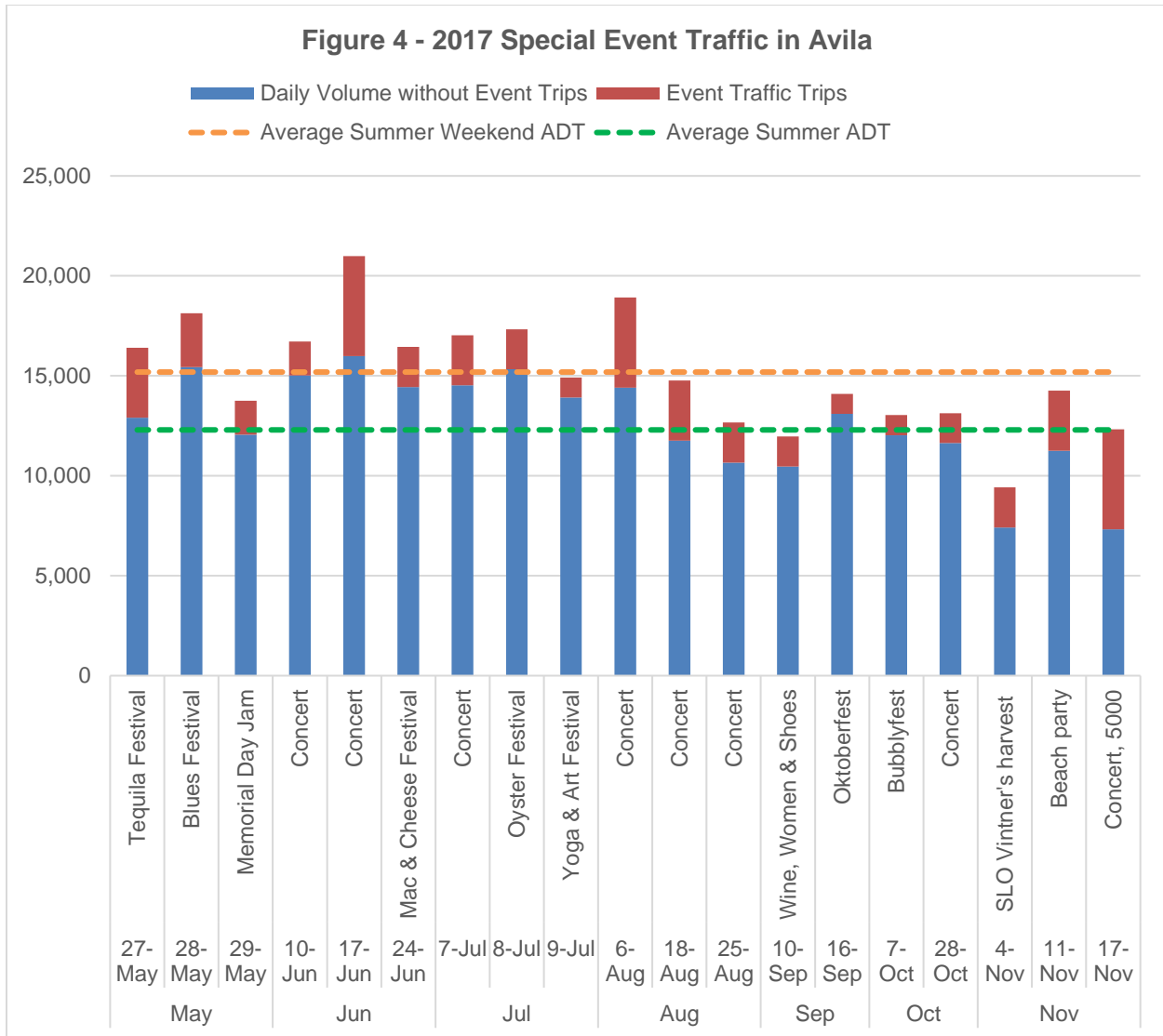


Figure 4 presents the daily volume and estimated event demand on specific event days in 2017. Event traffic trips were estimated assuming 2 trips per attendee, and 2 persons per vehicle on average. As shown in Figure 4, highly attended events in the peak summer season added trips that resulted in daily volumes well over 15,000 vehicles, resulting in over-capacity conditions in Avila. However, larger events in the off-peak season (November) resulted in traffic volumes similar to average summer daily traffic volumes.





On an hourly basis, special event traffic creates significant congestion inbound when the event begins, and outbound after the event is over. Throughout the day, and especially on holidays, this effect is compounded as attendees arrive to an already congested system. Once parking has reached saturation in Avila, vehicles circling downtown looking for parking exacerbate circulation issues and congestion significantly. Excessive delay and queuing at the Avila Beach Drive/San Luis Bay Drive intersection is of heightened concern due to it being the only ingress/egress point into and out of Avila.

