Pacific Beach/Mission Beach SDAT

San Diego, CA SDAT Report

AIA Communities by Design

ENVISION. CREATE. SUSTAIN.

Table of Contents

AIA Communities by Design

ENVISION. CREATE. SUSTAIN.

INTRODUCTION

In December of 2012, San Diego, CA submitted a proposal to the American Institute of Architects (AIA) for a Sustainable Design Assessment Team (SDAT) to assist the community and its citizens in addressing key issues facing the community. The issues included economic development, connectivity, sustainable design, and regulatory measures. The AIA accepted the proposal and, after a preliminary visit by a small group in July 2013, recruited a multi-disciplinary team of volunteers to serve on the SDAT Team. In December 2013, the SDAT Team members worked closely with local officials, community leaders, technical experts, non-profit organizations and citizens to study the community and its concerns. The team used its expertise to frame a wide range of recommendations, which were presented to the community in a public meeting. This report represents a summary of the findings and recommendations that were presented to the community.

The Sustainable Design Assessment Team (SDAT) Program

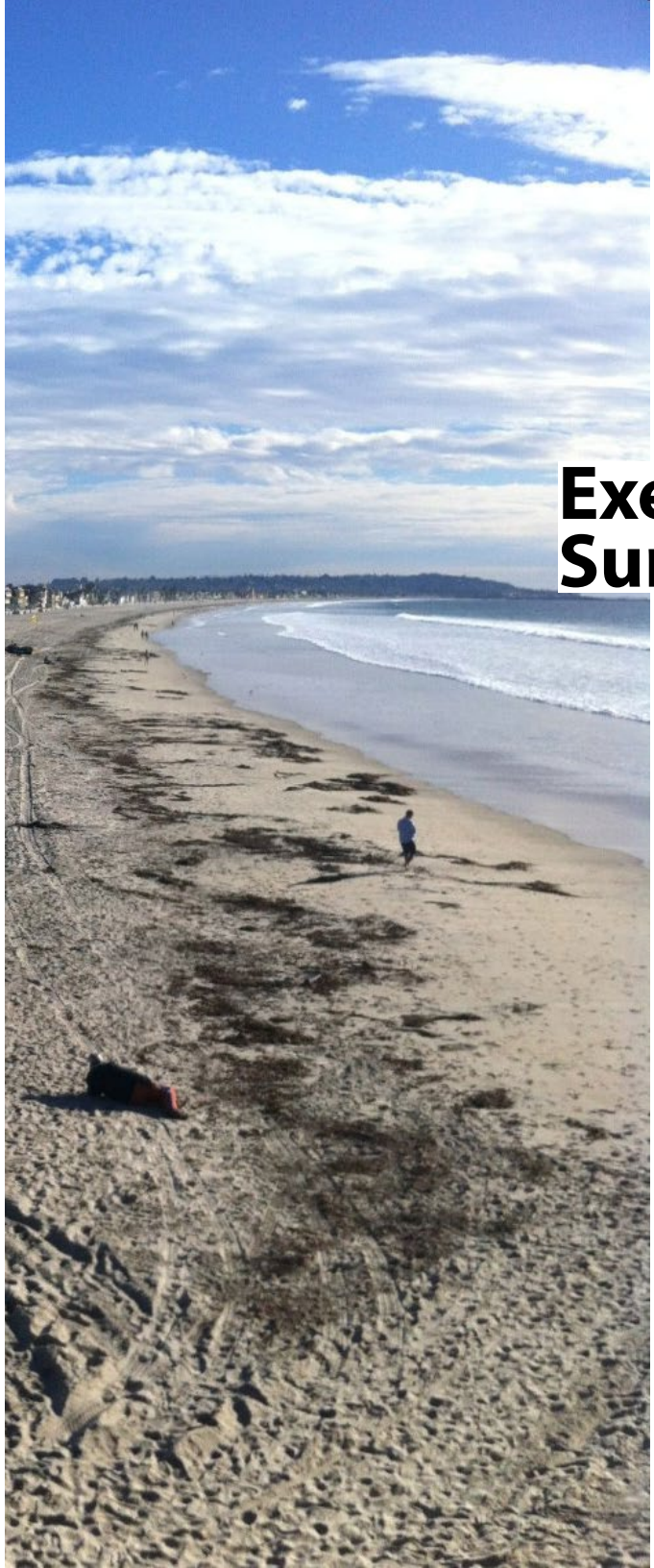
The Sustainable Design Assessment Team (SDAT) program focuses on the importance of developing sustainable communities through design. The mission of the SDAT program is to provide technical assistance and process expertise to help communities develop a vision and framework for a sustainable future. The SDAT program brings together multidisciplinary teams of professionals to work with community stakeholders and decision-makers in an intensive planning process. Teams are composed of volunteer professionals representing a range of disciplines, including architects, urban design professionals, economic development experts, land use attorneys, and others. Today, communities face a host of challenges to long-term planning for sustainability, including limited resources and technical capacity, ineffective public processes and poor participation. The SDAT approach is designed to address many of the common challenges communities face by producing long-term sustainability plans that are realistic and reflect each community's unique context. Key features of the SDAT approach include the following:

- **Customized Design Assistance.** The SDAT is designed as a customized approach to community assistance which incorporates local realities and the unique challenges and assets of each community.
- **A Systems Approach to Sustainability.** The SDAT applies a systems-based approach to community sustainability, examining cross-cutting issues and relationships between issues. The SDAT forms multi- disciplinary teams that combine a range of disciplines and professions in an integrated assessment and design process.
- **Inclusive and Participatory Processes.** Public participation is the foundation of good community design. The SDAT involves a wide range of stakeholders and utilizes short feedback loops, resulting in sustainable decision-making that has broad public support and ownership.
- **Objective Technical Expertise.** The SDAT Team is assembled to include a range of technical experts from across the country. Team Members do not accept payment for services in an SDAT. They serve in a volunteer capacity on behalf of the AIA and the partner community. As a result, the SDAT Team has enhanced credibility with local stakeholders and can provide unencumbered technical advice.
- **Cost Effectiveness.** By employing the SDAT approach, communities are able to take advantage of leveraged resources for their planning efforts. The AIA contributes up to $15,000 in financial assistance for each project. The SDAT team members volunteer their labor and expertise, allowing communities to gain immediate access to the combined technical knowledge of top- notch

professionals from varied fields.

The SDAT program is modeled on the Regional and Urban Design Assistance Team (R/UDAT) program, one of AIA's longest-running success stories. While the R/UDAT program was developed to provide communities with specific design solutions, the SDAT program provides broad assessments to help frame future policies or design solutions in the context of sustainability and help communities plan the first steps of implementation. Through the Design Assistance Team (DAT) program, over 500 professionals from 30 disciplines have provided millions of dollars in professional pro bono services to more than 200 communities across the country. The SDAT program leverages the pivotal role of the architectural community in the creation and support of sustainable livable communities.

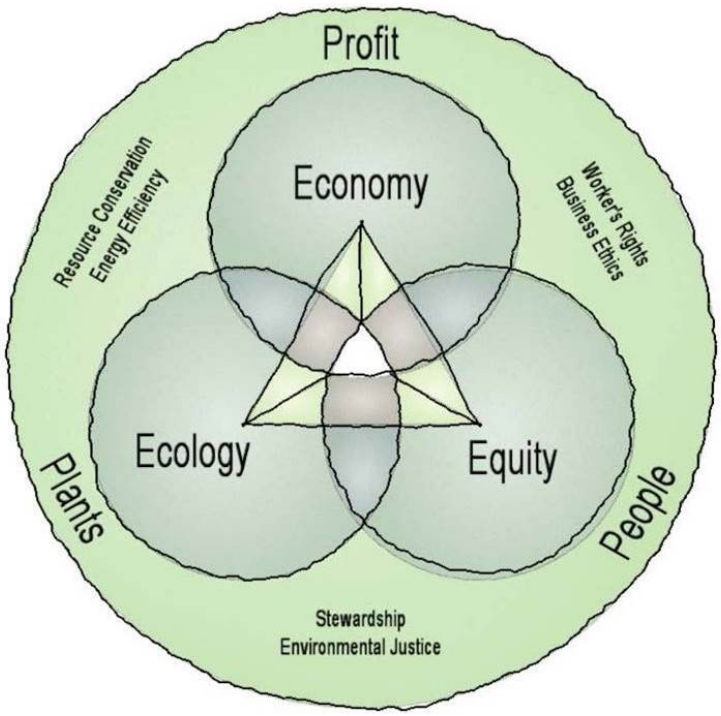
The following report includes a narrative account of the Tremonton SDAT project recommendations, with summary information concerning several principle areas of investigation. The recommendations are made within the broad framework of sustainability, and are designed to form an integrated approach to future sustainability efforts in the community.



Executive Summary

We would like to thank everyone who supported our efforts in Mission Beach and Pacific Beach last year. We were very fortunate to have the opportunity to draw from the talents of community residents, local professionals through the AIA and government officials. As we look forward to developing and implementing the ideas contained in this report, all of these groups will need to continue to collaborate in order to achieve this vision.

Before beginning with our data analysis, it is important to recognize the lens through which the SDAT team viewed the question of sustainability. We took a very broad definition of sustainability that considered not only environmental sustainability, but also economic and social sustainability. The most successful projects address all three aspects of sustainability and can be found at the center of the adjacent image. Given the strong sense of community articulated by all those we met, we felt it was particularly important to study aspects of social sustainability, as this aspect is the least explored and least quantified component of sustainability these days.

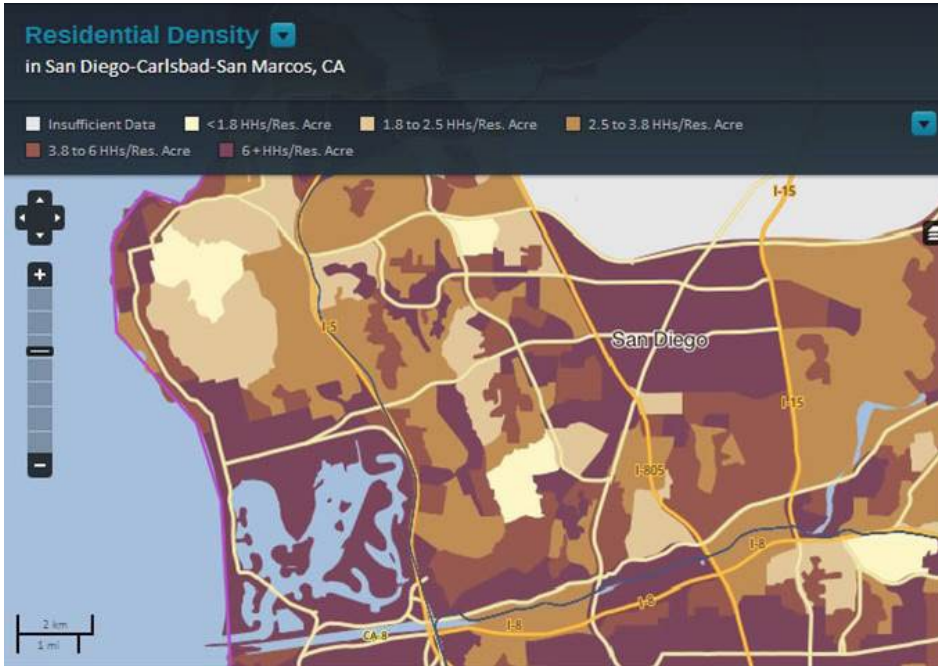


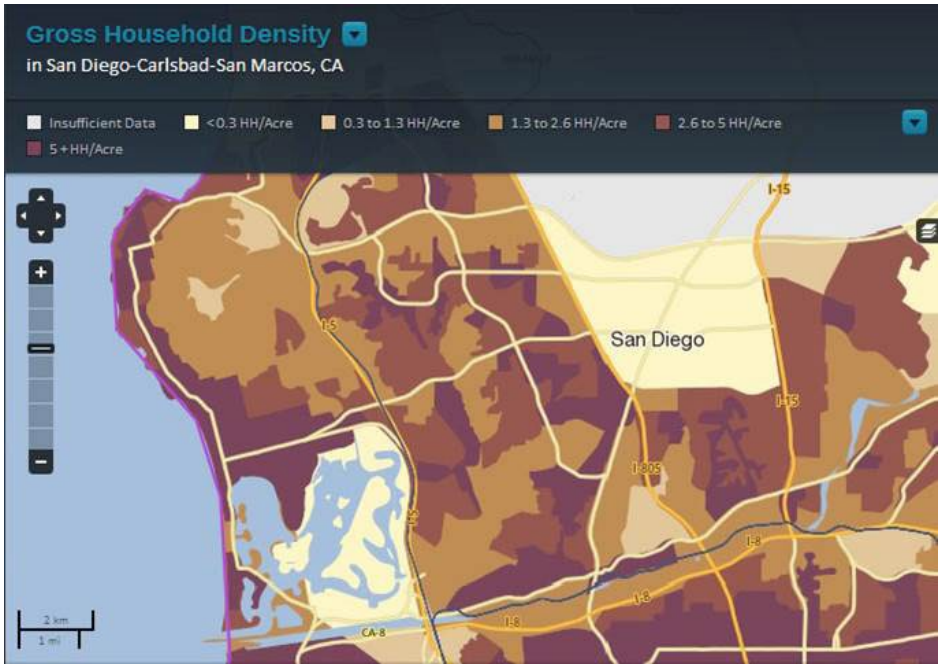
One of the first things we analyzed was demographic data, which the team could then compare against the vision articulated by the community in order to ascertain how close the reality of the data aligned with the community's self-image. The community stated a pretty clear vision of how they perceive themselves – 'healthy', 'outdoor', 'active' were words we heard time and again. Given San Diego's wonderful climate and beachfront access, this is not surprising.

