Appendix A: Parking Analysis

Appendix A

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MEMORANDUM

To: Dahlia Chazan

From: Jessica ter Schure and Francesca Napolitan

Date: November 22, 2010

Subject: Hillsdale Station Area Plan Parking Analysis

Introduction

This memorandum presents an assessment of the projected future commuter parking demand at the relocated Transit Center as part of the Hillsdale Station Area Plan. It also examines the parking demand generated by new development expected within the boundaries of the larger Hillsdale Station Area Plan and the potential parking impacts of new development on the surrounding neighborhoods.

This analysis is part of a study of the Hillsdale Station Area, which reflects the vision for the Station Area as a mixed-use, transit-oriented neighborhood, with new development featuring ground floor commercial uses and upper-level office and residential units. The Plan calls for an additional 751 residential units and an increase of approximately 10,000 sq. ft. in retail uses. There are no planned changes to the total office square footage. The SAP proposes to reduce restaurant space by approximately 9,000 sq. ft. and service commercial space by 50,000 sq. ft. The adjacent development at Bay Meadows Phase II will also support transit-oriented development (TOD) at the Hillsdale Station. The Hillsdale Station Area Plan (SAP) assumes the relocation of the Hillsdale Caltrain station with a new intermodal transit center and improved facilities for bicycles and pedestrians.

This memorandum is divided into three sections. The first section focuses specifically on the Transit Center and discusses the ridership projections for the station, the preferred and alternate programs for the Transit Center, commuter parking that will serve the relocated Caltrain station and associated development, the effects of parking pricing on commuter parking demand and mode split, and recommendations for bike parking at the station.

The second part of this memo looks at the proposed development program for the Station Area and describes the parking requirements. It then provides an analysis of the future parking supply which will be constructed to serve new residential and commercial development, recommended parking management and transportation demand management programs for new residential and non-residential developments, the components and impacts of the trip reduction program for new development, and the potential for shared parking between commuters and other uses.

The third part of this memo focuses on existing uses and parking in the surrounding neighborhoods and identifies strategies for managing parking spillover that may occur as the

result of new development, opportunities for shared parking between existing uses, and management of on-street parking along El Camino Real.

When developing parking management and policy recommendations for the Hillsdale SAP, both the Metropolitan Transportation Commission (MTC) Parking Toolbox and the City of San Mateo's Rail Corridor Transit-Oriented Development Plan ("Corridor Plan") were consulted to ensure that the recommendations made for the Hillsdale SAP are in line with the policies outlined in these documents. The MTC Parking Toolbox is described further below and relevant Rail Corridor Plan policies are identified throughout this memorandum.

MTC has developed a toolbox that provides parking strategies for supporting transit-oriented development and smart growth in the Bay Area. The report is structured such that strategies are organized by community type. Five community types are presented, of which the Hillsdale Station Area most closely fits into the Transit Neighborhood category. These categories are broad, so not all recommended strategies for the Transit Neighborhood are appropriate to the HSAP, and some called out for other community types may fit the Station Area. For this type of community, the MTC Toolbox recommends the following parking policies and strategies:

Figure 1 MTC Parking Strategies[1]

Transit/TOD Supportive Policies	Parking Requirements	Parking Pricing	Parking Management Strategies	Parking Districts	Parking Finance
Transit Incentive Programs Carsharing Transit Friendly Parking Design Transit Overlay Zones Walkability and Wayfinding	Reduced Parking Requirements TOD Friendly Parking Requirements Parking Maximums Shared Parking	On-street Parking Pricing Variable Rate Parking Pricing Coordinated Off-street and On-street Pricing Unbundled Parking Parking Cash-Out	Parking Payment Technology Parking Database Real-time Parking Information	Assessment Districts Revenue Districts Residential Permit Districts	In-Lieu Fees Risk Fund Parking Occupancy Tax Parking Tax by Space Tax Exemptions and Variable Rate Tax

Hillsdale Station Ridership and Parking Projections

In this section, we conduct two analyses of future ridership at the Hillsdale Station. The first uses adjustments to the VTA Travel Demand Model to predict future ridership based on development in the Station Area and expected increases in Caltrain service. The second uses a different model, the BART Parking Replacement Model, to examine the question of how sensitive ridership at the Hillsdale Station is to changes in the amount of parking for riders, as well as how that might be offset by TOD bringing new riders who can access the station by walking or cycling there.

[1] http://www.mtc.ca.gov/planning/smart_growth/parking_study.htm

New ridership expected at Hillsdale arises from both the residential and the commercial development within the Hillsdale SAP boundaries as well as Bay Meadows Phase II, where 1,066 residential units, 746,765 square feet of office/commercial space, 17,808 square feet of restaurant space, and 74,771 square feet of retail space are planned.

Nelson/Nygaard calculated future ridership for 2035 using VTA's Travel Demand Ridership Model and other adjustments.[2] For all of these reasons, ridership is projected to increase by 250% between 2009 and 2035 (Figure 2), from1,941 to 6,838 average weekday riders. . This projection is based on both the expected transit-oriented development as well as increased frequency of service projected when Caltrain completes its Caltrain 2025 program. This involves electrification of the Caltrain tracks, improving train controls, and operating a mix of trains and Electric Multiple Units, which operate without a locomotive. These measures will allow Caltrain to run additional trains throughout the day, including at peak hours. The number of trains is anticipated to increase from 98 to 114 per day by 2035, with an ultimate maximum capacity of 172 trains per day.

Figure 2 Projected Ridership

	2009	2015	2019	2025	2029	2035
Average Weekday Riders	1,941	3,071	3,824	4,954	5,708	6,838

Nelson\Nygaard used the BART Replacement Parking Model,[3] modified to fit Caltrain conditions, to calculate projected ridership impacts of new development and parking changes located nearby the Hillsdale station. The BART model was simplified by removing the fiscal analysis component of the model, since it is aimed at measuring project impacts on BART's fiscal health, and not a city's or other transit agency's fiscal health. In addition, the retention rate[4] for displaced parkers was adjusted downward to 17% to more accurately reflect the context surrounding this Caltrain station.

In order to establish parking demand, we examined how reductions in the parking supply would impact ridership projections. Two scenarios, the existing development plus Bay Meadows Phase II and the SAP plus Bay Meadows Phase II were evaluated using the modified BART model, assuming three levels of commuter parking reduction: 10%, 20% and 30%. These levels of parking reduction were selected for illustrative purposes as it has not yet been determined what the final commuter parking supply will be. It may remain essentially the same, be reduced at the outset of station relocation, or increase over time. In addition, given construction phasing it is likely that the number of available parking spaces will fluctuate as there may be a delay in the timing between when existing parking is removed and new parking is constructed. Thus by providing a range of reductions, the analysis shows how ridership could fluctuate with parking supply. For example, assuming the SAP land use program and Bay Meadows Phase II come to fruition, there would be a net increase in Caltrain ridership of 1,023 trips, even with a 30% reduction in parking supply (Figure 3).

[2] Average weekday boardings is estimated to be 5,946 in 2035 with a 6-peak-hour train schedule. This is adjusted by an additional 15% to account for the likely increase in ridership if Caltrain runs on a 10-peak-hour train schedule. This estimate was developed in cooperation with and approved by Caltrain staff in May, 2010.

[3] Replacement Parking for Joint Development: An Access Policy Methodology. Prepared by: Richard Willson, Ph.D. AICP. Prepared for: BART Departments of Planning and Real Estate. Date: April 18, 2005. Available at: http://www.bart.gov/docs/planning/BART%20Access%20Policy%20Methodology.pdf)

[4] The retention rate represents the number of displaced parkers who would continue to access the Hillsdale station but via another mode than driving and parking. In this analysis the retention rate is assumed to be 17 percent which means that 17% of the displaced parkers would continue to access the Hillsdale but now using a different mode. The remaining 83% of the displaced parkers would either access a different Caltrain station or would not take Caltrain at all.

Figure 3 Hillsdale Caltrain Ridership Impacts of TOD and Commuter Parking Reductions

Alternative	Parking Reduction Scenario	Amount of Parking Reduction	Additional TOD Development to Counteract Ridership Loss			Net Change in Ridership
			Residential Units	Office (SF)	Retail (SF)	
Existing + Bay Meadows II	A. 10%	50	1,066	746,765	92,579	785
	B. 20%	99	1,066	746,765	92,579	694
	C. 30%	149	1,066	746,765	92,579	604
SAP + Bay Meadows II	A. 10%	50	1,817	746,765	102,259	1,205
	B. 20%	99	1,817	746,765	102,259	1,114
	C. 30%	149	1,817	746,765	102,259	1,023

Source: Nelson\Nygaard

Note that this analysis represents net changes in ridership. Regardless of whether the projected ridership in 2055 is as projected in Figure 2, transit-supportive development and amount of parking will influence the number of riders. While reduced parking supply would deter some patrons from taking the train, other park and ride patrons will continue riding the train but accessing the station by other modes, such as walking, bicycling, taking transit/shuttle or kiss-and-ride. Additionally, given that the station will be directly adjacent to TOD, the increase in ridership generated by this development will likely not be impacted by a reduction in parking as most of those riders will not be accessing the station via car. This approach is consistent with the already high percentage of riders accessing the station through modes other than park-and-ride, as is further discussed below.