Although parking for events at the golf resort, specifically *Concerts at the Cove*, is provided on-site with ticket purchase, parking is still an on-going issue within the downtown and port areas during the peak summer months. Based on the Parking Management Plan conducted in May 2013, the total number of parking available in Avila is 1,771, with nearly 50% of the supply located downtown either in the parking lot or on-street. Beachgoers and tourists will fill up the paid parking lots and on-street parking, and park along Avila Beach Drive in both designated and non-designated areas along the shoulder. Currently, the County is undergoing a Parking Study for Avila Beach. It is likely that some of the event attendees will arrive early the day-of or the day before the event to also tour Avila Beach. This will add to the parking demand. The



recommendations for TDM measures for special events should also incorporate the findings of the Parking Study.

However, as thousands of people travel along Avila Beach Drive during the peak hours in the summer on an event day, and although there is parking capacity for the event attendees, travel conditions along Avila Beach Drive can become gridlocked. For inbound traffic, the intersection of Avila Beach Drive and San Luis Bay Drive forms a bottleneck and long queues and delays are experienced. Then, in Avila and to Port San Luis, parking, access, and circulation becomes an issue due to the high demand. The travel demand along Avila Beach Drive reaches capacity during the special events in the summer. Travel demand management measures need to be implemented in order for Avila to continue to have events, for new development to prosper, and to maintain circulation between Avila and US 101.

Access/Emergency Management

The management of travel demand in Avila presents a unique situation, as Avila Beach Drive is the only public road that provides access to Avila, west of San Luis Bay Drive. San Luis Bay Drive and Avila Beach Drive then provide access to US 101 and frontage roads (Ontario Road and Shell Beach Drive). Given the area's ingress and egress limitations, emergency access, response time, and reliability is also of importance. The nearest fire department is located at Sparrow Street and San Luis Bay Drive. Congestion due to the culmination of special events and beachgoer traffic could potentially be a safety issue in evacuation or emergency situations. However, access to the golf resort and beach could also be attained via private roads, including Blue Heron Drive and Lupine Canyon Road.

Alternative Modes of Transportation

Currently, there is access to Avila by bicycle via the Bob Jones Trail. The trail runs along the north side of San Luis Obispo Creek and the trailhead is at the Park & Ride Lot on Ontario Road. The non-profit organization, Bike SLO County has formed a partnership with Avila Beach Concerts at the Cove, and previously provided a free Bike Valet. Based on their website¹, they have a capacity of 200 bicycles per event.

Additionally, the Avila-Pismo Trolley operates Friday, Saturday, and Sunday, April through September, with extended hours for the Friday Avila Farmers Market and during the summer. The trolley also operates during the major holidays of Memorial Day, Independence Day, and Labor Day. The trolley has stops at Port San Luis, San Luis Bay Inn (northbound) Avila Beach Drive/1st Street, Cave Landing (Southbound), Avila Bay Athletic Club, Bob Jones Trailhead at Ontario Road, Avila Hot Springs Resort, and multiple stops in Pismo Beach, with the route ending at the Pismo Premium Outlets.

¹ <http://bikeslocounty.org/programs/valet/>

Recommended TDM Measures for Events

Whether the special event is large or small, traffic related to festivals and concerts affect the travel conditions along Avila Beach Drive. Added congestion will occur when thousands of visitors come in along Avila Beach Drive and San Luis Bay Drive within a short period of time, since all traffic is filtered through a single intersection (San Luis Bay Drive at Avila Beach Drive).

From a local mobility perspective, travel time reliability can be a significant quality of life concern. Travel time reliability is the consistency or dependability of travel time as measured by the extent of delays during peak conditions. If delay along a route is consistent from day-to-day, then the travel time would be consistent and the route would have a reasonably good travel time reliability. Sporadic gridlock conditions during events reflect poor travel time reliability, as residents and business owners are not able to anticipate and plan for the time it takes to get in or out of town. In this sense, anticipated congestion is preferred to unanticipated congestion, as it can be managed by planning trips accordingly.

Beyond travel time reliability, gridlocked conditions are particularly problematic for emergency response times, if emergency vehicles are unable to get to and/or from Avila from regional connections. With a single traffic lane in and out of time, extended queues either inbound to or outbound from Avila could prevent ambulances, fire trucks, or other emergency personnel from reaching their destinations in a timely manner.

Because special events are primary causes of sporadic gridlock conditions, queuing spillbacks, and increased travel times, travel demand and parking management measures need to be considered to dampen these effects. Below are recommendations for travel demand management measures for special events in Avila.

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Recommendation #1: Advance charge for parking spaces on the golf course for special events including concerts and festivals (i.e. \$10 for pre-paid parking pass), while also providing a free shuttle from remote (located outside of Avila, i.e. Cal Poly Campus) or satellite parking lots (see recommendation #5). Parking in the remote or satellite lots should be incentivized via a food or drink coupon at the event (i.e. \$10 vendor coupon). This will help incentivize incoming cars to use the remote and/or satellite parking. Additional amenities could also be provided at the remote and satellite parking lots, such food trucks, etc. A threshold could be established for on-site parking at events based on anticipated attendance and non-event travel demand on Avila Beach Drive. Refer to Table 2 (next page) for recommended special event parking management implementation by event size.