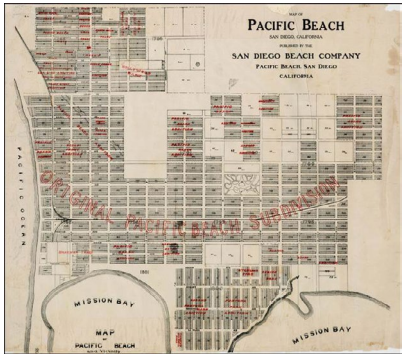
A lot of the data absolutely validated perceptions. Studying Average Block Size, Intersection Density, Gross Household Density, and Residential Density we find that the communities of Pacific Beach and Mission Beach are dense residential communities with small blocks that are ideal for a walkable, pedestrian friendly environment.

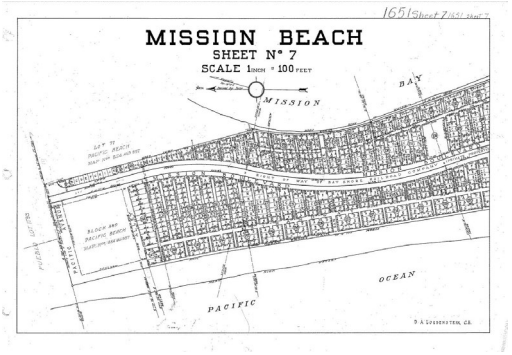
It is also clear from early plats of the towns that it was always intended that Mission Beach and Pacific Beach should be a walkable, mixed-use community with residential, commercial and institutional functions all within the community.

Analyzing Housing and Transportation Costs, one needs to acknowledge the commonly accepted definitions of 'affordability', which consist of rent less than 30% of area median income, transportation costs less than 15% of area median income, or a combination of rent and transportation costs less than 45% of area median income. What is obvious from the data is that transportation costs have a significant impact on the lives of residents, with no parcels within the study area deemed affordable. To put it another way, there is nowhere in Pacific Beach or Mission Beach where an individual earning the area median income is projected to spend less than 15% of their income on transportation

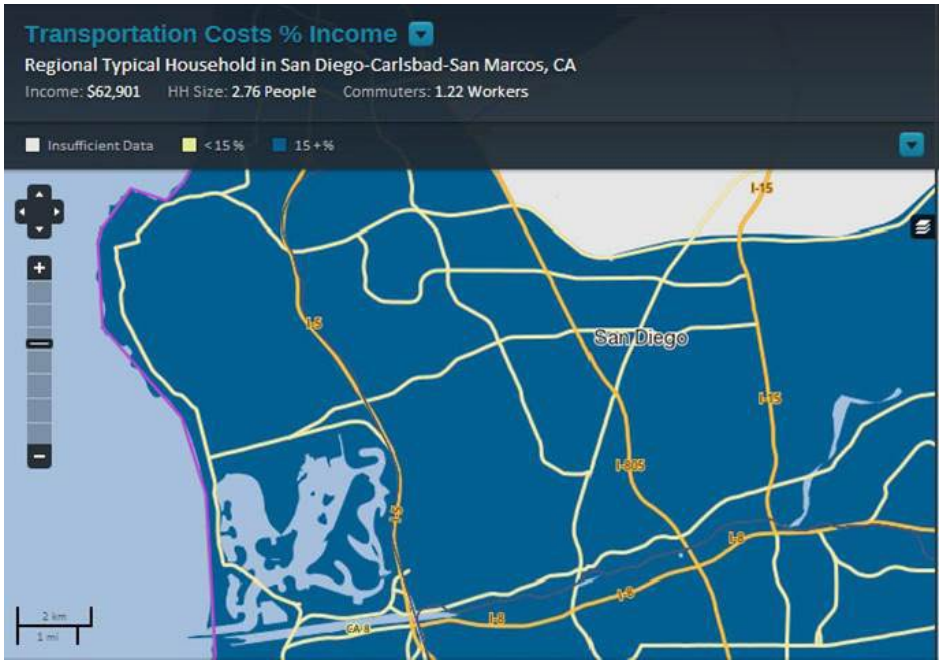






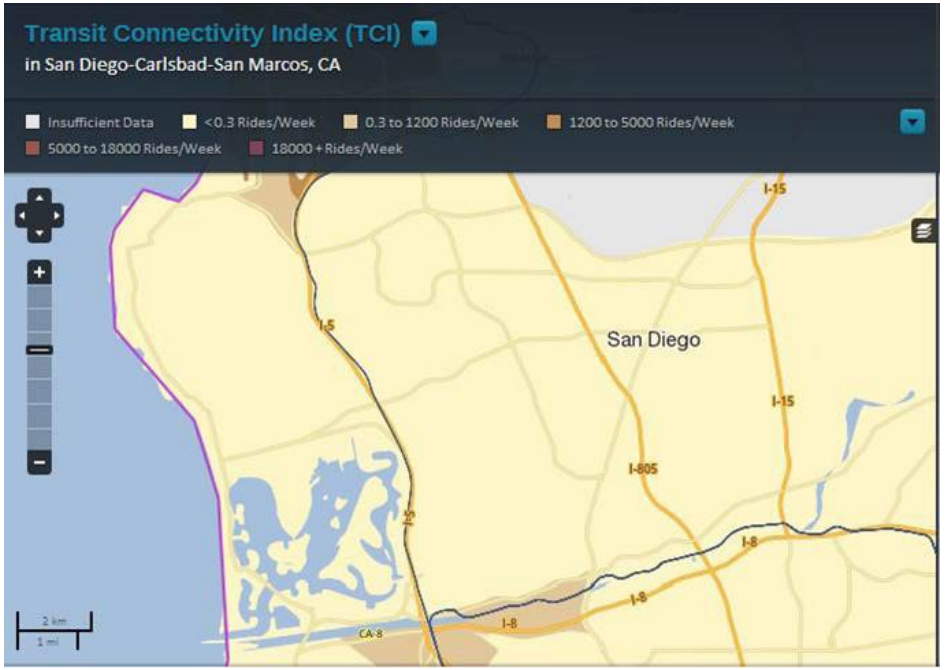


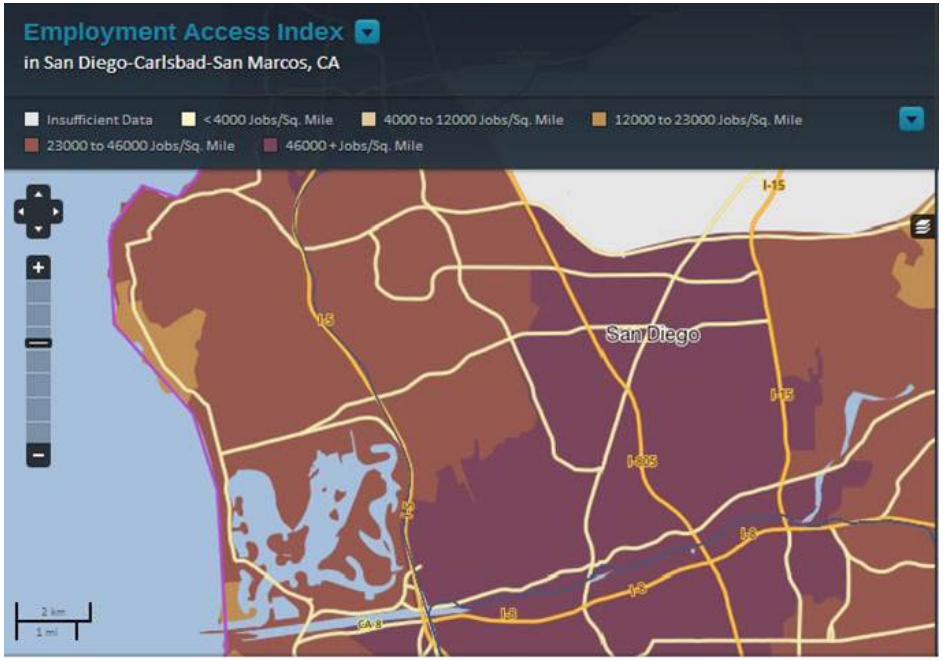
costs. The amount of driving this implies is further validated by the Greenhouse Gas Emissions per Acre and per Household. While the physical structure of the community is ripe for walking and public transit, this does not currently appear to be the case. This is also validated by the Transit Connectivity Index, which indicates extremely poor connectivity to public transit. This makes automobile transportation the only viable alternative for travel beyond the immediate vicinity. There are a significant amount of jobs located within the community, but as future sections of this report will indicate there are not very many jobs in the community held by members of the community, with lots of people commuting into and out of the community on a regular basis.


Transportation Costs % Income
Regional Typical Household in San Diego-Carlsbad-San Marcos, CA
Income: $62,901 HH Size: 2.76 People Commuters: 1.22 Workers
Insufficient Data
< 15 %
15 + %
San Diego
I-15
I-5
I-805
I-8
CA-8


GHG Per Household
in San Diego-Carlsbad-San Marcos, CA
Insufficient Data
<3.3 Tonnes/Year
3.3 to 5.1 Tonnes/Year
5.1 to 6.5 Tonnes/Year
6.5 to 8.6 Tonnes/Year
8.6 + Tonnes/Year
San Diego
I-15
I-5
I-805
I-8
CA-8


GHG per Acre
in San Diego-Carlsbad-San Marcos, CA
Insufficient Data
<6 Tonnes/Year
6 to 14 Tonnes/Year
14 to 20 Tonnes/Year
20 to 30 Tonnes/Year
30 + Tonnes/Year
San Diego
I-15
I-5
I-805
I-8
CA-8

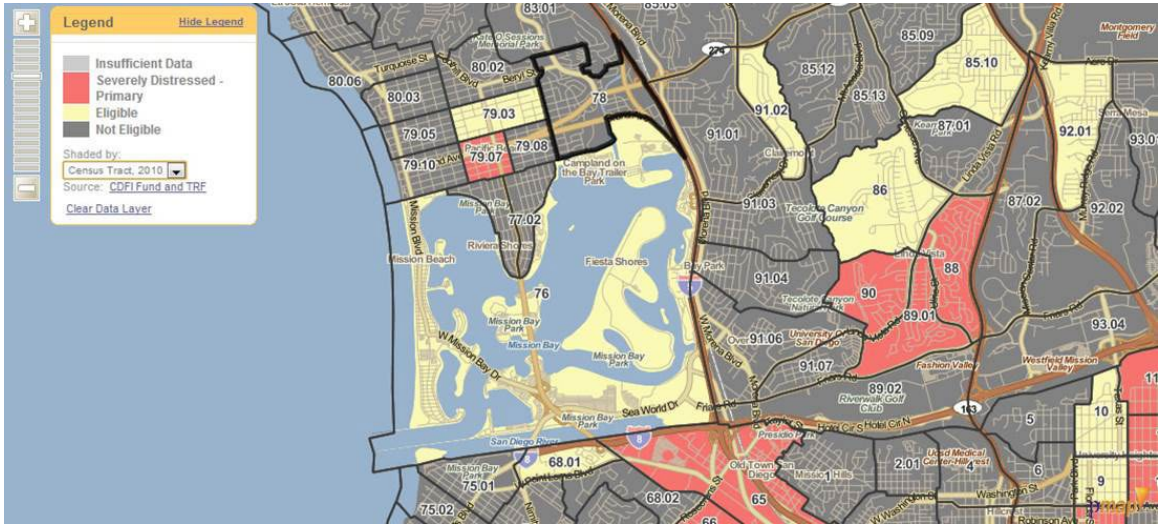

Transit Connectivity Index (TCI)
in San Diego-Carlsbad-San Marcos, CA
Insufficient Data
<0.3 Rides/Week
0.3 to 1200 Rides/Week
1200 to 5000 Rides/Week
5000 to 18000 Rides/Week
18000 + Rides/Week
San Diego
I-15
I-5
I-805
I-8
CA-8



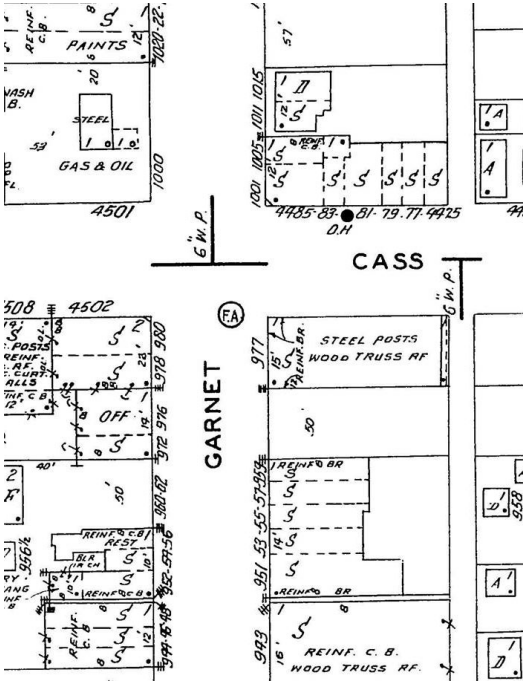
Turning to walkability – the Walk Score mapping of these two communities reveals pretty good to very good walkability. Walk Score (www.walkscore.com) measures the walkability of any address by analyzing hundreds of walking routes to nearby amenities. Points are awarded based on the distance to amenities in each category. Amenities within a 5 minute walk (.25 miles) are given maximum points. A decay function is used to give points to more distant amenities, with no points given after a 30 minute walk. Walk Score also measures pedestrian friendliness by analyzing population density and road metrics such as block length and intersection density.

Mission Beach's relatively lower scores are something of a statistical anomaly, reflecting the fact that there is very little commercial activity in the community, so there are relatively few commercial functions that can be walked to. So, the walkability is there, but is the community taking advantage of this walkability?

Another interesting fact is that while significant areas of the community are fairly well off, there is a sector along the Garnet Street corridor that qualifies as a distressed census tract and therefore is eligible for New Market Tax credit subsidies. These tax credits are intended to encourage the development of jobs and businesses in distressed communities with higher than average levels of poverty and unemployment. As noted in a later section in this report, the redevelopment of Garnet Avenue has the capability to transform not just the avenue, but the surrounding community. These credits could prove to be an incredibly effective tool to boost any redevelopment plans.