While it is highly unlikely that all commuter parking will be removed since it is an important access mode to the station, even with a total loss of parking the new development would still generate ridership to balance the loss in patrons who now park at the station.

Transit Center Parking

This section provides a description of the two potential locations for parking to serve the relocated Caltrain station, the effects of parking pricing on commuter parking demand and mode split for Caltrain riders accessing the station, and commuter bicycle parking recommendations.

Transit Center

In the Transit Center Program, a 636-space multi-story parking garage will be constructed along El Camino Real near 31st Avenue during the first phase of construction. In Phase 2, an approximately 500-space parking garage in Bay Meadows will be constructed (Figure 4). In the 31st Avenue Alternative Program (presented in Appendix B to the Plan), the parking garage located in Bay Meadows will be constructed in Phase 1 instead and in Phase 2 a 742-parking space multi-story garage will be built next to the Caltrain Station at 31st Avenue and El Camino Real (Figure 5).

Both Transit Center programs will also have a small surface parking lot near the station which will have space for kiss-and-ride parkers and buses. In the Transit Center Program, the surface lot will have 16 parking spaces and room for approximately eight kiss-and-ride vehicles to wait or drop off passengers. In the 31st Avenue Alternative Program, the surface lot will have 42 parking spaces and room for approximately six kiss-and-ride vehicles.

Figure 4 Caltrain Station Transit Center Program

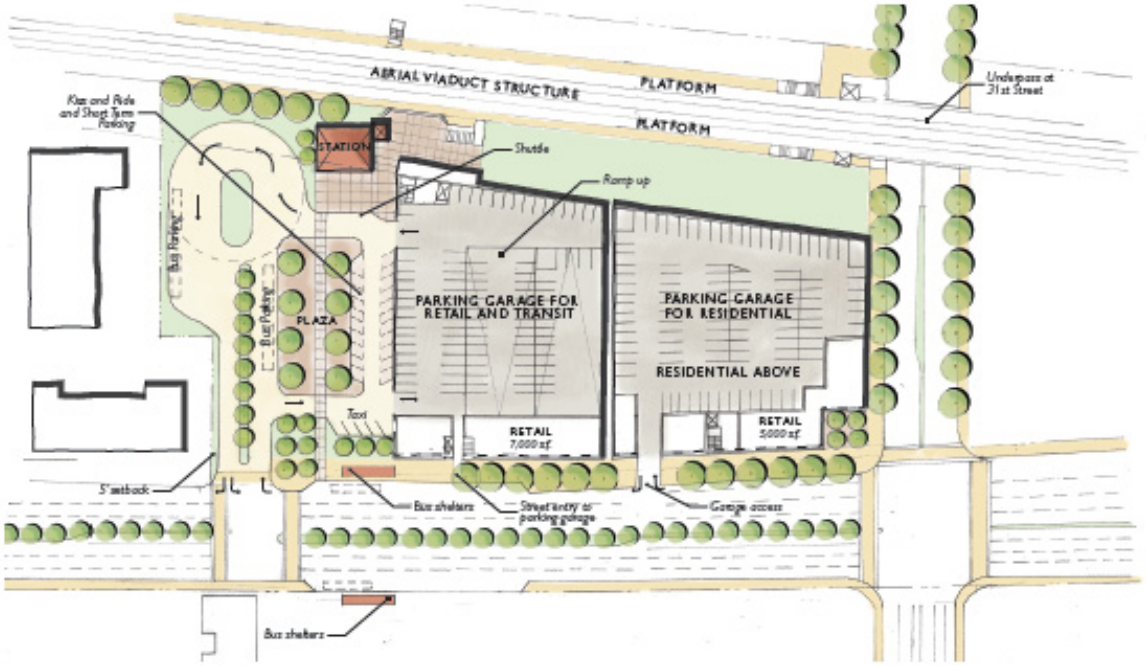
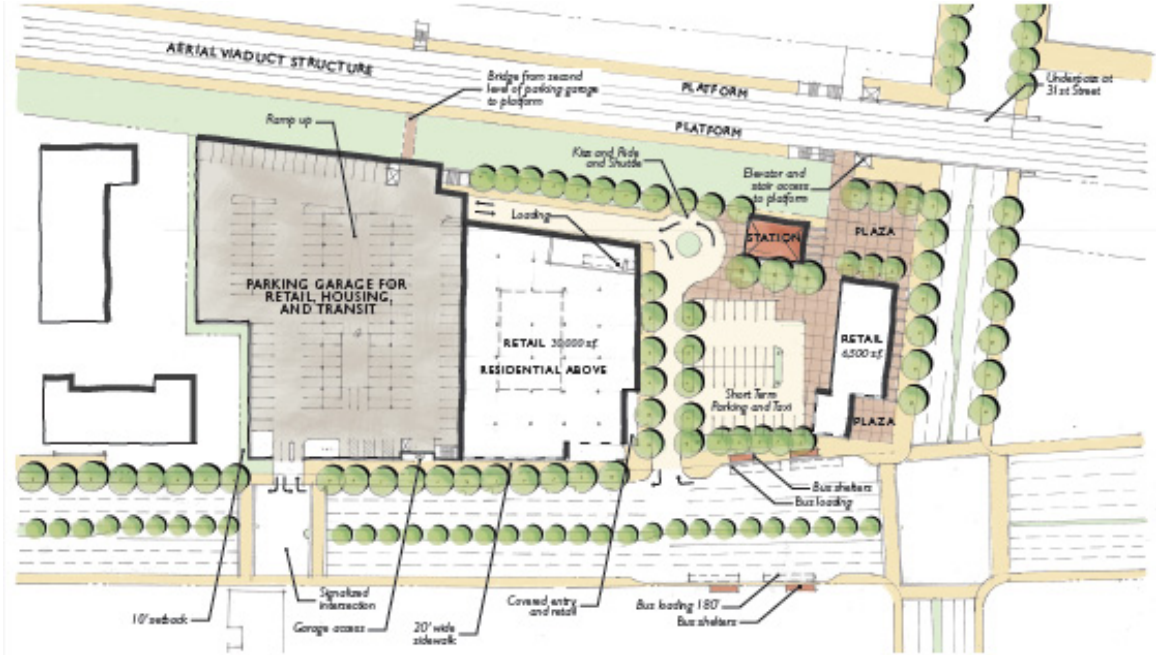


Figure 5 Caltrain Station 31st Avenue Alternative Program



In the Transit Center Program, the Caltrain Station parking lot and parking garage will be relocated to the site where the Borders bookstore is currently located. Elevators connecting to the train platform will be located at the station with a grade-separated bicycle and pedestrian crossing providing access to both sides of the train tracks. An additional grade-separated pedestrian crossing will be located at the 31st Avenue vehicle underpass. In this alternative, a pedestrian bridge connecting the Bay Meadows parking garage and the western side of the tracks will be constructed.

In the 31st Avenue Alternative Program, the relocated Caltrain Station, bus drop off area, kiss-and-ride area, and surface parking lot will be located at the corner of 31st Avenue and El Camino Real. Adjacent to the surface parking lot, where Borders is currently located, will be a multifamily housing development. The multi-story parking garage will be constructed on what is currently the Border's parking lot. With this configuration, the Bay Meadows parking structure will be located much closer to the Caltrain Station than in the Transit Center Program. A pedestrian plaza will be constructed on both sides of the train tracks at 31st Avenue which will also act as a grade-separated crossing point for pedestrians and cyclists. Ramps and elevators will connect the pedestrian plaza to the train platform. Additional access to the train platform will be provided at the parking structure via a pedestrian bridge.

In both Alternatives, a mixed-use development comprised of retail and housing will be built on the same site as the relocated Caltrain Station. In the Transit Center Program, 7,200 square feet of retail associated with the parking garage will be built with an estimated 14 parking spaces assigned. In addition, a mixed-use project comprised of 60 housing units and 11,441 square feet of retail will be built next to the parking garage at the corner of 31st Avenue and El Camino Real. Twenty two parking spaces will be constructed to serve the retail uses and 114 parking spaces will be constructed for the housing.

In the 31st Avenue Alternative Program, a mixed use development with 74 housing units and 30,000 square feet of retail will be built. A total of 214 parking spaces will be included, 140 of which will be for the housing units and 74 of which will serve the retail space. An additional 8,000 square feet of retail will be constructed along the Caltrain Station plaza.