Recommendation #2: Limit the number of events with attendance greater than 1,000 people during the peak summer season. Rescheduling large special events to occur during the off-peak season (non-summer) will transfer portions of the highest travel demand to times of the year when tourist/beachgoer traffic is much lower. Utilize the permanent count station to monitor and determine when the peak and off-peak seasons occur.

Recommendation #3: Enforce existing permit regulations and requirements for major event hosts such as the Avila Beach Golf Resort. Commercial outdoor entertainment activities are subject to the permit requirements and standards of [Chapter 6.56](#) of the County Code (temporary commercial outdoor entertainment licenses). Additionally, “Outdoor temporary events are to be provided a minimum of two unobstructed access points, each a minimum of eighteen feet wide, from the event site to a publicly maintained road.” Currently, event access for events at the golf course is provided only at Avila Beach Drive and Frist Street. Event

permits should also take into consideration limiting the event capacity at certain times of the year, i.e. peak season, and implementing travel demand management measures such as a shuttle bus plan and/or restricting parking on-site.

Recommendation #4: Install temporary or permanent changeable message signs on Avila Beach Drive and San Luis Bay Drive prior to their intersection. The changeable message signs will aim to direct people to utilize the satellite parking lots when there is a special event and/or when public parking is at capacity. The permanent count station on Avila Beach Drive could be used to estimate how many vehicles are currently located Downtown for the parking demand compared to the parking supply. Parking inventory and parking demand management strategies are anticipated to be included in the findings of the ongoing Avila Parking Study.

Recommendation #5: Provide satellite parking lots with shuttle buses for special events. The satellite parking lots should be located close to US 101, on Ontario Road at the current Park & Ride Lot, and/or at the southwest corner of Avila Beach Drive at Shell Beach Drive. The Park & Ride Lot on Ontario will need to be expanded to accommodate increased parking demand.

These parking lots could be made more attractive by adding retail opportunities such as food trucks/stands, subsidized parking costs, bike rentals, etc.

Recommendation #6: Provide a secondary access to the Golf Course parking for special events at or in between San Miguel Street and Cave Landing Road. Access at San Miguel Street would require the installation of a traffic signal due to the sight-distance of the horizontal curve located on Avila Beach Drive approaching the intersection. Advancing the golf course access to be located before the downtown area could help alleviate some of the congestion occurring in downtown.

Recommendation #7: Install a Safety Shoulder OR a Reversible Lane along Avila Beach Drive. The Safety Shoulder is a part-time shoulder use for busses or shuttles **only** and emergency vehicles **only**. The Safety Shoulder would not be the size of a full lane but would need to accommodate shuttle busses and emergency response vehicles. The Reversible Lane would be managed based on directional travel demand. The reversible lane could be managed by removable barriers or overhead changeable signs. The Safety Shoulder and Reversible Lane would also have colored pavement, signing, and markings to differentiate the designated lane.

Table 2 presents the recommended special event parking management implementation by event size.

TABLE 2: RECOMMENDED SPECIAL EVENT PARKING MANAGEMENT BY EVENT SIZE

Event Size (Attendees)	Peak Season TDM	Off-Peak Season TDM
<500	On-Site Parking can accommodate	Public Parking can accommodate
500 – 999	Limit On-Site Parking & Shuttle Bus from remote/satellite lots	On-Site Parking can accommodate
1,000 – 2,000	Limit On-Site Parking & Shuttle Bus from remote/satellite lots & Special Event Signage	Limit On-Site Parking & Shuttle Bus from remote/satellite lots
>2,000	Limit On-Site Parking & Shuttle Bus from remote/satellite lots & Special Event Signage	Limit On-Site Parking & Shuttle Bus from remote/satellite lots



Table 3 presents a summary list of the recommendations, and the responsible party in terms of implementation and costs.

TABLE 3: RECOMMENDATIONS SUMMARY

#	Recommendation	Responsible Party
1	Advance charge for Parking & Free Shuttle w/coupon	Event Sponsor
2	Limit large events during peak season	County Measure
3	Enforce Temporary Commercial Outdoor Entertainment Licenses	Event Sponsor/ County Measure
4	Install temporary or permanent changeable message signs entering town	Event Sponsor/ County Measure
5	Provide satellite parking lots with shuttle buses for special events	County Measure (parking lot) / Event Sponsor (Shuttle)
6	Provide a secondary access to the Golf Course parking for special events	Event Sponsor
7	Install a Safety Shoulder OR a Reversible Lane along Avila Beach Drive.	County Measure