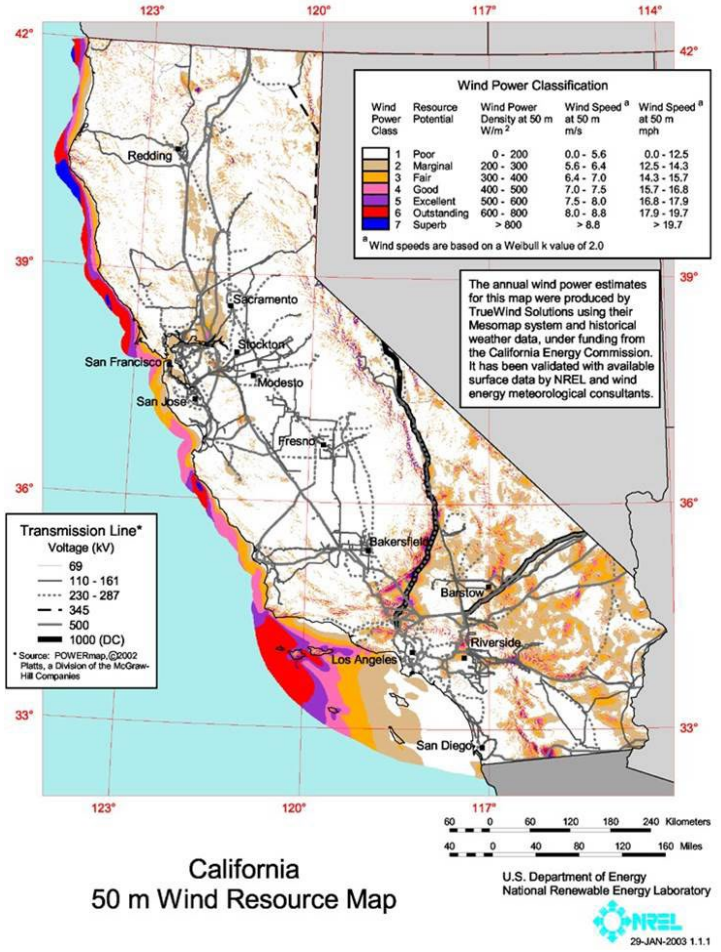


Upon reviewing the historic images of Pacific Beach and Mission Beach something else becomes clear – the communities have grown and evolved over time, and will continue to need to grow and evolve if they are to survive and prosper. What is thought of today as some of the densest parts of the community today were once parking lots and low density sprawl. Promoting the vision of a future that is different from the present can be a challenge at times, as historical inertia can often weigh on a community, but it is critical that positive change be encouraged.



REDUCING THE CARBON FOOTPRINT

There are numerous ways that the community's carbon footprint can be reduced. Alternative energy sources are one very effective way to reduce a community's carbon footprint. Interestingly, Mission Beach and Pacific Beach are not good candidates for wind power, despite the coastal location. There simply isn't enough wind to support the installation of wind turbines.



However, solar energy has a very large potential to reduced demand on carbon-based energy sources. With an average of 263 days of sunshine every year, there is ample opportunity to embrace solar power. With the available infrastructure and rooftop exposure there really is no excuse to not incorporate solar

photovoltaic power, and solar water heating where there is a year round demand for hot water such as restaurants, hospitals, etc. Something else to remember is that solar PV doesn't have to be boring, and with a tradition of quirkiness in Mission Beach and Pacific Beach there could be ample opportunity to highlight the use of solar power – perhaps street lighting, such as that created by the artist Dan Corson for the city of Portland, OR, or solar powered electric vehicle charging stations, street lights or solar canopies. Photovoltaic panels are now incorporated into a wide variety of new building materials. Rather than bolting a photovoltaic panel onto a roof, why not make the roof the photovoltaic element?

While embracing alternative fuel sources and looking at other utility upgrades (lamp replacements, improved air conditioning efficiency, etc.) it still must be emphasized that the most effective means of carbon footprint reduction would be to reduce reliance upon the automobile, walking more and taking advantage of an enhanced public transit system.

CONGESTION

One obvious challenge in the Pacific Beach and Mission Beach communities is traffic congestion and a lack of parking, but only during certain times. It is our understanding that during peak weekends traffic is gridlocked and there is no parking available. A comprehensive traffic mitigation strategy can effectively address these challenges while also encouraging healthier, pedestrian-oriented behavior.

One of the first things to recognize is that free things have no value. If there is no charge for parking then the intrinsic value of proving parking as an amenity is lost.

What is also interesting is that the reliance on automobiles, even for short trips within the community, is contradictory to the community's stated self-image of healthy and outdoors. With the small block-scale and the wonderful climate there is no reason why walking or biking could not become the preferred means of travel within the community.

There are a number of traffic mitigation strategies that we have analyzed. One intriguing option would be to monetize parking to help pay for public transportation improvements. The concept is to use a carrot and stick approach to encourage changes in behavior. If paid parking were implemented, the revenues from parking could be used to subsidize a free shuttle loop from outlying parking areas and light rail stops through the community.

There are many 'flavors' of parking fees. The community could simply install metered parking throughout the retail districts and beach parking lots. Another alternative would be to implement peak demand charges, through which parking at the beach would be free during off-peak times, but charging a fee during peak times (weekends and summers) when parking is in greatest demand. This would need to be coupled with limited hours of parking throughout the community (2 hour max?) to keep beach visitors from occupying all of the on street parking. Any of these scenarios can also be tied to a residential permit program to allow free parking (at least in designated areas) for Mission Beach or Pacific Beach residents.

One concept would have the parking fees subsidize a free shuttle loop circulating through the downtown business districts and out to the light rail stations in order to allow beach visitors to take public transit and not need to park in Mission Beach/ Pacific Beach, and also allow residents of Mission Beach and Pacific Beach to take the light rail to their jobs or downtown, further reducing the need for automobiles to serve every single trip in and out of the community.

Best of all, there is already a model for this - the Business Improvement District for the Little Italy neighborhood of San Diego has a similar arrangement where the local district can receive parking revenues and apply those funds to neighborhood-specific priorities. Discover PB has a similar status as a Business Improvement District and can both collect and disburse funds on behalf of community improvements.

Market Analysis

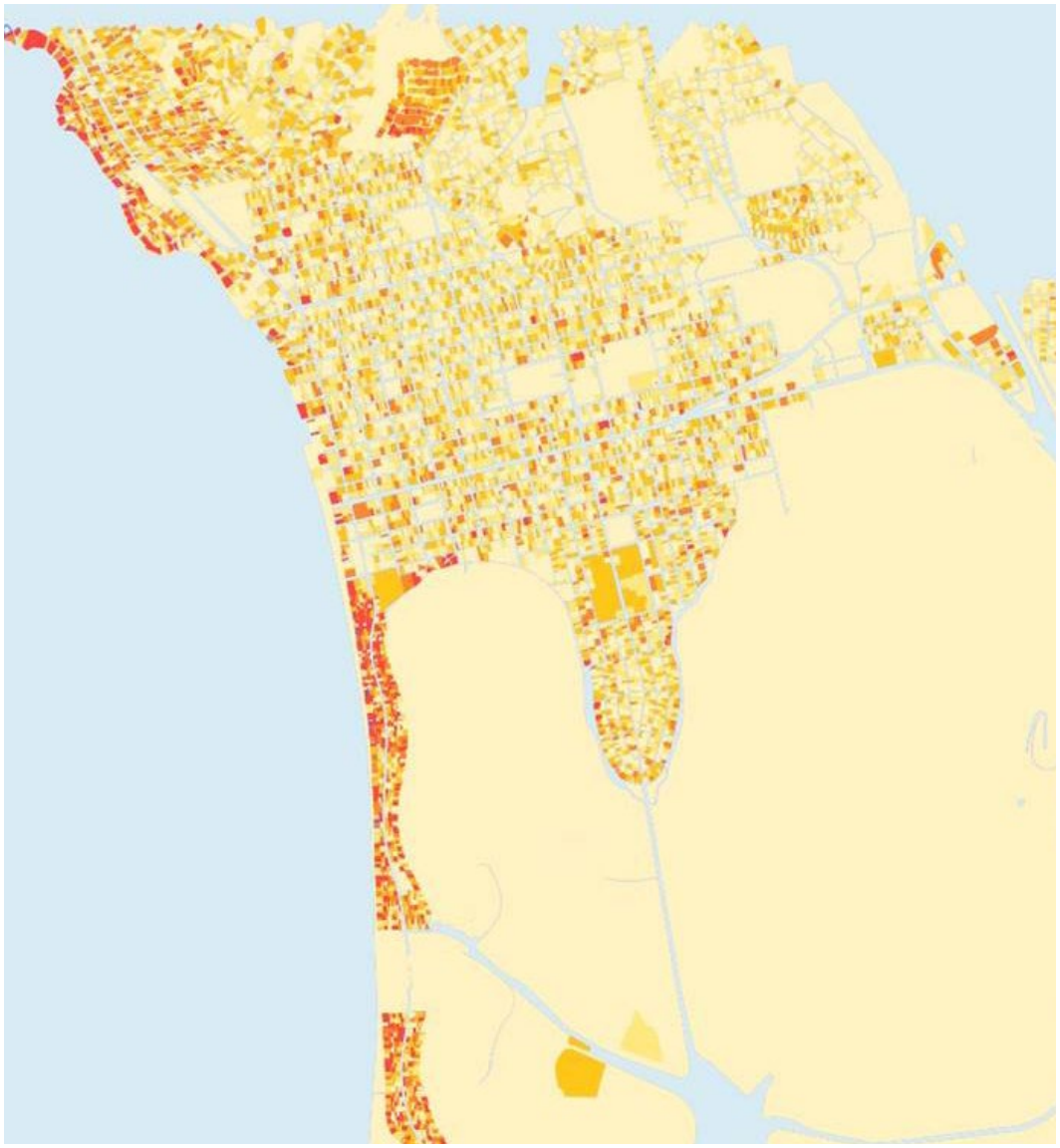
Interviews with residents, business and community representatives revealed a number of issues. Both the resident and business community mentioned tired retail stock on corridors a need for greater employment diversity. It is perceived that entertainment uses have an upward impact on leasing rates for other uses aimed toward more local-serving uses resulting in a perception that local needs are not well met by the existing mix of business. Along with this is the perception by many residents that there is a lack of local control over land use. There is a perception that the local corridors and main streets are not bicycle friendly and that many do not provide an excellent pedestrian experience. Stakeholders familiar with local real estate commented that there is Insufficient land for residential demand unless redevelopment takes place. Concern was expressed about a perceived lack of workforce housing, and further that many children who grow up in the area cannot afford to stay as adults due to relatively high housing costs.

One of the characteristics of an environmentally sound urban area is the ability of residents to walk, bicycle, or have a short drive to jobs and services. 2011 data from the US Census Local Employment Dynamics database show that in Pacific Beach ±30,000 employed persons lived here and ±27,000 of these residents worked elsewhere. Of the ±22,000 jobs located in the area, only ±3,000 of the local jobs were held by area residents, while ±19,000 were held by non-residents commuting to the area.

These figures indicate that commuting car trips on workdays are in the range of ±73,000 trips per day. At the same time, according to Census data 70 percent of local jobs paid less than $3,333 per month with the consequence that most inflow commuters can't afford to live here. The majority of employed residents who commute outside the area have higher income employment that yields the ability to afford local housing.

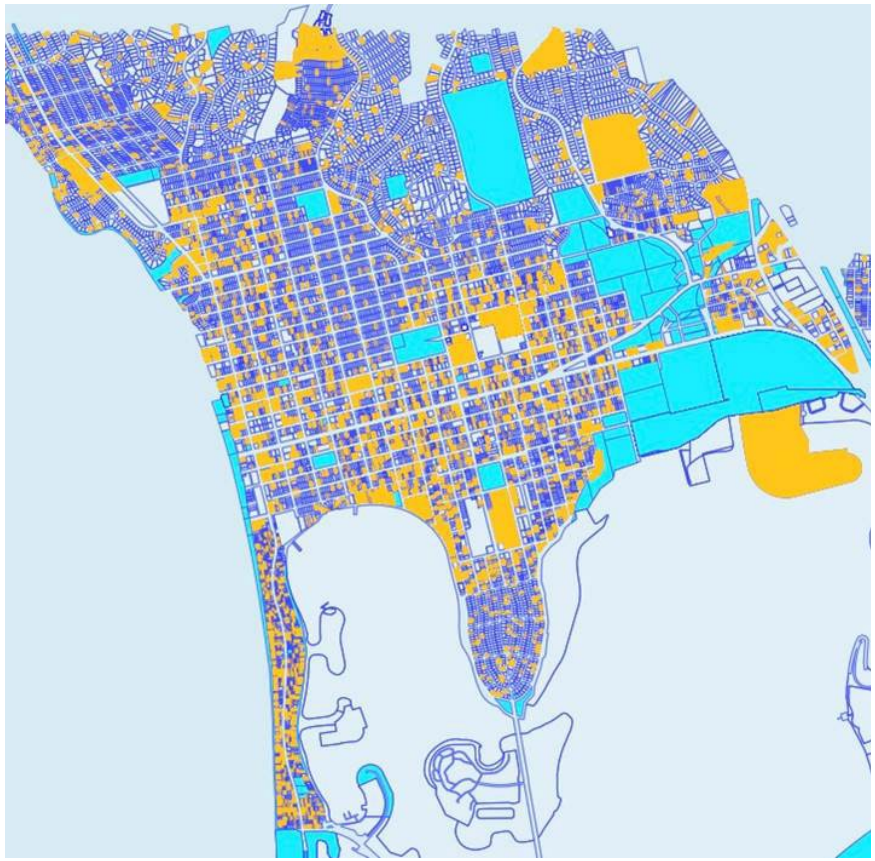
The absolute need to have a car for access to jobs and services has a direct effect on workforce housing affordability. According to the American Automobile Association, car ownership and operations on average costs approximately$8,950 per year. If a household in need of workforce housing were able to access jobs and services without car ownership, the savings would amount to a monthly subsidy of ±$300-$500 per month per car not owned. Since many households need two cars to commute, the savings in living without cars in a neighborhood that offered both jobs and services might yield $600 to $1,000 per month in savings that could then contribute to rent and consumer spending To achieve this people must work within walking, biking, or transit access from their residence. A household with two cars that moves near to work and gives up one car can move from $800 per month rent to $1,100 to $1,400 rent per month with no change in disposable income. A household with two cars that chose to forego auto ownership could afford rent in the range of $1,800 with no other change in disposable income.