Parking for retail and housing uses was determined using the following ratios:

- Housing: average ratio of 1.80 spaces per unit for housing (average rate for 1-, 2-, and 3-bedroom units combined)[5]
- Retail: City of San Mateo Downtown parking standard of 1.9 spaces per 1,000 square feet.

Figure 6 below summarizes the components of each of the two Caltrain Station Alternatives.

[5] This rate is currently a placeholder. Nelson\Nygaard recommends that the residential parking ratio for studios and 1BR-units is no more than 1 space per unit, plus an additional 0.15 spaces per unit for visitors. For 2- and 3-BR units, we recommend 1.5 spaces per unit, plus an additional 0.15 spaces per unit for visitors, with the half-space per unit distributed either through a waiting list or unbundling. In locations where on-street parking or adjacent available off-street parking could be used for visitor parking, we recommend that the City allows the inclusion of these off-site spaces.

Figure 6 Summary of Caltrain Station Alternatives

Land Use	Transit Center Program	31st Avenue Alternative Program
Caltrain Structured Parking		
Phase 1	636-space garage near 31st Ave. and El Camino Real	500-space garage at Bay Meadows
Phase 2	500-space garage at Bay Meadows	742-space garage at 31st Ave. and El Camino Real
Caltrain Surface Parking	16 spaces 8 kiss–and-ride spaces	42 spaces 6 kiss-and-ride spaces
Housing		
Number of Units	60 units	74 units
Parking Spaces	114 spaces	140 spaces
Retail		
Square Footage	7,300 sq. ft. in the garage and 11,400 sq. ft. in the mixed-use development	30,000 sq. ft. in the mixed use development 8,000 sq. ft. at Caltrain Station
Parking Spaces	22 spaces	74 spaces

Commuter Parking Pricing and Ridership

As ridership increases, and along with it demand for parking, a parking pricing is a tool that can be used to shift Caltrain commuters from driving to alternative modes and help Caltrain cover operating costs.

As shown earlier in Figure 2, average weekday boardings at Hillsdale Caltrain Station are projected to increase from an average of 1,941 weekday boardings in 2009 to 6,838 average weekday boardings in 2035. If the current parking ratio of 0.24 spaces per Hillsdale boarding (FY 2009 occupancy of 463 spaces with 1,941 boardings) were to be used, this would result in a parking demand of 1,418 spaces in 2035. This assumes that the parking fee would remain at $2 per day (as it was before August 31, 2009; the current rate is $3 per day, with a slightly lower parking demand) until 2035.

Since structured parking costs $25,000 or more to construct, providing 1,400 spaces would cost a minimum of $35,000,000. If funded by bonds, and including amortization over 30 years, operations and maintenance, each space would require a weekday parking fee of almost $10 (in 2009 dollars) to cover all costs. However, with a $10 daily parking fee, there would be a significant loss in riders, as well as in demand for parking. Research shows that the typical national parking elasticity rate is -0.3, which means that for every 100% increase in parking fee, there is a 30% reduction in parking demand. For the purposes of this analysis however, a parking elasticity of -0.22 was used as it is more reflective of the Bay Area context and is the rate which is utilized in the recently-developed BART Ridership Model.[6]

If Caltrain can secure capital funding for the construction of one or more new parking facility, the agency may still consider using demand based parking pricing to balance the demand with supply. Over the next ten years, this may drive up the daily parking fee from the current $3 towards $10. The remainder of this analysis is therefore based on the potential of utilizing a

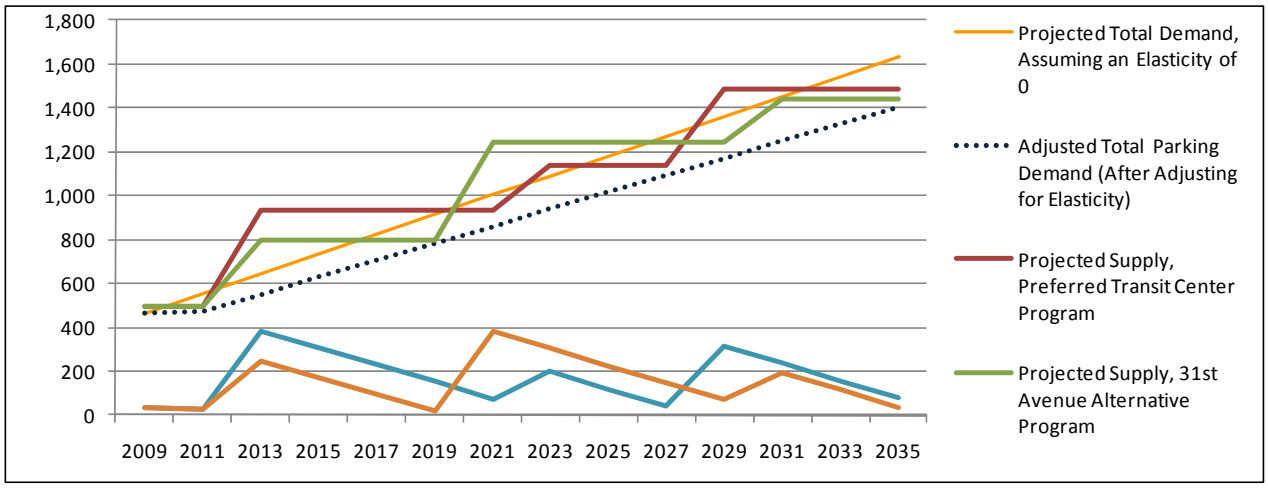
[6] This elasticity rate is a reflection of current data from the Bay Area; however, over time as traffic congestion and vehicle usage costs increase, which in turn may increase Caltrain ridership and thus demand for parking at the station, a different elasticity rate may be appropriate. For sake of simplicity and not knowing what this future rate may be, it is assumed that the parking elasticity rate is -0.22.

higher daily parking fee to control demand. Figures 7 to 9 show three different pricing strategies for the daily commuter parking fee, and the associated impact on required supply.

Maintain Current Daily Parking Price of $3

Figure 7 illustrates what would happen if the parking fee remains at $3 per day. Parking demand would grow fairly rapidly, and the first parking structure would be needed by 2013. Assuming that an additional 300 spaces in temporary surface lots could be secured for an extended period, by 2021/2023 the second parking structure would be needed (at that point replacing the 300 spaces in temporary surface parking). An additional 200 to 350 spaces would be needed in 2029/2031, requiring a total supply of more than 1,400 spaces.

Figure 7 Commuter Parking Fee Adjusted for Inflation Only



Increase Daily Parking Fee to $10

If the commuter parking fee is instead slowly increased to about $10 by 2035, as shown in Figure 8, the first parking structure along with 200-300 temporary surface parking spaces would be needed around 2013. The temporary parking would still need to be replaced by a 500-space structure by 2023, at which point the full supply would need to be more than 1,100 spaces (or more than 1,200 spaces in the 31st Avenue Alternative Program).

Figure 8 Daily Commuter Parking Fee Slowly Increasing to $10 ($2009)

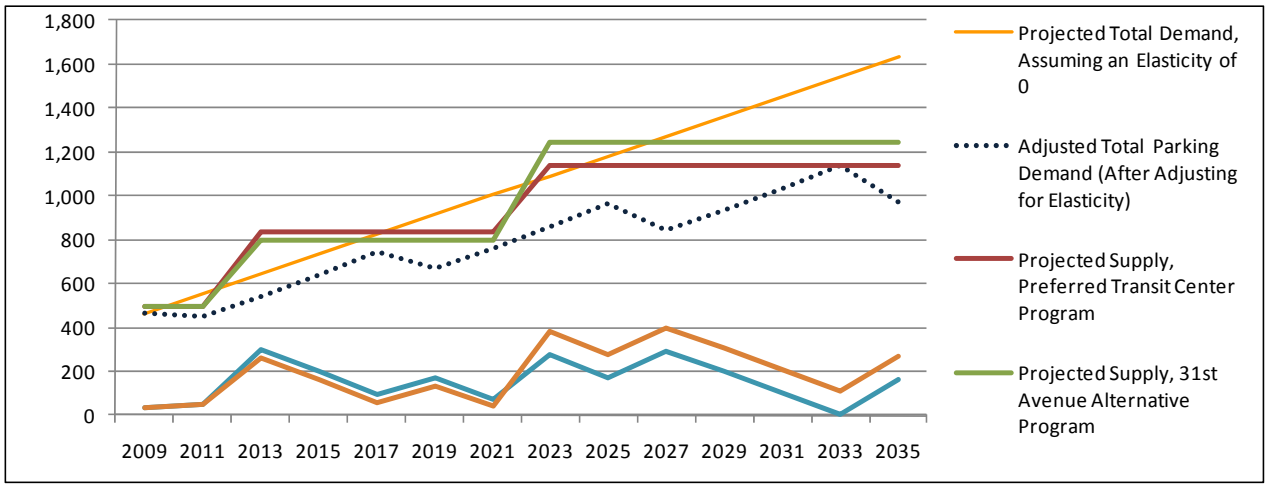
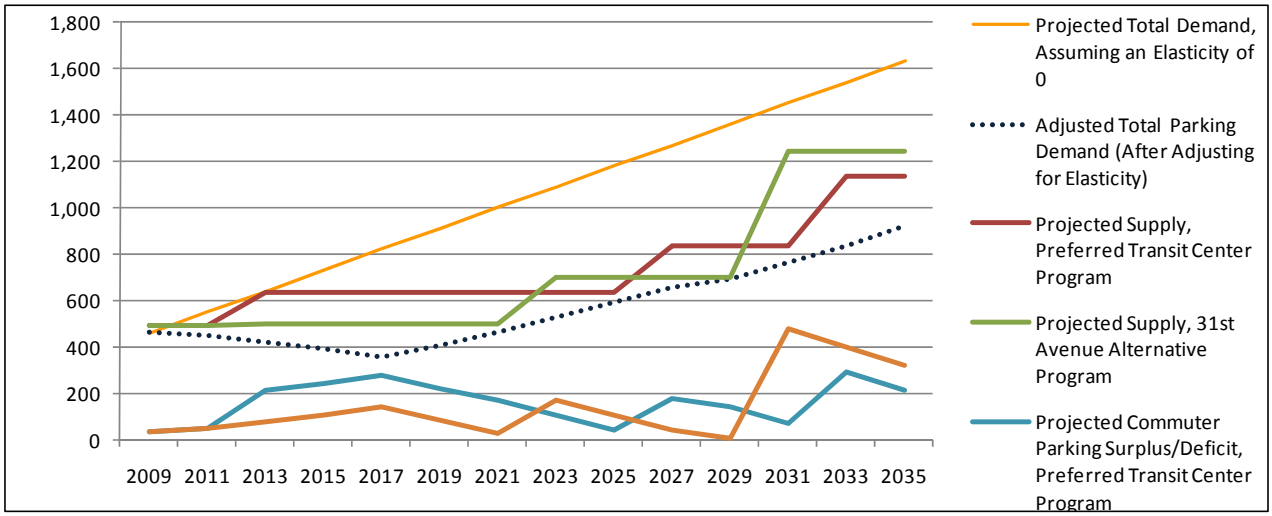


Figure 9 illustrates what would happen to parking demand if the daily parking fee is rapidly increased to $10 by 2017, from the current fee of $3 per day. The first parking garage would be needed in 2013. However, the second structure would not be needed until 2027 in the Transit Center Program. In the 31st Avenue Alternative Program, there is a need for a 200-space temporary surface lot. If this is possible, the second parking structure would not be needed until 2031. Total parking demand in year 2035 is around 920 spaces with the rapid increase in parking fee. Since this is a more phased approach, it gives stakeholders a long time to decide whether the second parking structure is really necessary based on updated ridership projections.

Figure 9 Daily Commuter Parking Fee Rapidly Increasing to $10 ($2009)



If the daily parking fee is instead increased to $10 by 2017, from the current fee of $3 per day, there would only be a demand for 392 spaces by 2015, with a total demand for 921 spaces in 2035. Instead of having to build two parking structures early on in the project, with this rapid fee approach (balancing parking demand and supply) a second parking structure may not be needed. Considering the natural shift in access modes due to all new proposed development in the SAP, as well as a chance of lower ridership than projected, this rapid increase in pricing may not even be necessary. The most important lesson from this exercise is to balance supply and demand by adjusting the daily parking fee. If there is additional fee revenue, it could be spent on other access improvements, further reducing the need for an automobile to access the station.

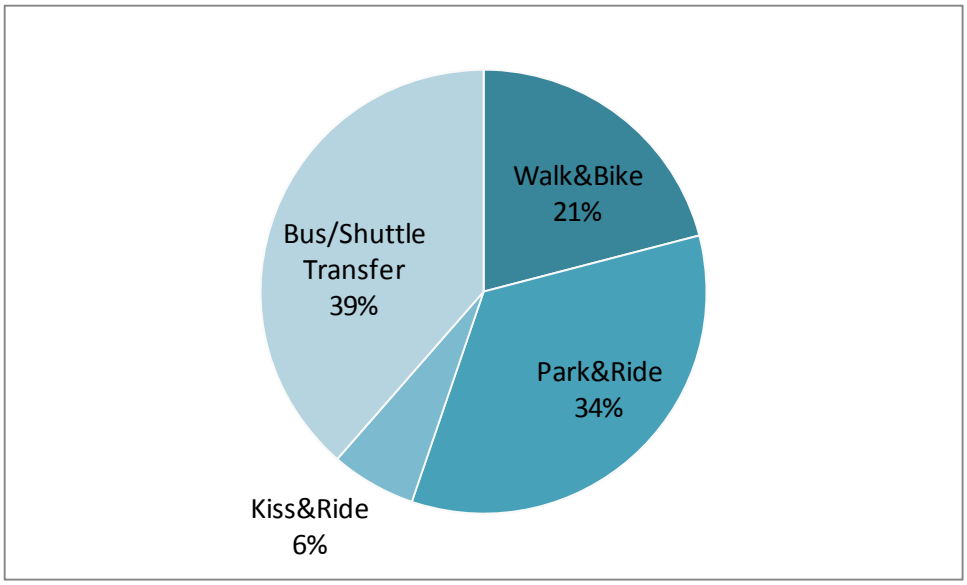
Mode Split

Over time, it is likely that the parking pricing scenarios presented above will change. However, with the implementation of Caltrain's Comprehensive Access Program[7], currently under development, the prioritization of access modes will be in the order of walking, transit, biking and auto. With the first two parking pricing scenarios (Figures 7 and 8), park-and-ride will still have a large impact on mode split. With the scenario presented in Figure 9, the focus would be on getting commuters to access the station by other modes than park-and-ride.

As shown in Figure 10, currently park-and-ride access to the station makes up 34% of the mode split, with bus/shuttle transfers comprising 39% of the mode split, walking/biking 21%, and kiss-and-ride 6%.

[7] http://www.caltrain.com/pdf/comprehensiveaccessprogram/DRAFT_Caltrain_Access_Policy_03-17-2010.pdf
http://www.caltrain.com/pdf/comprehensiveaccessprogram/Caltrain_Access_Program_Presenation_03-2010.pdf

Figure 10 Existing Hillsdale Caltrain Access Mode Split

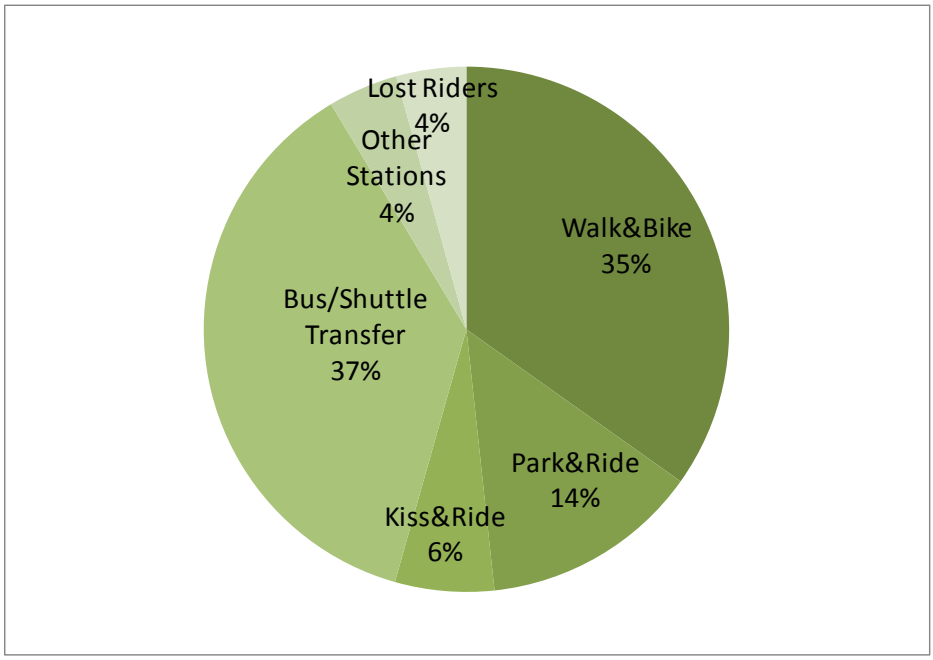


Source: Caltrain Access Survey 2006

In comparison as illustrated in Figure 11, there would be a loss in ridership of roughly 300 patrons (4% of 6,838) due to the increased parking fees. It is also estimated that an additional 300 patrons would likely drive to Belmont, San Mateo or other stations to find a cheaper parking space if the cost of parking at these stations remains the same as it is today. If the cost of parking at these stations is increased to be equivalent to the cost of parking at the Hillsdale station then there will likely be a much smaller shift to other nearby stations.