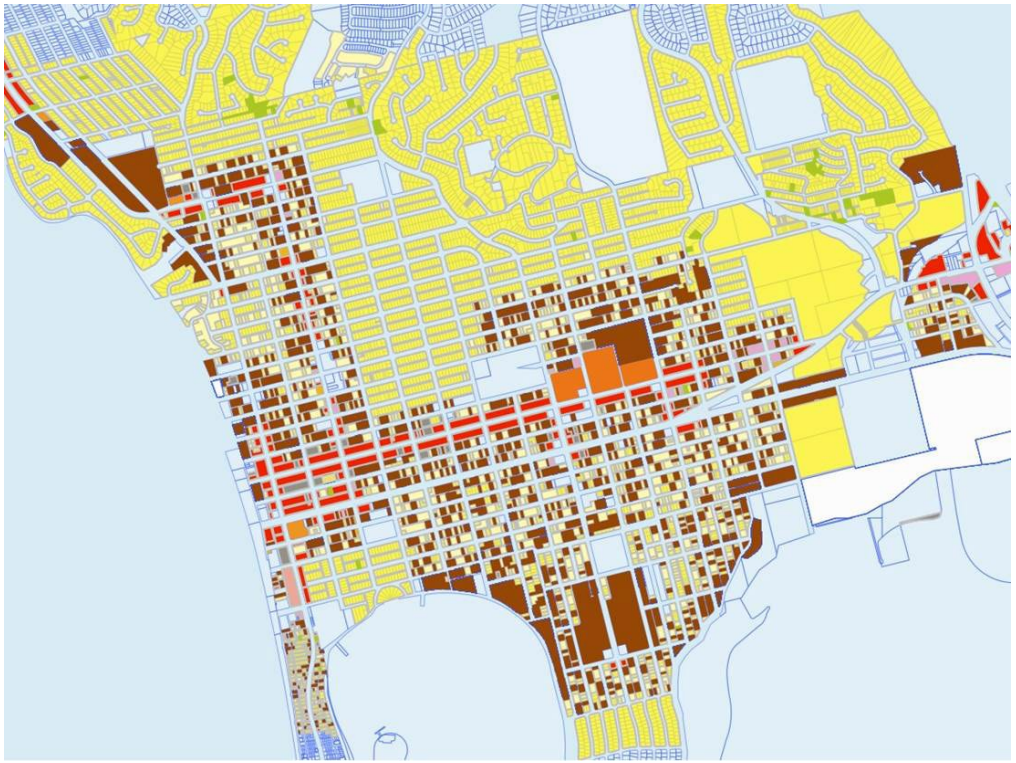
One of the solutions offered by those interviewed was the potential for more mixed use development in the area to increase retail services, add workforce and market rate housing units, and increase the customer base for local services. Mixed-use development, while desirable for urban main streets ad corridors can be difficult to achieve because of economic constraints. Mixed-use structures cost more than single use buildings for a variety of reasons. Mixed-use requires multiple entries, lobbies, vertical access that is separate from ground floor uses, and thus results in less leasable space per square foot built.



These facts make mixed-use development more expensive per leasable square foot. Retail use is more risky currently than residential use and a higher return is required for retail use than for residential to achieve financing. Current assessed values show an average for all sites of around $80 per square foot. Given the higher costs of mixed-use total cost could be over $280 per square foot and at a leasable ratio of 85 percent to achieve a retail return on asset of 10 percent would require a rent in the range of ±$33 per square foot, a leasing rate higher than the current retail rates in the area, but within the rates commanded for bars. Residential rents will support mixed use, but not at workforce housing rental rates.

A potential solution is to alter current zoning regulation to lower developer risk: to insist on a retail ground floor format where it is ultimately desired by the community, but to allow ground floor occupation by other land uses that are currently feasible such as residential. It is particularly important to not demand mixed-use retail in all buildings, but to carefully plan where clusters of retail will be located in order to create locations or nodes with the critical mass to yield high economic utility for customers and vitality for businesses.





RECOMMENDATIONS

Based upon a review of the corridors and neighborhoods, as well as interviews, there are some basic recommendations for making a more economically sustainable environment:

Create Walkable, Bikable Networks

Making the study area as pedestrian and bike friendly as possible can add to local economic vitality for several reasons. First, increasing modes of access to local business will increase the potential for local capture of consumer spending. This is not a recommendation to lower access by automobile, but rather to add to the already dominant mode so that local businesses have increased foot traffic.

Concentrate Retail/Commercial

Currently, retail is spread out along the corridors reducing the efficiency for any one location. By clustering retail uses together at desired nodes the efficiency and capture rises because of the ability for one-stop shopping that is produced by a destination with a critical mass of retail and services.

Consider Putting Liquor Licensing & Location Under Local Land Use Controls

Interviews with residents indicated that the number of establishments engaged in entertainment did not serve local markets, but a regional tourism market. As such, unregulated allowance for that use places pressure on leasing rates that cannot be met by typical local-serving retail and services. Enabling some measure of local control on location for such uses will relieve market pressure in other locations and potentially enable a more diverse selection of services.

Consider Adding Land Use Oversight to Location of Controversial Land Uses

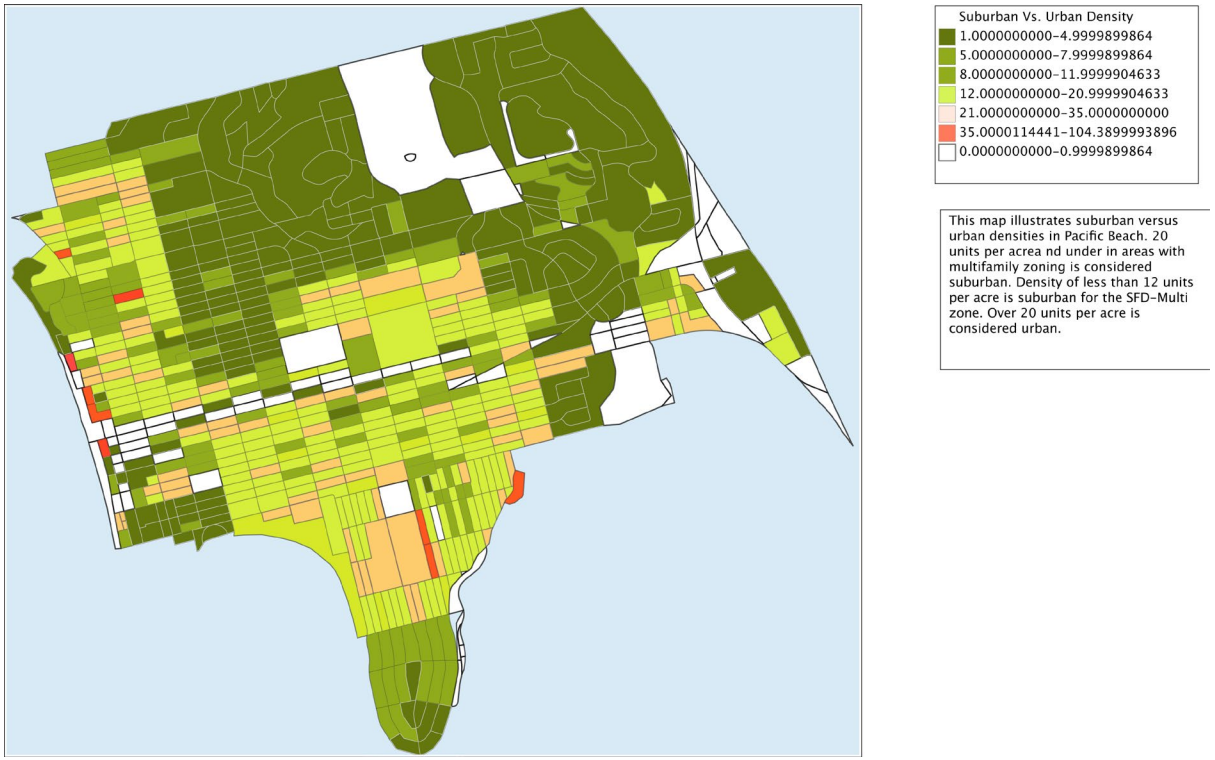
In considering what makes a desirable neighborhood, one needs to consider whether the local land use is to be dictated entirely by regional economic forces or whether local needs should have a voice and a measure of priority. Long-term community sustainability in part relies upon long-term retention of both households and business.

Make Your Corridors Transit Ready

There are corridors in the study area that were once served by streetcars. Streetcars in fact supported the development that occurred and helped shape the urban form that was built early in the 20th century. Since the urban form has already been shaped by streetcar access, adjusting densities and business locations along corridors to most directly support transit investment can be far easier here than in almost any other local community. Fixed-guideway transit offers documented advantages for development and can add to the long-term desirability and viability of the community.

Modify Area Zoning

Area zoning can help to enable long-term sustainability in three ways: increase multifamily residential density; implement mixed use incrementally; and enable no-car projects. Current densities feel high to residents, but an examination of actual densities from 2010 Census data reveals that much of the areas around the corridors are at suburban densities. Mixed use can be more difficult to implement due to cost so it should be applied incrementally to allow for market support to develop over time. Finally, no-car



projects are those built without any provision for parking. These are not likely to be immediately feasible, but if other recommendations are followed for making a more compact and walkable urban environment, such projects will become viable and desirable to future residents who are not interested in automobile ownership. Nationally, the percent of young people who want to drive cars is dropping. Young households are turning to biking, walking and car share programs in increasing numbers, and are choosing to live in urban environments that enable this lifestyle.

Urban Framework

The project SDAT team has created an urban framework plan to address the issues noted by residents and businesses. Among the economic considerations the plan addresses are:

- Creating pedestrian networks for neighborhoods to increase local foot traffic for business
- Connecting Garnet and Turquoise by a greenway at Cass that will create a series of walking destinations with anchors at each end.
- Concentrating retail/commercial destinations
- Enabling land value capture on corridors
- Increasing corridor residential density that will increase retail sales per square foot and increase the market for neighborhood services

Market Demand Zoning

Restoring the urban form of the study area to encourage more economic vitality and to meet future housing needs for a range of household types and incomes will take years to implement. The type of improvement that is desired by the public and proposed in this plan can be encouraged through zoning that seeks to:

- Increase site self sufficiency
- Increase tax revenue
- Enable creative re-use of structures if possible
- Enable immediate opportunities

We are suggesting a different style of zoning that would respond to market demand but also help to create an urban framework for future change. To be effective, such a zoning modification would incorporate the following:

- Market flexibility
- No minimum parking requirement
- District parking solutions required
- Retail only required at designated clusters, not elsewhere
- Residential density to 35 du per acre or more in corridor areas
- Stand alone retail in clustered destinations only
- Retail in mixed use allowed on Garnet, and Turquoise anywhere
- Second floor residential allowed anywhere
- Form for retail required where necessary, but
- Retail use not required until market support exists

Such change will require community plan to target areas for intensification and preserve existing neighborhood character—there is not a one-size-fits all-solution.

The advantages of a more urban zone for selected areas of this study area are that it potentially can:

- Respond to market demand now
- Set form for future market where desired
- Capture maximum value for low-value sites
- Provide new options to profit for existing owners
- Begin a process of change at no public cost

For specific zones included in the study are the following suggestion are made.

Current Multifamily Zone

- Adjacent to corridors allow rise to 35 du/acre
- Leave zone unchanged at transition to SFD
- Allow no-car projects within walking distance of services
- Use community plan to target areas

Current SFD Multi-unit Zone

- Allow rise to 12 du/acre everywhere
- Allow small lot alley loaded development at up to 20 du/acre
- Allow courtyard housing at up to 20 du/acre
- Allow no-car projects within walking distance of services
- Use community plan to target areas

Transportation

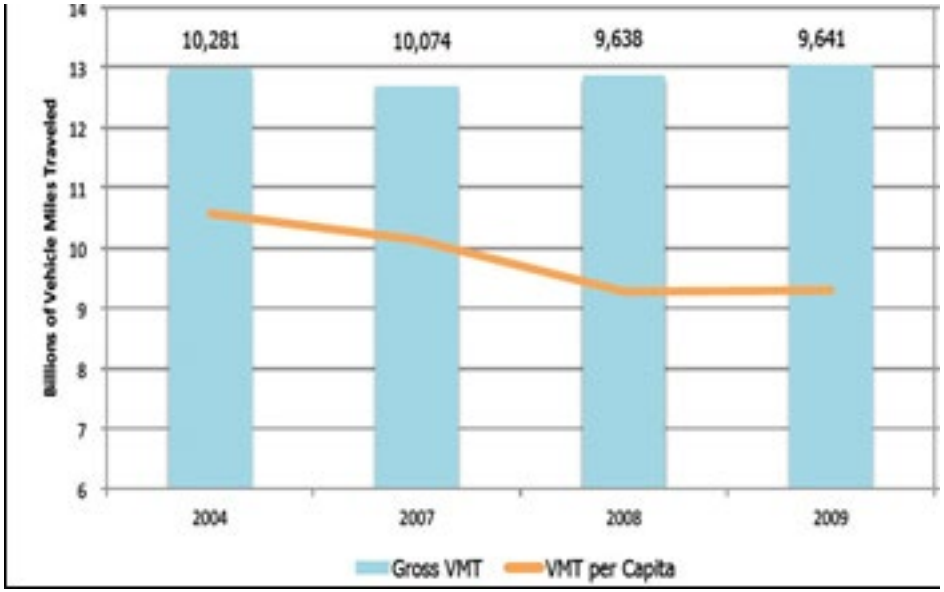
HAVE WE REACHED "PEAK CAR"?

Several indicators including vehicle use, driver's license registration, and public-transit ridership suggest that the automobile age is changing. Technology, urbanization, fluctuating fuel prices, and environmental concerns are changing the way we travel, and young people are leading the shift.

Millennials (18-29 year olds) are getting driver's licenses later or not getting them at all. They take the train, bus, bike to work, or use technology in place of travel. If they need a car, car sharing options are available for rental by the hour. According to the National Household Travel Survey, from 2001 to 2009, driving among this age group declined 23 percent.

Although some of the decline in vehicle use and ownership may be a result of the recession that began in 2008, some of these indicators began to decline earlier and do not appear to be reversing as the economy rebounds.

Another indication of this trend sometimes called 'Peak Car' is the looming expense of transportation infrastructure and the inability of cities and regions to maintain existing highways, roads, streets and bridges, let alone expand the system significantly. The American Society of Civil Engineers reports that the US currently has an infrastructure maintenance backlog of 2.2 trillion. The City of San Diego faces challenges similar to those facing the rest of the nation with a backlog of maintenance and capital improvement needs recently estimated at just under $1 Billion.



San Diego VMT Per Capita

Defining a more sustainable transportation system

An overarching question related to transportation sustainability for communities across the US is, How will the different and possibly competing transportation visions come together?

In San Diego as everywhere, transportation is linked to all aspects of life. The natural environment, economic vitality, and health and social well-being of our community depend on transportation systems that are efficient, clean and equitable. A sustainable transportation system is one that:

- Allows basic access for all,
- Offers a variety of transportation options, and
- Limits waste and uses energy efficiently.

Sustainable transportation projects weigh transportation objectives, impacts to the environment, and impacts to community values equally, and may help avoid delay and other costly obstacles to project implementation.

Start Today – Implementing Low Cost-High Benefit Solutions

Adopting a more sustainable approach to transportation doesn't necessarily mean winning large grant projects or completely overhauling systems. The Pacific Beach/ Mission Beach community is currently taking a lot of steps toward a more sustainable transportation system including: implementing bike share city-wide, supporting bicycle friendly businesses, supporting a strong and interconnected transit system, and moving toward more integrated transportation planning.

There are some additional, low-cost/high benefit transportation improvements that could help support the community's longer term vision. These improvements have proven effective in other similar sized cities including: Seattle, Portland and Vancouver BC. They are also consistent with the themes that emerged during the AIA SDAT workshops including:

- Create a more walkable and bikeable community;
- Improve safety;
- Reduce traffic congestion;
- Provide better travel options with more connection.

Low Cost – High Benefit "Neighborhood Greenways"

Neighborhood Greenways are residential streets with low traffic speeds and volumes of auto traffic where bicyclists and pedestrians have priority. These streets can be coupled with other efforts like rain gardens and other storm water improvements.

Potential Neighborhood Greenways

Through the AIA SDAT workshops with the community, tours of the area, and review of the City's Capital Improvement Projects, several corridors were identified for their potential to serve as Neighborhood Greenways helping to channel pedestrians and cyclists to clearly identified routes and crossings. Two potential east-west Neighborhood Greenways corridors that provide connection to the beach as well as neighborhoods, trails, and the Garnet commercial corridor are Oliver and Missouri. Cass was identified as a primary north-south Neighborhood Greenway connection through Pacific Beach.

Neighborhood Greenways can be established through a range of improvements as simple as signage or community activities to more involved corridor retrofits that install medians, curb extensions, protected paths, etc. Low cost improvements like signage can be incorporated into the City's existing Capital Improvement Projects or completed through public-private partnerships and initiated in the short term.

Low Cost – High Benefit Improvements to Safety, Convenience, and Neighborhood Identity

The weather conditions and the public attitude toward walking, biking and being active in the outdoors create an ideal circumstance for a bicycle transportation system or a network of bicycle facilities that serve people bicycling to work, school or shopping may include:

- A connected system of on-street bike lanes
- Separated paths through high traffic or safety risk areas
- Bike stations at or near primary commuter destinations and modal centers
- Bike lockers and bike racks throughout the city (may be required in development standards)
- Informational kiosks, maps, and on-line tools to help cyclists find destinations, local bike shops, etc...
- A community policing policy or a policy that supports law enforcement interaction with education of the community to improve safety.
- Bicycle police patrols.
- A public service campaign aimed at bicycle commuters as well as motor vehicle drivers.

Community Participation in Neighborhood Traffic Calming Project, Seattle, WA

Examples of Bicycle Boulevards in other US Cities with Similar Challenges

Low Cost – High Benefit - Putting Pedestrians First

Pedestrian safety and mobility should be a top transportation priority for Pacific Beach/ Mission Beach, the City and the region in coming years. It is critical in order to create the kind of vibrant and livable downtown the community envisions. A growing body

of research shows that businesses do better in walkable commercial areas than in areas attracting mainly automobile or drive-to patronage. The Robert Wood Johnson Foundation published research in 2013 that suggests rents in walkable shopping areas can be 27 to 54 percent higher than in non-walkable areas, and walkable shopping areas increase nearby housing values. Improving pedestrian safety and connectivity by creating Neighborhood Greenways to channel both pedestrians and bicyclists to clearly identified corridors and crossings is one step in putting pedestrians first.

Studies show that people are generally willing to walk about ¼ - ½ miles to transit and other destinations and wait about 30 seconds before attempting to cross the roadway. To increase safety and convenience of pedestrians, maintain a block size of 600 feet or less in downtown by installing mid-block crossings on longer blocks and consider providing a leading pedestrian interval (3 seconds before the green light) and/or curb extensions at longer crossings. Installation of a mid-block crossing to continue a Neighborhood Greenway on Oliver across to the beach front would be one way to improve connectivity and safety for pedestrians and help establish a clearly defined corridor where pedestrians are prioritized. Consider pedestrian lighting, medians and other low cost improvements at these locations in the near term.

Incentives and Disincentives

Parking management is another tool to help support infill development while reducing the need to construct expensive new road capacity. A well rounded parking management program can help support a more sustainable transportation system without being perceived as strictly a disincentive.

45 Minute Free Parking – Seattle, WA and Capital Bike Share – Washington DC

Parklet - Olympia, WA

The Pacific Beach/Mission Beach area should consider a parking management program that includes a combination of some strategic parking charges, removal of parking minimum requirements, and expansion of parklets and other similar uses of existing parking, even if only in selected parking control zones. Parklets enhance existing commercial areas by adding more public space for seating, vegetation, signage, etc. through public private partnerships. Employers, developers and property owners should also have opportunities to mitigate parking demand by investing in car share and bike share programs and employee or residential transit passes.

Longer Term Solutions – Addressing Connectivity

During the AIA SDAT workshops, it became clear that the Pacific Beach/Mission Beach community desires a better balance between the regional need for freeways, tourist automobile traffic, and a vibrant family friendly pedestrian environment. Plans for a new trolley station present some opportunities. Improving pedestrian, bicycle, bus connections to and through the study area from the proposed trolley station are critical to the success of the trolley service and will contribute to this balance by providing safe and convenient travel options.

Current research shows an estimated 95 percent survival rate for pedestrians struck by a vehicles traveling at 20 miles per hour or less. This compares with fatality rates of 40, 80, and nearly 100 percent for striking speeds of 30, 40, and 50 miles per hour or more,

respectively. Reductions in vehicle travel speeds on urban arterials throughout the study area is a cost effective way to improve walkability and livability. Comprehensive community-based speed reduction programs, which combine public information and education, enforcement, and roadway engineering, have the best outcomes. Reductions in speed can be achieved through road redesigns, including raised medians, chicanes, road diets, temporary road closures for events, and roundabouts.

Target Intersections – Balboa at Garnet & Grand

The type of traffic control to install at an intersection is one of the most important decisions and can have major safety and capacity implications for the sustainability of the transportation system. The AIA SDAT identified two intersections, Balboa at Garnet and Grand, that are of particular concern. These intersections are also identified in local plans as priorities and were mentioned a number of times by communities members during the workshops. These two locations currently pose barriers to connectivity for the Garnet commercial corridor. They could also be more effectively used as gateways. Two possible options for improving these intersection locations were explored by the SDAT including roundabout installations and "re-gridding" the intersection area.

Balboa at Garnet today and visualization with roundabout.

Roundabouts – Concept for Balboa and Garnet

Compared to traditional signalized intersections, roundabouts have demonstrated benefits. They improve safety by slowing intersection speeds, but at the same time, they keep traffic flowing through the intersection so there is less delay, especially during peak traffic hours, as cars do not stop moving. Extensive research has shown a more than 90% reduction in traffic fatalities at roundabouts over signalized intersections. Roundabouts reduce air pollution by reducing the time vehicles spend idling at the intersection and they save maintenance costs by reducing the amount of traffic control equipment necessary. They can be both functional as well as aesthetic by incorporating landscaping or gateway and way-finding features. The intersection of Balboa and Grand may be best suited for the urban multi-lane roundabout design that would accommodate the traffic volumes that occur even during the peak hours, improve pedestrian safety with installation of pedestrian actuated flashing beacons at crossing locations, and provide a clear gateway to the community.

Re-Grid Intersection – Concept for Balboa and Grand

Complete grid systems in and around congested urban areas, especially where highways intersect with busy surface streets, may help to maintain acceptable levels of service longer, reduce maintenance costs, and improve safety. This type of street and intersection design also supports compact, connected and walkable commercial and residential development.

Principles for Designing Connected & Walkable Transportation Systems

- Maintain a block length of 300-600 feet or provide mid-block pedestrian crossings.
- Maintain road connections vs. dead-end and cul-de-sac streets.
- Maintain road, pedestrian and bicycle connections with adjoining parcels/property.
- Include convenient pedestrian access in site and street designs.
- Minimize curb cuts and incorporate well marked, signed and/or signalized pedestrian crossings in higher traffic areas.
- Incorporate traffic calming.
- Provide off-street paths connections for bicyclists and pedestrians.
- Keep vehicle speeds lower than 35 mph.
- Place buildings to reduce walking distances (minimum lot frontage and maximum building spacing).
- Consider service alleys to provide motor vehicle access behind buildings and parking areas.

Establishing Sustainable Transportation Indicators of Success

The Pacific Beach/Mission Bay/Mission Beach area needs to establish quantifiable, area-specific targets and performance measures derived from safety, environmental, and health objectives. These measures will help the community, the City and the region to anticipate environmental or social impacts of transportation-related decisions rather than trying to react to them after they have occurred.

Several examples of quantifiable performance measurement tools commonly used for transportation systems analysis include the following:

Total Person Travel Capacity vs. Motor Vehicle Level of Service

- Measuring all the person trip making capacity of all elements of the transportation system including roads, trains, buses, sidewalks, bicycle facilities, etc.. can produce more flexibility for infill development, support a vibrant and sustainable commercial core, and move away from using limited transportation funding on expensive road capacity expansion.

Connectivity Indexes

- Average trip length – the distance community or neighborhood residents travel normalized by population or area (e.g., per capita or TAZ). This can serve as a land use mix indicator as well as a transportation connectivity indicator.
- Intersection or crosswalk density - the number of intersections within a defined area (e.g., square mile, TAZ, other). The number of roadway links divided by the number of intersections or nodes – higher index means travelers have more route choice.

Goals for reducing Carbon Dioxide and Air Toxins

- Single-family home with 2 cars generates 12-14 metric tons
- A household in denser urban housing with 1 car generates 6-8 metric tons
- A household in denser urban housing with no car generates 3-5 metric tons

(Source: Climate Trust Portland, OR)

By using these or other similar indicators, the community, the City, and the Region can begin to prioritize projects which will create greater connectivity between state, regional and local systems, begin to put pedestrians first, and move toward a more sustainable and equitable transportation system.

Urban Design

URBAN DESIGN AND SUSTAINABLE DISTRICTS

The "urban design" of a district refers to the composition of the physical components that define a community. Urban design considers the relationships among buildings and open spaces, streets and sidewalks. Urban design considers the distinctive characteristics that create a sense of place and community as well as providing for the civic and economic vitality that well-composed areas possess. Urban design also encompasses the experience of moving to, from and within a district by taking into account the visual and aesthetic experience that the built and natural environment provides.

As a planning profession, urban design considers how a community can change over time using a variety of private and public tools and actions to better reflect community goals.

With these perspectives as a point of departure, the Pacific Beach/Mission Beach SDAT considered how urban design changes could enhance the environmental sustainability of these districts. The observations and recommendations that emerged reflect several guiding urban principles regarding sustainability.

- Compact development - Compact development that optimizes the efficient use of land and utilities tends to have a significantly lower total environmental impact of dispersed and low-density development patterns like those associated with "urban sprawl". The benefits of compact development accrue at a City and regional level.
- Reductions in automobile dependency - Sustainable districts rely less on autos for access to, from and within the neighborhood; they accomplish this through the distribution of uses and through high quality infrastructure for pedestrians, bicyclists and transit.
- Mix and location of interdependent uses within a district - Sustainable districts tend to have a balance of uses that serve many of the internal community needs, rather than requiring long trips or commutes. If a community can provide a meaningful percentage of housing, shopping, working, recreational and civic opportunities within a reasonably close proximity to one another, energy costs and environmental impacts associated with longer distance travel can be reduced.
- Site planning and site design principles - The site planning and subsequent design of projects can reduce energy consumption and use of non-renewable resources.
- Infrastructure planning and design principles – The infrastructure that serves the community can be designed to encourage sustainable land use and development patterns while enhancing walkability, bicycle use and transit choices.
- Other urban design principles consider how these districts could be enhanced over time to meet other community goals, and how these are related to sustainability.
- Enhancing the identity and image - The urban design of these districts is directly related to the self-image of the community and their broader identity as distinctive beach-oriented neighborhoods. Urban design can help address negative associations and help reposition the character and quality of both Pacific Beach and Mission Beach as better places to live, work, visit and enjoy.
- Orientation to the beaches and Bay – The identity of these districts is directly linked to the spectacular beaches and unique urban and natural asset of Mission Bay; enhancing the quality of these places and supportive relationships will benefit the districts as a whole.