Overall, however, regardless of whether or not the cost of parking at nearby Caltrain stations is increased and despite the increase in parking prices at the Hillsdale station, with the increase in TOD around Hillsdale, the walk/bike share is projected to increase significantly from 21% to 35% of the mode share, with the number of commuters parking & riding decreasing to 14% compared to present day (34%).

Figure 11 2035 Mode Split with Rapidly Increasing Daily Commuter Parking Fee



Commuter Bicycle Parking

Caltrain has developed a Bicycle Access and Parking Plan, which provides policy and facilities recommendations to better serve bicycle commuters at Caltrain stations. In addition to general policy and design guidelines, the Bicycle Access and Parking Plan also provides information on existing conditions as well as specific access and parking recommendations for the 10 Caltrain stations with the highest bicycle use, one of which is the Hillsdale Station. Specific recommendations that were identified to address some of the current issues at the Hillsdale Station have been modified in here to fit the new station location:

- Initially, provide at least 35 electronic lockers, distributed if feasible evenly on both sides of the relocated station or near the station building. This may require collaboration with Bay Meadows II. Ensure monitoring of the lockers and add lockers as demand warrants more lockers. Consider using the revenue from increased daily parking fees to finance new lockers.
- Initially, provide 5 to 10 rack spaces on each side of the station or near the station building for patrons who do not need a locker.
- Consider installing channels on stairways for easier access to and from the platforms, if it is not feasible to provide access via ramps.

Station Area Plan Parking

This section provides an overview of the new development that will occur within the boundaries of the Station Area Plan, recommended parking requirements for new development, the potential parking supply for the SAP, the recommended trip reduction program for new development, and the potential for shared parking between various existing and proposed uses.

Development Program for the SAP

New office, residential, and commercial development will occur throughout the SAP area. Figure 12 presents the land use program for the SAP.

Figure 12 SAP Development Program

Land Use	Total Use (Units/KSG)	Net Change in Use (Units/KSG)
Residential (units)	819	+751
Office	101.61	0
Retail (General Commercial)	1,514.92	+9.68
Service Commercial	96.82	-49.87
Restaurant	2.60	-9.10

The SAP land use program will result in a net increase of 751 residential units and 9,677 square feet of general commercial space from existing development. There will be no change in the amount of office space. Restaurant space will decline by approximately 9,100 square feet from existing development and service commercial will decline by almost 50,000 square feet.

Parking Ratios

Since the SAP is within the City of San Mateo's Corridor Plan area, the City's standard parking requirements do not apply to those parcels between El Camino Real and the train tracks that are zoned TOD. These parcels are located between El Camino Real and the train tracks, from the existing station to just north of the train tracks. The City's current parking requirements for non-TOD parcels are shown in Figure 13.

Figure 13 City of San Mateo Minimum Parking Requirements

Land Use	Citywide
	Number of Spaces (Units/KSG.)[8]
Residential (units)	
Studio	1.5
1-bedroom	1.8
2-bedroom	2.0
3-bedroom	2.2
Office	2.98[9]
Retail	3.33[10]
Restaurant	20[11]

For the non TOD zoned parcels the SAP calls for the following minimum parking standards to be adopted (Figure 14). Given that the Hillsdale SAP is a mixed-use, transit orientated development, it is appropriate to have parking minimums which are lower than the Citywide parking minimums.

[8] These parking ratios include visitor parking.
[9] Parking ratio for office buildings with a total floor area of less than 100,000 square feet
[10] Parking ratio for stores 0-20,000 sq. ft. of gross floor area
[11] This ratio is based 1,000 sq. ft public service area. City code states that there shall be 1 stall for each 50 square feet of public service area up to 4,000 square feet and 1 stall for each 80 square feet of public service area over 4,000 square feet.

Figure 14 Recommended SAP Minimum Parking Requirements[12]

Land Use	Minimum Number of Spaces (Units/KSG.)[13]
Residential (units)	
Studio	1.0
1-bedroom	1.2
2-bedroom	1.5
3-bedroom	1.8
Office	2.2
Retail	2.5
Restaurant	4

Note: If a proposed use does not fit in one of the above categories, consult the citywide parking standards. Any reductions from citywide parking standards should be justified through the project's Trip Reduction and Parking Management Plan.

Projects in the TOD zoned districts do not have specific parking requirements according to Policy 7.22 of the Rail Corridor Plan, which states that specific parking minimum and maximum standards for a new development project will be established as part of the conditions of approval process. However, it is recommended that new development located in TOD zoned districts be subject to the minimum parking requirements for non TOD zoned parcels (Figure 14).

The Corridor Plan does, however, contain other parking management related requirements for new development in TOD zoned districts. According to Policy 7.19 of the Rail Corridor Plan, all development projects must complete a Trip Reduction and Parking Management Plan as part of the development application. Policy 7.19 states that the Parking Management Plan "would be tailored to reflect the location of the project, proximity and access to transit, walkability, proposed land uses, proposed phasing, if applicable, and other relevant factors." Thus the Parking Management Plan offers the developer an opportunity to document and justify the amount of parking they are proposing to provide.

Parking Supply and Demand

Using the recommended minimum parking ratios (Figure 14), Figure 15 shows the total number of parking spaces that will be required for the SAP at full build out, excluding the new development that will be built in the TOD districts.

Figure 15 Projected Parking Supply for SAP

Land Use	Total Use (Units/KSG)	SAP Parking Minimum Ratios (Units/KSG)	Minimum Required Number of Parking Spaces
Residential (units)[14]			
Studio	102	1.0	102

[12] It should be noted that the recommended minimum and maximum parking requirements fall within the range of rates identified in the MTC Parking Toolbox for the Transit Neighborhood Type. The range of ratios used in the Bay Meadows Phase II Parking Management Plan, April 2008, generally also falls within the range of ratios shown in the MTC Parking Toolbox.

[13] These parking ratios include visitor parking.

[14] The breakdown in residential units is 20% studio, 40% 1-bedroom, and 40% 2-bedroom. These ratios were used to be consistent with other analysis done as part of the SAP.

1-bedroom	202	1.2	242
2-bedroom	202	1.5	303
3-bedroom	0	1.8	0
Office	101,614.50	2.2	224
Retail	1,409,904.62	2.5	3,525
Restaurant	2,604.64	4	10
Total			**4,406**

Based on the land use program for the SAP, a total of 4,406 parking spaces would be required under the recommended minimum parking requirements.

In addition, if the non-TOD parking minimum and maximum requirements are applied to the land use program for the TOD zoned parcels, a total of 664 to 857 parking spaces that would be built (Figure 16).

Figure 16 Projected Parking Supply for TOD Districts

Land Use	Total Use (Units/KSG)	Parking Minimum Ratios (Unit/KSG)	Parking Maximum Ratios (Unit/KSG)	Minimum Required Number of Parking Spaces	Maximum Required Number of Parking Spaces
Residential (units)[15]	313				
Studio	63	1.0	1. 3	63	82
1-bedroom	125	1.2	1. 6	150	200
2-bedroom	125	1.5	1.8	188	225
3-bedroom	0	1.8	2. 0	0	0
Office	0	2.2	2.98	0	0
Retail	105,017	2.5	3.33	263	350
Restaurant	0		14	0	0
Total	105,017			**664**	**857**

However, given that Policy 7.19 of the Rail Corridor Plan stipulates that the parking supply for new development located in the TOD zoned districts will be determined through the required development of a Trip Reduction and Parking Management Plan as part of the development application, it is at this time impossible at this time to know what the final overall parking supply will be for the TOD zoned districts other than what is proposed for the Caltrain station and the adjacent retail and housing component.

Parking Management Strategies

As stated in Policy 7.19 of the Rail Corridor Plan each new development in the TOD zoned districts must complete a Trip Reduction and Parking Management Plan as part of the development application and all other projects outside the TOD zoned district, but within the corridor are encouraged to submit plans. It is recommended that this requirement be expanded to cover all new development in the Hillsdale SAP.

[15] [15] The breakdown in residential units is 20% studio, 40% 1-bedroom, and 40% 2-bedroom. These ratios were used to be consistent with other analysis done as part of the SAP

Although this policy encourages flexibility by not prescribing the contents of these plans, it is recommended that the following parking management strategies be adopted by all new development to help ensure the success of complementary Transportation Demand Management (TDM) measures and to support the vehicle trip reduction goals of the Rail Corridor Plan.