URBAN DESIGN OBSERVATIONS AND RECOMMENDATIONS

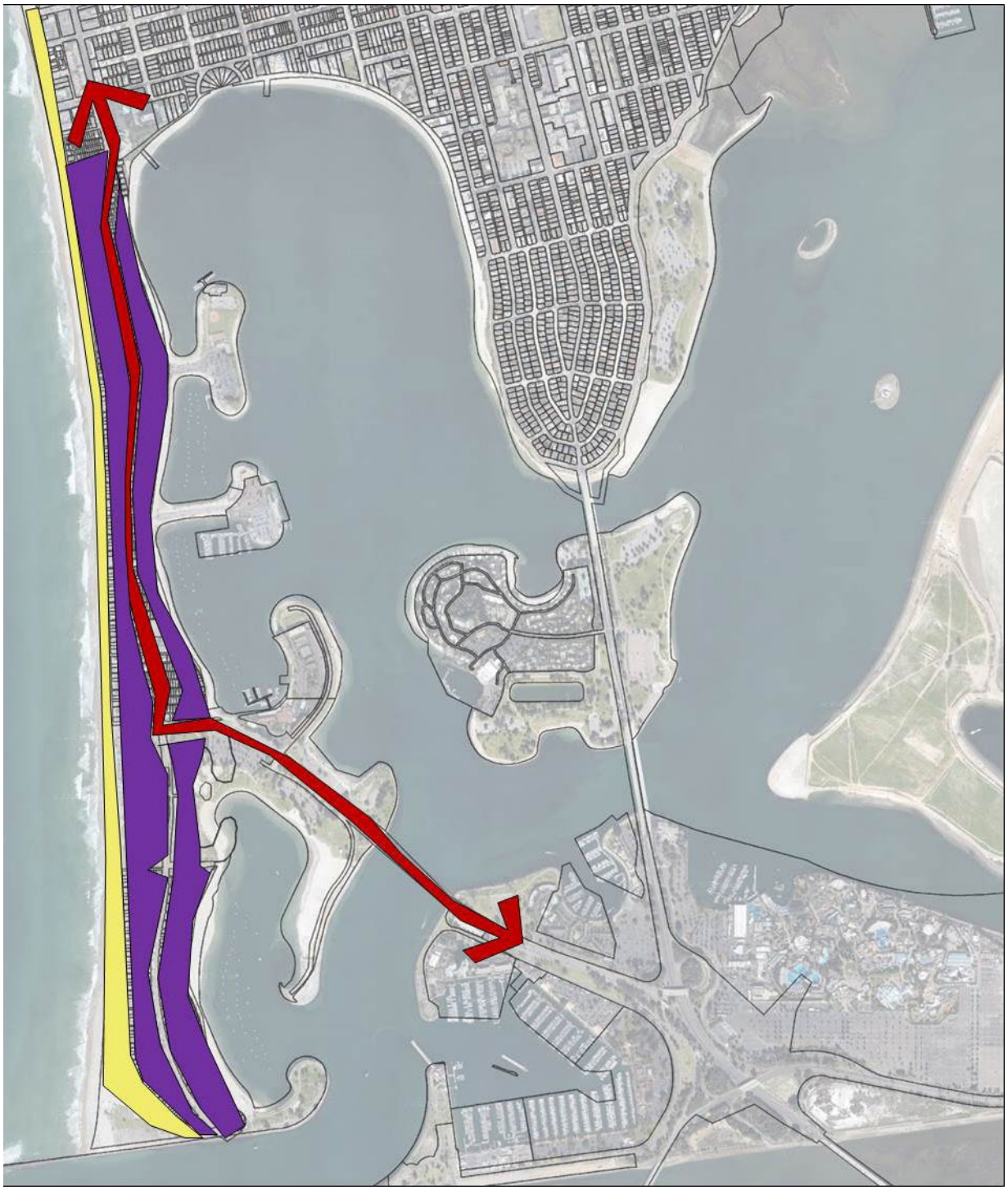
Mission Beach: Access, Parking and Transit

The discussions with stakeholders in Mission Beach and the site visits consistently centered on a few consistent themes. This district's image and economy are directly associated with the beach-going experience, which is enjoyed by many thousands of visitors and valued by residents and renters who trade off the relatively high price of housing for the unusual opportunity to live or stay within a few block of either the beach or Mission Bay.

Recent shifts in the regulation of alcohol have resulted in a major re-orientation of the activities and reputation of the area, and the value of real estate appears to be very high. However, the overall the building stock and the "public realm" are not in consistently good condition. This is a pattern that recurs in many destination beach communities: because these locations are valued for the beach experience, renters, buyers and visitors will tolerate lower quality housing and hospitality accommodations that they might in other places. Furthermore, the seasonal cycles of activity reduces the total annual available sales and rental income associated with year-round communities.

The public infrastructure of walkways, promenades and parks is in a surprisingly poor condition and state of repair. The SDAT team was presented with an innovative initiative to transform street-ends and alleyways into a network of public spaces and access ways geared to pedestrians. This initiative is well aligned with many community goals, and was supported by the SDAT team. Similarly, initiatives are underway and can be expanded to transform the "boardwalk" environment, perhaps building on the historic elements that remain.

One of the fundamental issues, however, is to understand how to expand the economics of the area to support reinvestment including renovation and improvements. In other circumstances, a goal might be to increase the number of visitors and provide food, services and goods that would attract higher average expenditures. However, a severe limitation seems to be occurring. During peak days and seasons, the available supply of parking is effectively fully absorbed, and the lines of traffic reach well beyond the limits of Mission Beach. Even though there is plenty of space on the beach for



beachgoers, the entire district reaches a practical capacity limit.

Bus shuttle programs have not succeeded in the past as an alternative to cars. Remote lots were used with periodic buses.

The SDAT team investigated this issue, and reached the following conclusion. Unless there is a dramatic re-organization of parking availability and conversion to a bus shuttles as the principal means of accessing Mission Beach during peak periods, significant additional access to the beach cannot be practically achieved except for bicyclists and enhance walking or hiking routes. Marginal improvements in additional parking or limited bus shuttle programs are not likely to have any significant impact or advantage relative to current conditions.

A few observations and the associated graphics convey the key ideas that lead to this conclusion:

"Built out" condition- All available land in the district is essentially covered by buildings or parking lots, except for the land used for recreation, open space and circulation.

Limited access- There are only two access routes to the beach, and they cannot be expanded to provide dedicated bus or shuttle lanes.

Parking at capacity and associated congestion and delays -The parking available in Mission Bay reaches effective capacity early in the day on "beach days", but there is some turnover. Combined with the desire of some visitors to "cruise" the beach while waiting for parking, the two roads become significantly congested and stay in that condition for extended periods of time.

Available alternative destinations- Day visitors have other practical alternatives for their free time, including other beaches, Mission Bay venues, and other choices.

Intolerance of delays- Typical day visitors will tolerate delays, but only up to a point. According to discussions with stakeholders, the tolerance for delays is about 30 minutes. A 30-minute line reaches back to points where motorists have options, and can turn around to reach other destinations.

Limited benefits and high cost of additional parking (structured parking) – Adding incremental parking in these circumstances would require parking structures. The increase in beach-visitors would be directly related to the number of additional space required. For example, 400 more parking spaces could probably be easily absorbed by patrons in very little time, and congestion would occur just as it does today, with disappointed motorists still turning back when the delay reaches about 30 minutes. The total number of new spaces and visitors that could be reasonably provided is low because of the few sites large enough to create parking structures. As a result, the increase in visitors relative to the total number of existing spaces and patrons of Mission Beach businesses today would be small, and would have a small impact on the businesses. However, the costs of providing such parking would be very high. Below-grade parking in waterfront environments is exceedingly expensive, with associated costs of $50,000/space or even much more. Above-grade structures are less expensive, but structures that are architecturally responsive to their settings typically require about $25,000/space. As a result, the cost/benefit of providing structured parking for seasonal and peak day use is not likely to result in a positive return in business activity or investment.

Shuttle buses will not decrease delays, but tend to increase the time of travel – Because shuttle buses need to follow the same limited routes as motorists, they will be in the same lines of congestion. When one considers the added time associated with parking at a remote lot and waiting for the departure of a shuttle bus, the total time of travel is increased. Because people value their time and have alternatives, they will not be incented to take a shuttle that typically results in even longer delays than either driving, or going somewhere else.

Transit as the predominant option – The only way to substantially increase patronage of the beach by day visitors is to dramatically decrease the ability to reach the beach by car, and provide bus service that would have acceptable maximum delays. This approach (which is used in some seasonal and recreation venues. This approach would effectively prohibit car access by day users by limiting parking for to residents, renters, hotel guests and a few other essential categories. This approach would require having very large parking lots available along reasonable accessible routes

where delays would not be significant. The total supply of space would need to provide for a significantly greater number of parking spaces than available at Mission Beach for day visitors today – otherwise there is not advantage to shifting to a new system. These parking lots would need to be served by a fleet of buses with very short turn-around intervals between arrivals and departures, so that patrons can reach the beach within an acceptable time frame, so they don't choose other options for destinations. The logistics and costs of such an operation are considerable barriers, and the cost/benefit of such an approach in economic terms is not likely to be positive.

As a consequence of thee considerations, the overall strategy for improving circulation and access choices would be to provide for enhanced bicycle and pedestrian access from nearby areas or consider water shuttles within Mission Bay, rather than either increasing the number of vehicles or funding peak period bus services that do not provide an effective convenience.

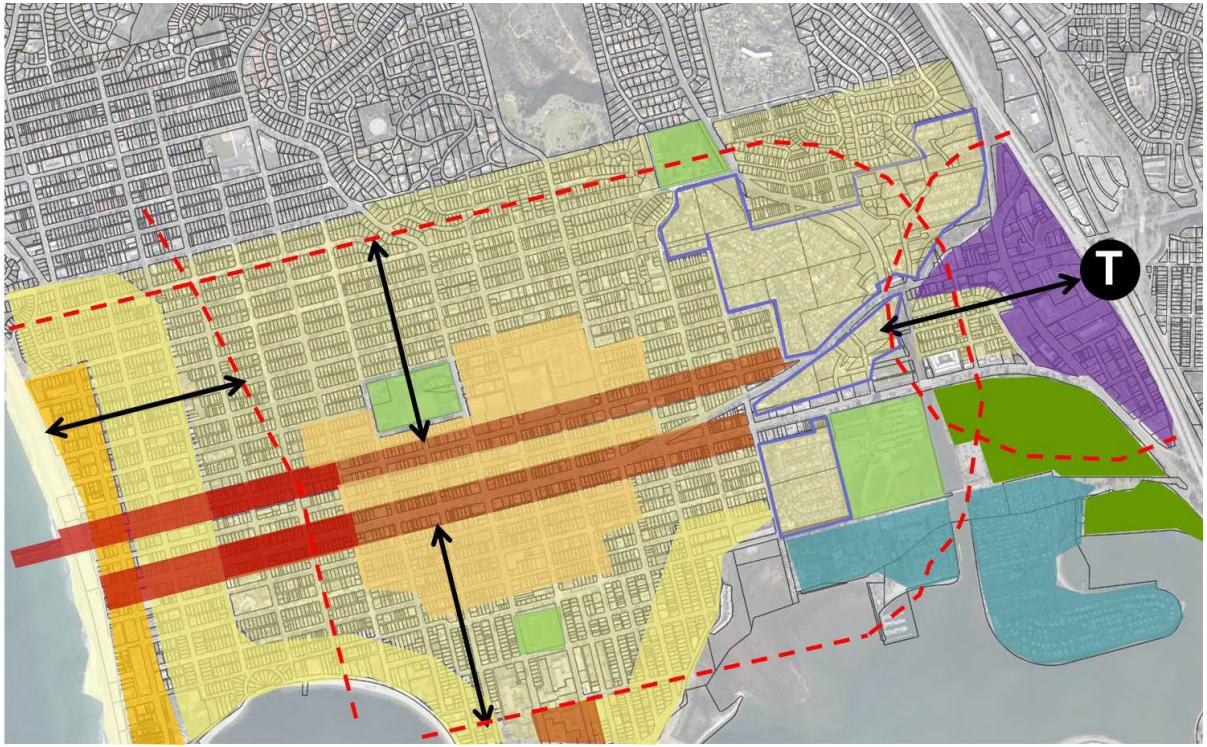
PATTERNS OF NEIGHBORHOOD DEVELOPMENT

Land Use Distribution and Walkability

Sustainable patterns of neighborhood development provide walkable connections between frequent destinations. As a rule of thumb, many people will routinely undertake walks of up to about ½ mile if they connect aspects of daily life - residences, amenities, shopping and restaurants, workplaces, services and education. If transit stops are within this same ½ mile radius, then the transit services extends the connections among destinations that it reaches.

The SDAT team prepared a simple evaluation of the distribution of land uses within Pacific Beach district to understand it relationship to sustainable patterns that can contribute to a high quality of life. This evaluation did not include Mission Beach, recognizing its unique character, specialized uses and configuration.