Employer Parking Measures

- Establish preferential parking spaces for carpools and vanpools
- Reserve garage spaces for future carshare vehicles
- Explore employee parking pricing feasibility, and implement if deemed feasible
- Reduce parking ratios from the Hillsdale SAP off-street parking requirements for non TOD zoned properties or recommended parking requirements for TOD zoned properties based on the findings of the required Trip Reduction and Parking Management Plan
- Employer/Visitor bicycle parking

Residential Parking Measures

- Provide both long-term and short-term bicycle parking, at least per requirement in City Code
- Reserve garage spaces for future carshare vehicles
- Explore the possibility of unbundling (separating the cost of parking from housing in the lease or purchase of housing) the second parking space for housing units where more than one parking space per unit is provided
- Reduce parking ratios from the Hillsdale SAP off-street parking requirements for non TOD zoned properties or recommended parking requirements for TOD zoned properties based on the findings of the required Trip Reduction and Parking Management Plan
- Share visitor parking with commercial uses and explore sharing additional parking spaces (such as the second parking space where more than one parking space per unit is provided)[16]

Trip Reduction Program

As noted earlier, under the guidelines of the Corridor Plan all projects located in the TOD zoned districts within the Hillsdale SAP boundaries will be required to submit a Trip Reduction Plan (Policy 7.19) and achieve an overall reduction in new vehicle trips of at least 25% (Policy 7.17). It is recommended that these requirements be expanded to cover all new development in the Hillsdale SAP.

The Corridor Plan does not stipulate what elements must be in the Trip Reduction Plan to achieve this goal. However, all new development in the TOD zoned districts must participate in the Corridor Plan Transportation Management Association (TMA) according to Policy 7.18 and all new development within the broader Rail Corridor Plan boundaries are encouraged to join. It is recommended that all new development in the Hillsdale SAP be required to join the TMA.

A monitoring plan must also be established as part of the conditions of approval process (Policy 7.23) to ensure that the project is in compliance with the 25%-trip reduction target. As part of on-going monitoring, projects located in the TOD zoned districts may be required to conduct hose counts or cordon counts to track vehicle trips. The Corridor Plan TMA will be responsible for submitting an annual report to the city council outlining compliance of occupied developments,

[16] In order to implement this recommendation it may be necessary to change existing Security Ordinance language.

on-going programs and program changes (Policy 7.25). It is recommended that these requirements be expanded to cover all new development in the Hillsdale SAP.

According to Policy 7.24 of the Rail Corridor Plan, projects located in the TOD zoned districts that exceed their trip generation threshold are required to modify their trip reduction and parking management plan and incorporate TDM measures that are expected to increase trip reduction. Projects may be required to implement market-rate parking pricing systems if other trip reduction strategies are ineffective.

Since the development of Trip Reduction Plans is project specific and plans are tailored to meet the particular mix of uses within a given project to achieve vehicle trip reduction goals, this memorandum does not prescribe a mandated list of TDM programs but rather a list of recommended and optional TDM programs. In addition, while it is not known at this time what services will be provided by the Rail Corridor TMA, listed below are basic services which could be provided by the Rail Corridor TMA.

Potential TMA TDM Measures

- Try Transit Free Program
- Guaranteed Ride Home
- Rebates for new vanpool participants
- Encouraging employers to sponsor new vanpools
- Carpool Incentive Program (fuel card incentive)
- Carpool to College program (fuel card incentive)
- School Pool program (fuel card incentive)
- The Bike and Pedestrian Safety Program (education program)
- Commute Benefits Program (employer based program planning assistance)
- Develop and implement an employee and resident travel survey annually or every other year
- Encourage private carshare enterprise (TMA to contact and promote)
- Provide rideshare matching service specific to Hillsdale Station employees
- Establish a “Commuter Club” providing cash drawings and other incentives for using alternative modes and completing travel diaries
- Bicycle purchase subsidy
- TMA to sell transit passes or Clipper cards
- Work with employers to fund vanpools (provide vehicles, maintenance and insurance)

At a minimum, all projects zoned TOD district in the SAP area must participate in the Corridor Plan TMA as stated in Policy 7.18 and provide alternative transportation information on-site for employees. It is also recommended that the following TDM measures be implemented by all new development within the broader Rail Corridor Plan area:

Employer TDM Measures

- Mandatory membership in Transportation Management Association (TMA), with financial contribution for services
- Secure (long-term) bicycle parking for employees and short-term bicycle parking for visitors in commercial buildings as part of the development program
- Locker/changing rooms and showers in larger commercial buildings
- Encourage/advise employers to offer the following services:
  - New employee commute options orientation program which may include distributing a new employee packet that is created by the TMA or the employer.
  - Pre-tax transit fare purchases (CommuterCheck with direct value loaded to Clipper cards)
  - Commute services website and/or link to TMA website on employer's intranet with information about 511.org
  - Co-sponsor (with Homeowners Association if one later exists) a commuter/ transportation fair (potentially in conjunction with other community event(s))
  - On-site vanpool promotion
  - Guaranteed Ride Home Program through 511.org
- Preferential parking for carpools, vanpools, and carshare vehicles
- Each employer to designate a TDM coordinator who will coordinate with the TMA

Residential TDM Measures

- Mandatory membership in Transportation Management Association (TMA) , with financial contribution for services
- Provide both long-term and short-term bicycle parking, at least per requirement in City Code
- Home Owners Association and rental property managers to offer the following services:
  - Regularly provide link to the TMA website and 511.org (on property website or in newsletters)
  - Provide a transportation-alternatives information package to every new household (either through TMA provision or through property management)
  - Provide rideshare matching service specific to Hillsdale Station Area residents (possibly through TMA and/or 511.org)

Listed below are other TDM programs which employers or residential developments may choose to implement.

Optional Employer TDM Measures

- 25% - 50% subsidized transit fares for existing employees
- Free 90-day to 12 month Clipper card for new employees
- Establish parking cash-out program for employees of commercial properties
- Subsidize carshare vehicles, if present (if a private carshare enterprise is not already implemented)

- Bicycle programs that include measures such as shared bicycles, riding and maintenance classes, on site bicycle maintenance supplies and work area, dedicated spaces for tandem bicycles and trailers, and a bicycle information board

Optional Residential TDM Measures

- Home Owners Association and rental property managers to provide a part-time on-site TDM coordinator serving Hillsdale residents
- 25% - 50% subsidized transit fares for new residents (funded through Home Owners Association/rental property management)
- Free 90-day to 12 month TransLink card for new residents (funded through the Home Owners Association/rental property management)
- Subsidize school bus/shuttle to local elementary/middle schools (subsidy funded through HOAs while parents pay subscription for remaining cost)
- Home Owners Association/rental property management funded carshare service (through purchase of vehicles to be managed, maintained and insured by private enterprise)
- Bicycle programs that include measures such as shared bicycles, riding and maintenance classes, on site bicycle maintenance supplies and work area, dedicated spaces for tandem parent/child bicycles and trailers, and a bicycle information board

Impacts of Trip Reduction Program

The exact impacts of a new development's Trip Reduction Plan will vary depending on what TDM and parking management measures are implemented. However, the characteristics of the Hillsdale site, including proximity to transit and retail services, higher density, and mix of uses will result in fewer trips than a traditional suburban development even without the implementation of TDM or parking management measures. To determine if the land use program for the Hillsdale SAP would achieve an overall reduction in new vehicle trips of at least 25% to meet Policy 7.17 of the Rail Corridor Plan an URBEMIS analysis was conducted.

The URBEMIS mitigation component is a simple yet powerful tool; it employs standard traffic engineering methodologies, but provides the opportunity to adjust ITE average rates to quantify the impact of a development's location, physical characteristics and any demand management programs for commercial uses. In this way, it provides an opportunity to fairly evaluate developments that minimize their transportation impact, for example, through locating close to transit or providing high densities and a mix of uses.

Utilizing the URBEMIS mitigation tool, trips generated by the Hillsdale SAP land use program will result in an average across all land uses of 25% fewer trips when compared to standard ITE trip generation (Figure 17). Based on site characteristics alone, overall new development within the Hillsdale SAP boundaries will meet the 25% trip reduction target of the Corridor Plan. When only looking at commercial land uses, trips generated by the commercial component of the SAP will result in 23% fewer trips when compared to standard ITE trip generation. Trips generated by the residential component of the SAP will result in 51% fewer trips when compared to standard ITE trip generation.

As shown in Figure 17, if the TDM measures that are recommended were implemented there would be an additional 3% reduction in vehicle trips for commercial uses and 1% for residential uses, which is equivalent to a total reduction of 26% in vehicle trips for commercial uses and 52% for residential uses.

It is important to note, however, that since each new development will be responsible for developing their own Trip Reduction program, which may or may not be comprised of the measures shown in Figure 17, a similar analysis will need to be conducted to ensure that each new development is in compliance with Policy 7.17 of the Corridor Plan.