The results were graphically represented in the final presentation, and underline a key observation. The allocation of commercial and retail corridors within PB and the distribution of housing is very well suited to a walkable neighborhood. The corridors along Grand Avenue, Garnet Avenue and Ingraham Street are perfectly situated as resource corridors for shops,



Typical convenient walking distance to transit, shopping, and amenities (what's within 1/2 mile.)

stores, schools, offices and services within walking distance of the houses and apartments in nearby areas. In addition, a significant percentage of the residential blocks are within highly walkable distances to the beach or Mission Bay.

However, the allocation of land for retail and commercial use appears to exceed the likely demand for such uses now or within the foreseeable future. This is evident in the types of uses and the rental levels for business and commercial properties along some segments of the corridors, and in the apparent lack of repair and maintenance.

The resulting land use and urban design strategy can be to focus neighborhood-serving retail and commercial uses along segments of these corridors, while allowing higher density residential uses to fill in underutilized sites in between and above retail and commercial space. This overall approach focuses new development in areas that can be well served by transit and is at the center of a walkable environment. It entails zoning that supports this type of development and infrastructure improvements and design standards to ensure that the sidewalks and crosswalks are pedestrian friendly and attractive.

THE FORM OF DEVELOPMENT: SCALE AND ARCHITECTURE OF "INFILL BUILDINGS"

The evolution of the patterns of development both PB and Mission Bay reflect the incremental transition from relatively small single-family homes towards increasingly dense multi-family buildings in many areas. The

zoning has reflected growing demand for various types of multi-family buildings, and there are many variations in the built outcomes. Some of the multi-unit housing has been accomplished by adding incremental development in the rear of deep lots that have alley access. Other projects have absorbed a series of smaller parcels, and placed buildings so that they maximize the square footage devoted to rentable units. These include building complexes that provide for circulation along exterior walkways and include narrow courtyards to bring access and light into the complexes.

The result has been inconsistent in terms of the scale, character and provision of landscaping or open space conducive to a sustainable community. Other communities have used zoning and design standards to manage the form of new development so that it provides the best long term value for the entire community.

The SDAT team and its supporting local professionals performed a basic evaluation of the building forms and their relationships to the pattern of blocks, parcels and uses. Using photographs and computer models, the investigations suggest that basic rules could be created that would allow new buildings and additions that would "infill" low density lots in strategic locations, while respecting the scale and variety conducive to an attractive and walkable neighborhood. The studies result in several urban design suggestions:

- **Housing with the courts and variable setback along the streets**- Because of the proportions of typical blocks, housing and some multiple use buildings can be proportioned and designed to have shallow landscaped courtyards or variable setbacks along the street that have landscaped features. This approach can support a pleasant and varied scale along sidewalks and expand the visible landscaping and shade provided by tree plantings. In contrast, undifferentiated building facades along relatively narrow sidewalks can result in a relatively unappealing walking edge, particularly if is lined with concealed parking spaces or shuttered residences.
- **Multiple units on narrow parcels-** The pattern of street and alleys provides an opportunity to create a sequence of units within deep parcels that "stack" units from the front to the back of the lot. This approach has been employed on a number of parcels in the neighborhood, where the rear units replace garages or fill backyards. This approach can be very successful in adding residences while maintaining a low-scale appearance similar to its traditional scale along the street. Guidelines need to be created to ensure that adequate light, circulation and parking access are

Existing scale and type of development on sites that could become available for rebuilding corridor segments with residential/mixed use buildings.

Rebuilding corridor segments for residential/mixed uses, with buildings that use courtyards and setback to provide landscaping and intermediate scale buildings close to single family housing.

maintained so that the quality of all of the units is appropriate and an asset for the neighborhood.

- **Flexibility in ground floor uses**– The need for retail and commercial uses on the ground floors of developments along the major avenues may be limited in the mid-term, but could change over the long term. Rather than requiring such uses, design standards and zoning could ensure that the ground floors of buildings in certain locations be designed so that they can be adapted, over time, to non-residential uses as the market shifts.

THE FABRIC OF STREETS: TRAFFIC CALMING AND WALKABLE NEIGHBORHOODS

As a "grid" community, the historic layout of avenues, streets and alleys was established as an efficient method to subdivide blocks and create buildable parcels. The size of the blocks and the orientation of the streets were very well suited to the early types of development – small houses and bungalows along long blocks oriented so that the frontages were on streets leading to and from the water, while the shorter side streets lead to the major connecting avenues. The streets were very wide; so wide that they easily accommodate traffic in two-directions and generous parking on both sides of the street, with room to spare.

The grid of streets and intersections can be improved and managed to better balance the needs of motorists, bicyclists and pedestrians. The network of stop signs, crosswalks, and intersections can be organized to achieve specific goals to become a more sustainable district – as well as enhancing livability and property values.

As the community considers various approaches, it should consider the many benefits associated with narrowing street widths in many locations and using the land to provide a greener, more attractive and more pedestrian-friendly environment. This can be accomplished through strategic improvements, while respecting the ongoing needs to accommodate parking and safe vehicular circulation.

Several diagrams in the presentation pointed to the ability to prioritize pedestrian improvements and traffic flows to emphasize the pedestrian environment and decrease the negative influence of automobiles. In simple terms, the dominant street directions leading to and from the water and beach could be prioritized for pedestrians with improved sidewalks, landscaping, excellent crosswalks and other landscape and

Adding units in a bungalow neighborhood: The form of new development does not need to completely fill available lots.

Adding units in a bungalow neighborhood: Backyards can be used for appropriate development that creates small -scale components and takes advantage of alley access.

streetscape enhancements. The crossing streets need to be evaluated relative to their role in distributing traffic, and appropriate improvements undertaken to calm traffic.

The underlying logic of the street and alley grid was readily apparent as development began, with the street and avenue frontages stretching back from the beach.

Streetscape, sidewalk and circulation enhancements can re-emphasize the connections to the beach and Mission Bay.

A computer illustration was employed to demonstrate a simple idea with many potential benefits. It indicates how some of the street width could be absorbed by widened landscaped strips that could be planted with attractive but drought-tolerant trees and plants to add shade and convert unnecessary asphalt into amenities, while still preserving curb-side parking where it is needed. This illustration is included within scenarios for streetscape improvements described at the end of this section.

NEW TRANSIT ACCESS & OPPORTUNITIES FOR TRANSIT-ORIENTED DEVELOPMENT

Over the long term, the advent of light rail transit at the eastern edge of Pacific Beach can bring substantial opportunities to become an increasingly sustainable community and participant in an increasingly sustainable region. As part of the Mid-Coast Corridor Transit Project, plans are being advance to finalize the siting and configuration of new transit station along the existing rail corridor, which is located immediately east of the I-5 highway alignment. Preliminary design studies have been created for a transit stations near Claremont Drive and near Balboa Avenue.

The prospect of a rail station near Claremont Drive may be most beneficial to residents of Pacific Beach or Mission Beach who can reach the station by bicycle, or for residents whose total trip time will be reduced by parking their cars or using buses to make connections at the station. It is unlikely to significantly influence land use on the western side of the rail station, however, because it is bordered by Mission Bay.

The circumstances may be very different in the vicinity of Balboa Street including other nearby sites that might be considered by the City and SANDAG for final siting of a rail station.

The land along the edges of I-5 have been relegated to storage, parking and light industrial uses. The area is heavily congested by vehicle travel today along the corridors that lead in and out of PB and serve as connectors for districts to the north, south and east. Much of the congestion is associated with the commutes

to and from the growing employment and institutional centers to the north of PB that can be reached by I-5 and its connecting network of interstate highways and arterial corridors.

Existing conditions adjacent to a potential transit station near the Balboa Street underpass and I-5.

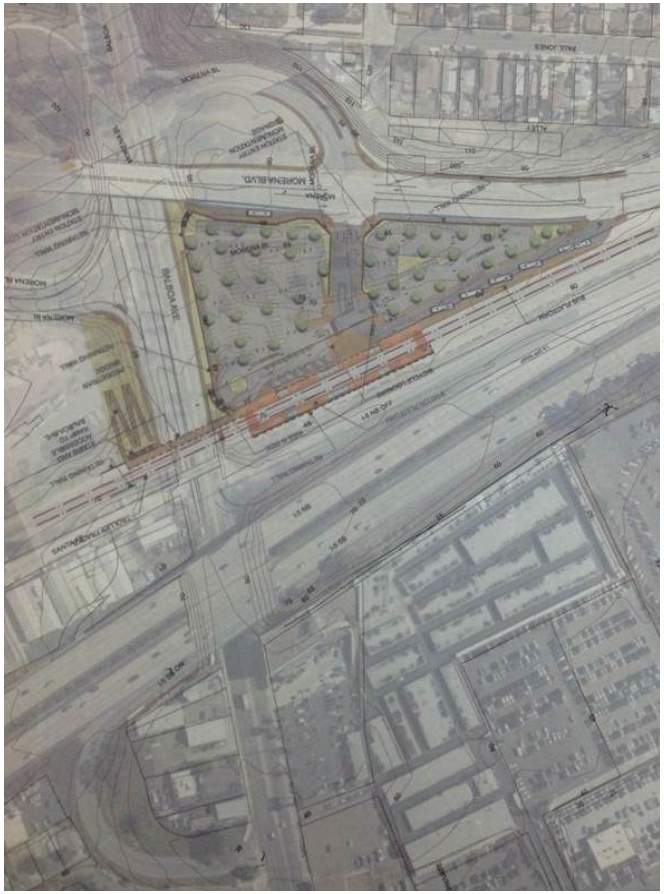
Light that might be incorporated into transit-oriented development.

The community should consider the long term benefits of reconstruction and redevelopment of the land adjacent to and near the new rail station for higher and better uses. As a regional strategy, it makes sense to distribute some of the future growth in employment and population to transit-served nodes that are closer to established residential neighborhoods. Over the long term, new uses could include job-generating office, research and development, medical uses or even retail uses that could benefit PB. An increasing number of residents could live, work and enjoy the community without subjecting themselves (and others to long commutes in cars to far-off locations. People within the community could walk or bicycle to new development near the rail station – or even live there.

The urban design and architecture participants in the visioning process developed sketch plans to explore the conversion of some parking and storage areas into new development that would line both sides of the highway and rail alignment, and be connected to PB with a fly-over pedestrian bridge that would signal the link to Pacific Beach and provide a visible and attractive route for people walking to and from the trains. Development would need to take advantage of the grades in the area to depress and conceal parking below landscaped decks. The vision does not require displacement of auto dealers along Mission Bay Drive, but would require consolidation or off-site storage in some cases. The planning sketches imagine the integration of new facilities with other local landmarks and the Kaiser Permanente medical center.

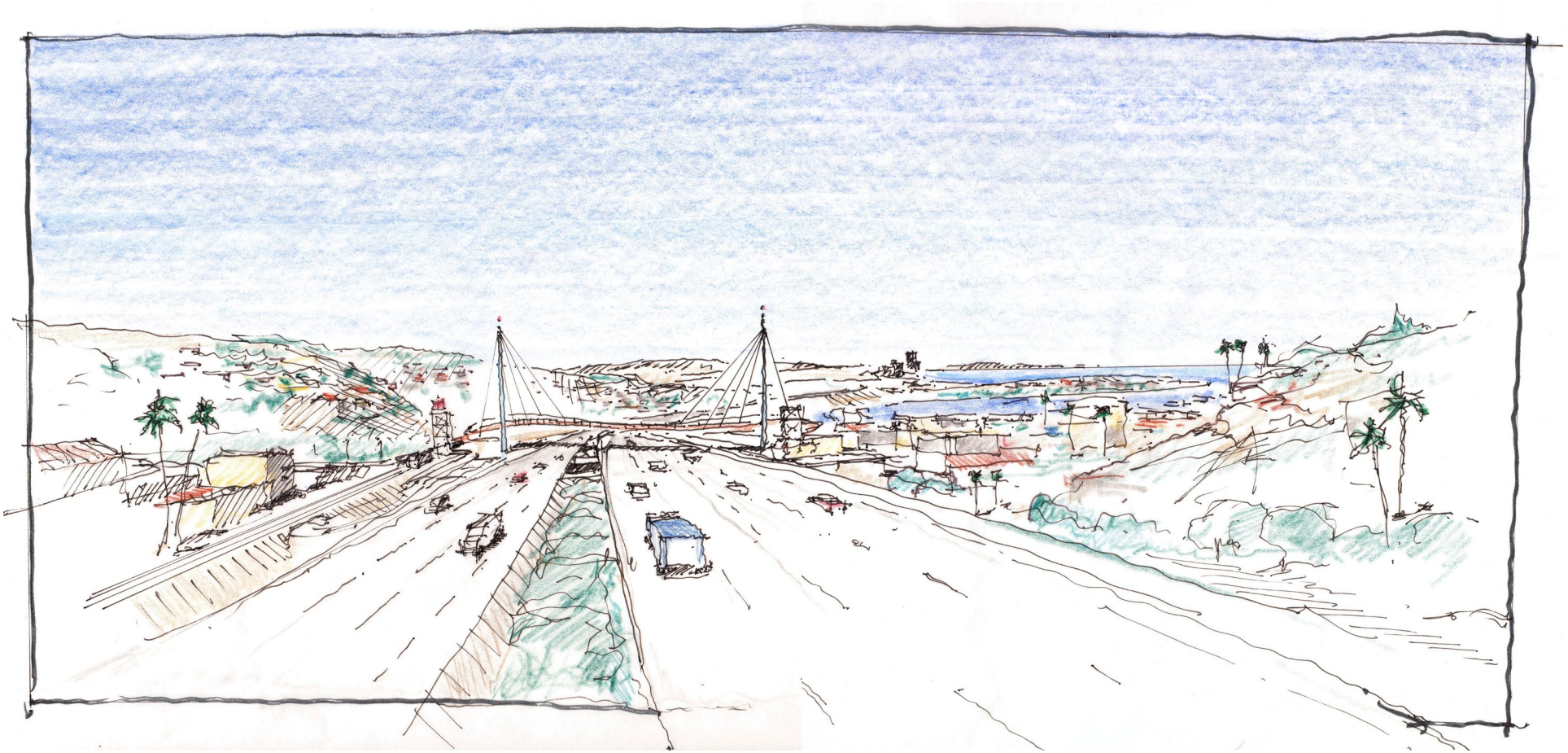
MOVING TO, FROM AND WITHIN: URBAN DESIGN EXPERIENCE

As part of the visioning process, an urban design perspective was brought to the experience of motorists and pedestrians as they move to, from and within Pacific Beach. The team was struck by the lack of consistent accommodation of pedestrians and bicyclists and the untapped potential to create a more attractive sequence of travel and a more green and appealing environment. The team envisioned how a series of strategic improvements along streets and sidewalks that could help transform the image and experience of PB to be a more walkable and sustainable place.