In addition, by reducing the number of vehicle trips associated with a development due to the implementation of a Trip Reduction and Parking Management Plan the demand for parking will also be reduced. The relationship between reduced vehicle trips and parking is not one to one. For example, the reduction of one vehicle trip will not necessarily result in a reduction of demand for one parking space. As such, the development of a Parking Management Plan will be a key step in determining the appropriate amount of parking for each development project.

Figure 17 URBEMIS Mitigated Trip Generation with TDM

Baseline Daily Trips	**Hillsdale SAP Land Use Program**	
	% Trip Reduction	**% Trip Generation Compared to ITE**
ITE Generated Trips	-	100%
URBEMIS Overall Baseline Trips	25%	75%
URBEMIS Commercial Baseline Trips	23%	77%
URBEMIS Residential Baseline Trips	51%	49%
Commercial Proposed TDM Measures		
• TMA participation • Bicycle parking and storage • New tenant/employee orientation regarding transportation options and TMA services • Vanpool promotions • Pre-tax transit sales • Guaranteed Ride Home program • Transportation coordinator • Preferential parking for carpools, vanpools, and carshare vehicles	3%	74%
Residential Proposed TDM Measures		
• TMA participation • Rideshare matching service • New resident orientation regarding transportation options and TMA services	1%	48%

Shared Parking Analysis

Typically mixed-use developments lend themselves to shared parking as the peak parking demand for various uses occurs at different times of the day. For example, peak office parking demand occurs during the day while employees are working and residential peak parking demand occurs during the evening when residents return home, allowing these two uses to effectively share parking. However the mix of uses proposed for the SAP site as well as physical site characteristics and City policies, will significantly limit the potential for shared parking. In this section the limitations to shared parking as well as areas where there is potential for shared parking are discussed.

Limitations to Shared Parking

There is limited opportunity to share parking between the Caltrain Station and adjacent land uses due to several factors. The proposed commercial development in the immediate vicinity of the Caltrain Station will have similar parking demand patterns to Caltrain since most workers tend to arrive between 8:00 am and 9:00 am and leave after 5:00 pm, which overlaps with weekday Caltrain commuter parking. In addition, given the area's TOD characteristics it is assumed that a greater proportion of residents will take transit to work, leaving their cars at home. Thus, the majority of the new residential spaces will not be available to weekday commuter parkers either. Furthermore, City Municipal Code (Section 27.64) requires that residential parking be used exclusively by residents.[17] Lastly, current zoning code language (Section 27.645.080) stipulates that shared/off-site parking must be located within 200 feet of the residential use it is serving or within 500 feet of non-residential uses and that off-site parking facilities must be under the same ownership as the parcel for which the off-site parking is being utilized.[18] Given that there will be a significant number of residential units built within the SAP boundaries, the inability for other uses to access residential parking eliminates a large potential source of shared parking by commercial and office uses.

Given Caltrain ridership projections, the garage located on the west side of the tracks will be filled with Caltrain commuters, and the location of the lot on the east side of the tracks may make it unsuitable for sharing with residential and commercial developments on the west side of the tracks.

Restaurant or entertainment uses would provide greater shared parking potential, as the parking demand for these uses tends to be greater in the evening and on weekends, allowing some of the spaces associated with these uses to be utilized by commuter parkers during weekdays. However, the proposed development program does not include a significant increase in these types of uses beyond what presently exists. Thus, there would be limited sharing of parking between Caltrain commuters and the proposed new commercial and residential uses.

The Hillsdale Shopping Center is another potential source of shared parking, particularly for Caltrain commuters whose peak parking demand is weekdays, whereas the peak demand for retail is the evenings and weekends. However, at this time Shopping Center management is not willing to share its existing parking.

In addition to the constraints from the mix of development, the timing of development will also impact the feasibility of shared parking. Given that new development will likely occur in phases over a number of years, it is unknown if adjacent sites will be developed concurrently, making it difficult to state which buildings could potentially share parking with one another.

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[17] Building Security Code (San Mateo Municipal Code, Chapter 23.54) describes in great detail how to ensure that residential parking will only be accessible by residents. Specifically, this section of the municipal code describes the appropriate security measures that should be installed such as electrically operated garage closures, digital keypads, security grilles or screens, and making sure exterior doors are locked at all times.

[18] There a two exceptions to City Code which stipulates that the owner of the off-site parking must be the same as the owner of the parcel utilizing the off-site parking:

"(i) The term of the lease approximates the expected life of the building or use to which the parking facilities are accessory and the lessor and the applicant acknowledge in writing recorded to the satisfaction of the city that a failure to continuously maintain the total number of spaces required shall require the immediate reduction of the intensity of the use served to the extent necessary to bring it into full conformance with the parking requirements of this chapter; or

(ii) The number of required parking spaces leased for a shorter term does not exceed twenty-five percent (25%) of the total number of required parking spaces and the applicant and lessor acknowledge this restriction in writing as specified in subsection (i) above."

The physical conditions of the site also hinder shared parking. Given the layout of the site with the presence of physical barriers, such as El Camino Real and the train tracks, as well as the interspersing of existing buildings with new uses, finding locations within the area where shared parking will work is difficult at this point.

Potential Areas for Shared Parking

Despite these limitations there are still opportunities for shared parking. Although there will likely not be great potential for Caltrain commuters to use the parking from residential and commercial uses, Caltrain parking could be made available to other users outside the peak commute times, potentially reducing the amount of parking that would need to be constructed to serve other uses in the area.

While the Hillsdale Shopping Center is not currently interested in sharing parking spaces in their existing parking facilities, it may be interested in accessing the new Caltrain garage which will be constructed at or near the current Ana Furniture site at 31st Avenue and El Camino Real, if they choose to redevelop a portion of their existing surface parking lots. Thus, it is recommended that ongoing communication with Hillsdale Shopping Center regarding the feasibility of shared parking be maintained.

There may also be an opportunity to share parking with Bay Meadows Phase II. However, this would need further investigation to evaluate the shared parking potential and determine if the design of parking garages will prohibit access by outside parties as current plans call for gated residential and commercial garages which will have key card access that may make it difficult to share these spaces with other users. The lack of easy access between Bay Meadows II and the SAP may also make off-street parking facilities in Bay Meadows II undesirable to users within the SAP. In addition, the approved Parking Management Plan for Bay Meadows Phase II did not propose any shared parking with Caltrain or other off-site uses; therefore, the feasibility of long-term sharing parking between Caltrain commuters, off-site uses and Bay Meadows is currently limited. Temporary shared parking may be more feasible, through short-term lease arrangements agreed to voluntarily.

City Policies to Encourage Shared Parking

Changes to current City policies and requirements will also be critical in encouraging shared parking. Listed below are several ways the City of San Mateo can encourage shared parking:

- If adjacent projects are being planned within the same time frame they must coordinate their Trip Reduction and Parking Management Plan while during the approval process.
- Allow parking structures throughout the SAP to be phased. Let the first developer(s) use vacant lots as temporary parking, until structured parking is reasonable and financially feasible. By delaying construction of parking garages there is an opportunity to share parking with another development which may come later.
- Conduct a peer review and evaluate the feasibility of eliminating exclusive use of parking for residents.
- Allow developers to use off-site parking supplies to meet their projected demand.
- Remain in contact with the Hillsdale Shopping Center in case future opportunities to share parking arise.

Parking Surrounding the SAP

As new development occurs over time within the Hillsdale SAP boundaries, the increase in commercial services, residents, and transit riders may result in spillover parking into nearby

residential and commercial areas. This section provides parking management strategies for the 25th Avenue commercial corridor, El Camino Real and adjacent residential areas, that can help mitigate spillover parking.

25th Avenue

The stretch of 25th Avenue between El Camino Real and Hacienda Street is a lively neighborhood commercial district. With a number of shops and restaurants, this area attracts residents from throughout San Mateo, resulting in a high demand for parking during popular times such as lunch hours and weekends. Currently, parking is free of charge with 2-hour time limits of most spaces.

There are several parking management strategies that could be used to more effectively manage the on-street parking supply if the demand for parking exceeds supply or if this area experiences spillover parking from new development on the Hillsdale SAP site.

One option is to increase shared parking opportunities between visitors and the First Presbyterian Church which is located at the western corner of 25th Avenue and Hacienda Street. Currently, the church informally allows visitors to use their parking lot on weekdays and Saturdays. However, there is no signage stating that visitors may use this parking; thus it is generally assumed that this parking is not open to the public except for the few people who know about this informal policy. One option for increasing the usage of the lot by visitors is to provide signage at the lot stating the hours and days it is open to the public. If the Church does not wish to provide such signage, business owners could possibly inform their patrons of this option.

Another parking management strategy that can help ensure that there is always available parking for visitors is on-street parking pricing. By charging for parking, fewer employees and other long-term parkers will park in front of businesses, increasing the number of spaces available for shoppers and visitors. In addition, parking pricing can be more effective than time limits in encouraging parking turnover and ensuring that there are always a few parking spaces available. The City could install multi-space meters that take credit cards instead of using single-head mechanical meters, making it much easier for people to pay for parking and also enabling the City to implement demand responsive pricing if they so choose. The City has introduced pay-by-space meters on a couple a downtown street segments and is planning on continuing to replace single-head meters with multi-space meters.

Lastly, improved signage and wayfinding could direct motorists to nearby existing off-street public parking facilities which already exist, thus helping to free up street parking and reducing the number of vehicles circling for on-street parking.

Parking Management in Residential Areas to Address Potential Spillover

The proposed new development within the SAP boundaries may cause spillover parking to occur in the neighborhoods surrounding the site, specifically west of El Camino Real and on McLellan Avenue, Hillsdale Boulevard, Pacific Boulevard, and other streets within a ¼ mile of the station. On some of these streets there are already some issues with employees working in El Camino Real's auto-related businesses parking in the neighborhood west of El Camino Real. It should also be noted that the City already has a residential parking permit program in place on McLellan Avenue, Hillsdale Boulevard and other streets bordering the SAP. Nevertheless, there are several options for addressing spillover parking if this becomes a problem in the future.

Residential Parking Permit (RPP) Districts

In order to prevent spillover parking in residential neighborhoods, many cities, including the City of San Mateo, implement residential permit districts by issuing a certain number of parking permits to residents usually for free or a nominal fee. Under the City of San Mateo's current RPP program, San Mateo residents living within a RPP District are eligible for an unlimited number of free parking permits. These permits allow residents to park within the district while all others are prohibited from parking there for more than two hours. The hours of enforcement vary by RPP district. Permits are valid for two calendar years and residents may also obtain one visitor permit per household that is also valid for two years.

The current structure of San Mateo's RPP program has several limitations. Most notably, an unlimited number of permits are issued to residents without regard to the actual number of curb parking spaces available in the district. This may lead to a situation in which on-street parking is seriously congested, particularly over-night and on weekends, and the permit functions solely as a "hunting license," simply giving residents the right to hunt for a parking space with no guarantee that they will actually find one.

An opposite problem occurs with residential permit districts in situations where there actually are surplus parking spaces (especially during the day, when many residents are away), but the permit district prevents any commuters or other users from parking in these spaces even if demand is high and many motorists would be willing to pay to park in one of the surplus spaces. In both cases, these conventional residential parking permit districts prevent curb parking spaces from being efficiently used (promoting overuse in the former example and underuse in the latter).

Residential Parking Benefits Districts

A Residential Parking Benefits District (RPBD) is similar to residential parking permit districts but with the key difference that non-residents are allowed to park in a neighborhood typically during the day when residential demand is low.

By charging non-residents a higher permit fee than residents, new revenue is generated through permit fees which can help pay for neighborhood improvements. In order to ensure that residents have adequate parking, non-resident permits may be valid only during certain time periods such as during the daytime on weekdays and the number of permits sold may be limited to a percentage of the actual available on-street supply of parking. The revenue generated by the Residential Parking Benefits District should be dedicated to the neighborhood where the permits are purchased, to be used towards improvements in the neighborhood that promote walking, cycling and transit use, such as sidewalks, curb ramps, bicycle lanes, street lighting, or other projects that the neighborhood decides are important.

The key to success of conversion to Residential Parking Benefit Districts is that net revenues above the cost of administering the program should be dedicated to pay for public improvements in the neighborhood where the revenue is generated. Once implemented, residents and property owners in the district should continue to have a voice in advising the City Council on how they want new parking revenue spent in their neighborhood. This could occur via existing neighborhood organizations, mail-in surveys, public workshops, or public hearings.

Additional benefits of implementing a Residential Parking Benefits District include the following:

- Scarce curb parking spaces are used as efficiently as possible
- Non-residents can pay fair market prices for any spaces not needed by residents, and the revenues can fund neighborhood services and improvements
- Residents will clean out garages now used for storage and park cars in them

- Residents will sell clunkers now parked on the street, or store them at storage yards
- Renters with many cars will choose apartments with ample off-street parking; renters with one or no car will choose apartments with little off-street parking
- Neighborhood quality of life and parking impacts will be improved

On-Street Parking on El Camino Real

The segment of El Camino Real between the northern edge of the SAP boundary and 27th Avenue currently has free on-street parking with no time limits. Since the businesses along El Camino Real typically have off-street parking, there has not been a need to manage on-street parking along this portion of El Camino Real thus far. However, as new development occurs along El Camino Real and some existing on-street parking potentially removed there may be a need to implement on-street parking management tools.

Similarly to 25th Avenue, it is recommended that on-street parking meters and parking time limits be utilized to effectively manage on-street parking, encouraging turnover and ensure parking availability.

Conclusion

The proposed development program for the Hillsdale SAP and Hillsdale Caltrain Station will assist in transforming this area of San Mateo into a vibrant, mixed-used transit-oriented neighborhood. Development both in and around the SAP along with increased Caltrain service will result in a projected increase in average weekday boardings from 1,941 weekday boardings in 2009 to 6,838 average weekday boardings in 2035, an increase in ridership of approximately 250%. The construction of additional Caltrain parking will serve the increased ridership. However, daily parking pricing can be used to encourage Caltrain riders to use alternative modes of transportation to access the station, thus reducing the amount of new parking that will need to be constructed. In addition, Caltrain may want to explore the feasibility of sharing parking with new developments as they are constructed as well as with the Hillsdale Shopping Center to reduce the need to construct parking on-site while still providing adequate parking for Caltrain patrons.

Given that the Hillsdale SAP is a unique transit-oriented district, it is recommended that specific minimum parking requirements for this area be adopted. The recommended parking requirements identified in this memo take into consideration current citywide parking ratios, Downtown San Mateo requirements, guidelines provided in MTC's Parking Toolbox, Bay Meadows Phase II ratios, and best practices in the field and are designed to support the transit-oriented goals of this area while also providing sufficient parking. While Policy 7.19 of the Rail Corridor Plan stipulates that the parking supply for new development located in the TOD districts will be determined through the required development of a Trip Reduction and Parking Management Plan it is recommended that the parking requirements identified in this memo for non-TOD zoned districts be used as a guide for new development in TOD zoned districts as the context for both is similar.

While the potential for shared parking is somewhat constrained given physical barriers such as the train tracks, current municipal code language, and parking patterns, it is still worth exploring the feasibility of shared parking and to maintain on-going communications with potential shared parking partners including Caltrain, Hillsdale Shopping Center, Bay Meadows, First Presbyterian Church, and developers, as well as considering changes to the current municipal code to be more supportive of shared parking.

Overall the proposed SAP development program will meet the San Mateo Rail Corridor Plan's trip reduction target of 25%. Considering only commercial land uses, trips generated by the commercial component of the Transit Center Program will result in 23% fewer trips when

compared to standard ITE trip generation. Trips generated by the residential component of the Transit Center Program will result in 51% fewer trips when compared to standard ITE trip generation. If commercial developments implement the recommended TDM measures described in this memo as part of the required Trip Reduction Plan, there would be an additional 3% reduction in vehicle trips for commercial uses and 1% for residential uses, which is equivalent to a total reduction of 26% in vehicle trips for commercial uses and 52% for residential uses, thus meeting the Corridor Plan's trip reduction target.

The implementation of parking and transportation demand management strategies will be key both as part of the required Parking Management Plan and the 25% trip reduction target for new development as well as to address potential spillover parking issues resulting from new development. This memo lists a wide range of programs for both employers and residents that can be implemented to achieve these goals; however, it is crucial that all new development, not just development within the TOD zoned districts, be required to join the Rail Corridor TMA, create a parking management plan, and develop a trip reduction plan. By having all new development participate in the TMA, it ensures that all employees and residents will have access to the base level of TDM programs which can be difficult for smaller employers or residential complexes to provide on their own. Requiring all new development to establish a parking management plan and trip reduction plan ensures that all new development contributes to the 25% trip reduction target and is held accountable to meeting their established goals through the on-going monitoring process.

Lastly, there are a number of programs that can be utilized should spillover parking from SAP development become a concern. Along 25th Avenue, policies such as shared parking with the church, increasing the price of on-street parking, and improved wayfinding and signage for off-street parking can be used to ensure the availability of parking for visitors. Within residential neighborhoods, the current Residential Permit Parking Program could be adjusted to allow non-residents to purchase a permit for a fee in those neighborhoods where there is excess availability. The funds generated by non-resident permits can then be used to pay for neighborhood improvements.

Appendix A