Above: Recent studies indicating a possible rail station layout with a parking lot and bus plaza to the east of I-5.

Right: Sketch of new transit-oriented development extending along both sides of I-5 and a pedestrian bridge linking the station to Pacific Beach.



Linking transit and the neighborhood can create a landmark and gateway to Pacific Beach from many perspectives, including those traveling on transit or on I-5.

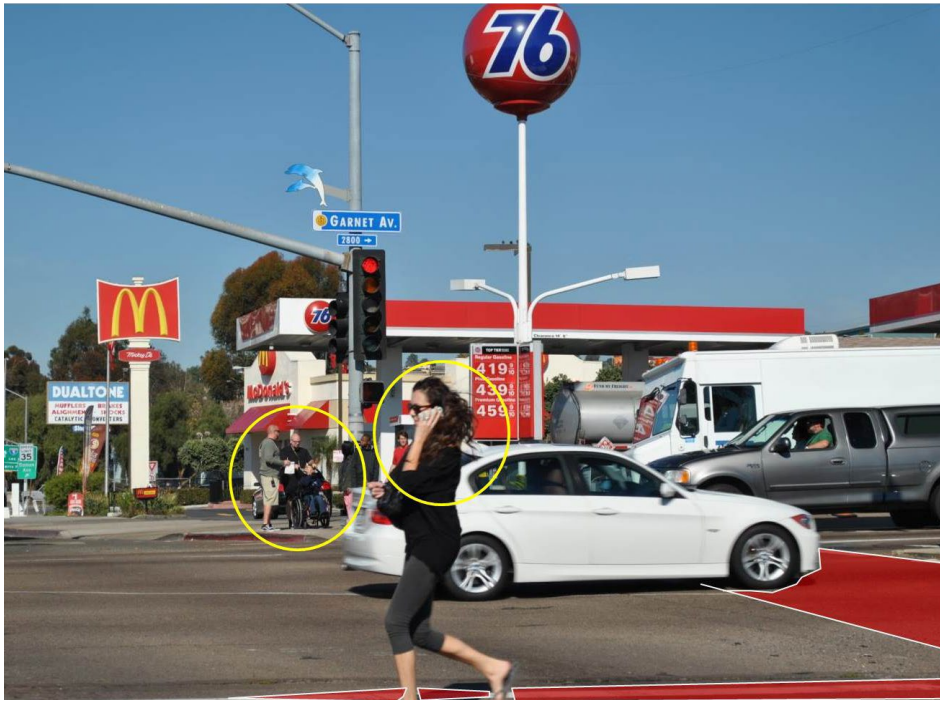
A scenario was imagined and illustrated. It considered the visual experience of someone returning home to their house on Missouri Street from work in downtown San Diego, getting off of I-5 and proceeding on local avenues and streets to their home on a typical block – say between Fanuel Street and Gresham Street. The team considered the experience of that same resident if they took a walk from their house to the beach to enjoy the views at the end of the day.

The trip begins with the exit off of I-5 north – using a typical "slip ramp" with no indication that this is the gateway to a significant and distinctive district of San Diego.

Our driver might use a portion of Mission Bay Drive to move into Pacific Beach. The lanes on this roadway are particularly wide – wider than may be needed according to emerging traffic engineering practices- and the pedestrian and landscaping border is exceptionally narrow.

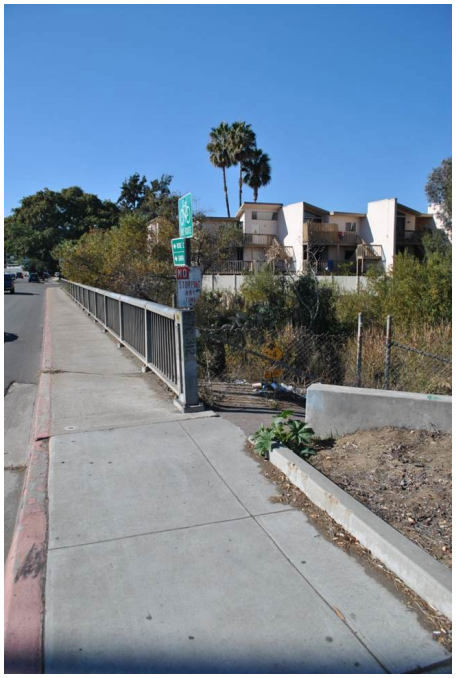
The existing visual environment is auto-dominated, with large signs and parking lots dominating the view of the driver. A strategic program to provide appropriate street trees and other plantings could be transformative and provide welcome shading.

Our driver would arrive at one of the busiest and least-pedestrian friendly intersections imaginable: the intersection of Mission Bay Drive and Garnet Avenue. Described by area residents as a barrier to pedestrians, it took only a few moments of observation to see that lots of people routinely cross here. But the pedestrian way is poorly marked and extremely wide. There are opportunities for simple improvements like median islands to serve as temporary stopping points, well marked crosswalks, "count down" crossing lights and signage – that would make this intersection less intimidating.


GARNET AV.
DUALTONE


1-800-GO CHEAP
76

Continuing along Garnet Avenue, there is a sequence of roadway segments and sidewalks that are distinctly unfriendly to pedestrians and bicyclists. For example, the connection to the Rose Creek Trail is hardly visible, and signs have to be turned sideways so that they won't intrude into the narrow sidewalk and block pedestrians or bikes.



In many locations along the arterials like Garnet Avenue, even, marginal increases in sidewalk widths and landscaping, and adequately marked pedestrian crosswalks would be an enormously important change and welcome accommodation for pedestrians.

The angular convergence of the connector between Garnett Avenue and Grand Avenue creates very awkward and dangerous conditions, strange development parcels and places that are very difficult for pedestrians, bikes or motorists to negotiate. There are certainly better ways to create these connections, and a focused study should be used to explore better alternatives. Under the right conditions, traffic rotaries can be created that channel traffic and reduce overall delays, add significant new landscaping, while directing pedestrian traffic to outside edges and designated crosswalks that are more safe. The shift from an asphalt-dominated view to a perspective with a green centerpiece can be easily envisioned.

Continuing towards our hypothetical resident's house, there are many locations where basic sidewalk, crosswalk and landscaping enhancements could create a more pleasant and safe environment for everyone. The SDAT team underlined the successful character of the streetscape within some of the commercial districts, providing lively sidewalk environments and convenient curbside parking that businesses need.

Arriving at home, our resident may choose to park in front of their house. However, PB has an excellent network of alleys which can provide access to parking at the rear of many residences. These alleys have been preserved and regulated to a higher degree than some comparable communities, and this will be a long term benefit for PB.

From the house on Missouri Street, our resident could walk out the front door and turn towards the west. The experience would be significantly enhanced if the roadway width was rescaled to provide for its actual use, and excess asphalt converted to new landscaping.

The sidewalks and crosswalks could be improved along the entire route towards the water with enhance crosswalks and curb extension to slow turning traffic and better protect pedestrians.

Arriving near the beach, the sidewalks and landscaping are already enhanced, in keeping with the high-value multi-family residences that line the street near the beach. But the sidewalk abruptly ends with a barrier and an intervening driveway. The walk has reached a deadened end.

Our urban designers noted that the signage is appropriately discouraging for drivers and parked cars. What the signage and the improvements could do, however, is explicitly encourage access by pedestrians and ensure that the connection to the beach and the waterfront is pleasant and safe for everyone in PB.

Green Infrastructure

GREEN INFRASTRUCTURE AND SUSTAINABILITY

The SDAT solicited commentary and perspective from a variety of invited stakeholders. On Day 1, the morning was spent on a site visit, and the SDAT heard from a variety of advocates for restorative projects in the Pacific Beach and Mission Bay study areas.

The afternoon of Day 1 included stakeholder engagement session. The Green Infrastructure group included neighborhood advocates, location professionals and public officials. Steve Benz and Adam Beck represented the SDAT for the Green Infrastructure group.

In summary, the stakeholders focused on the impact on water quality of Mission Bay. Several specific issues were discussed in some detail. The following comments were recorded:

- Articulating the benefits of green infrastructure to the public, especially in terms of allocating public funding resources for major initiatives such as wetland restoration in Mission Bay.
- The protection of the Bay is paramount.
- Maintenance resources (City) are increasingly scarce.
- New revenue streams need to be opened, leverage leasehold sharing and city public works infrastructure investments.
- San Diego is "water vulnerable" and depends on water for urban life support as well as a recreation/tourist based economy.
- Need to develop a water culture, where upland neighbors are connected to downstream effects on water quality.
- Develop upland watershed strategies that are source-based, supplementing end of pipe solutions.
- Sustainable solutions should address energy efficiency.
- Need to educate at the schools, about the value of ecological restoration.
- Need to consider the triple bottom line of sustainability—economy, ecology and equity.

The SDAT evaluated watershed strategies to restore functional health to the neighborhoods, in response to the issues identified above and the observations made during the site visit. Central to the loss of ecological function within the Bay was the high degree of urbanization within the study area. This resulted in a range of impacts including:

- Lack of groundwater recharge and plant evapotranspiration due to large amounts of pavement, buildings and lack of landscape surfaces; and
- Increase in stormwater pollution as a result of accumulation of urban pollutants on hardscapes, including herbicides, pesticides and nutrients which are washed off and transported to receiving water bodies during rainfall events.

Additional environmental issues identified within the study area included:

- Increase of urban heat island effect from urban pavement and dark roofs, and a lack of street trees and urban parks;
- Increasing greenhouse gas emissions from a reliance on automobile use, spurred by a lack of public transit and bike infrastructure; and
- Loss of natural habitat due to lack of mass plantings and decreased biodiversity within urban landscaping.

The dominant issue presented to the GI SDAT group was the need to keep Mission Bay healthy. Urbanization degrades water quality in a number of ways. Urban pollutants accumulate in the urban environment and are flushed downstream in large storm events. This pollutant-laden plug flow degrades Mission Bay to a point where swimming and recreation is not recommended for several days after a storm. The City is undertaking storm drainage and water quality improvement projects to assist in managing this pollution and minimize the impact to the Bay.

The relationship between the Bay and its watershed perhaps has been historically under-appreciated in the City. Research shows that receiving water is compromised when the level of development of a watershed reaches about 15 percent of impervious cover. Paving and buildings in Pacific and Mission Beach neighborhoods amount to a much higher percentage of ground cover and prevent the natural processes of groundwater recharge through soil infiltration and runoff reduction by means of plant water uptake. Further, land uses introduce urban pollutants that are carried in stormwater directly to the Bay. Source control of stormwater will reduce pollutant loadings downstream in the Bay and Beach.

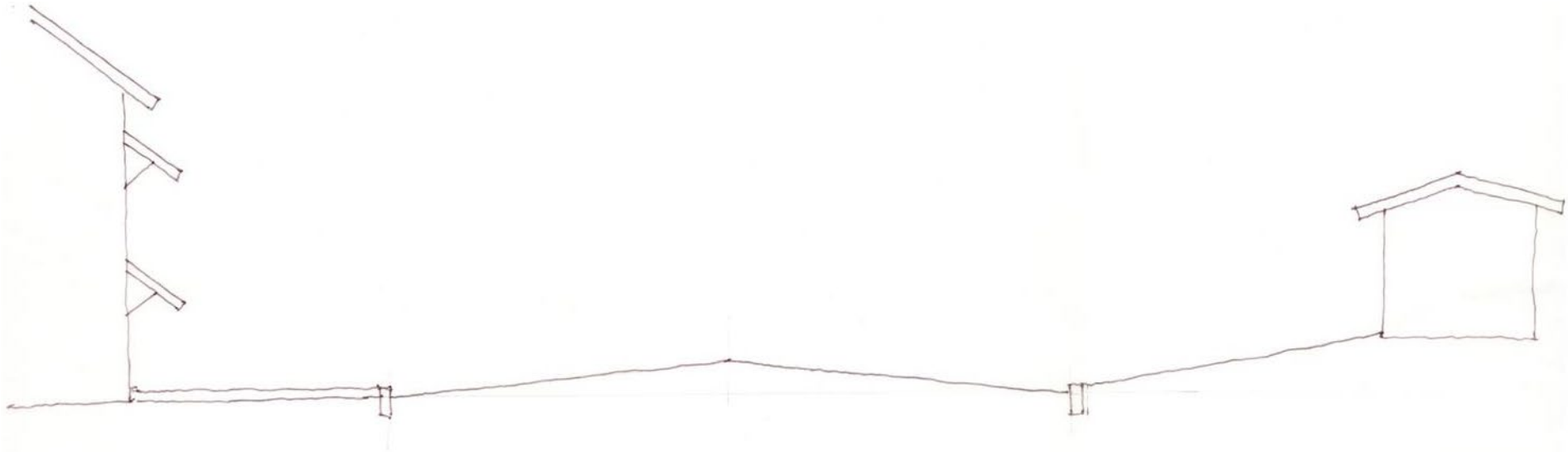
Whilst incremental stormwater infrastructure improvements will enhance outcomes for the Bay, overall Bay health will continue to decline if neighborhood and catchment-wide repair is not considered.

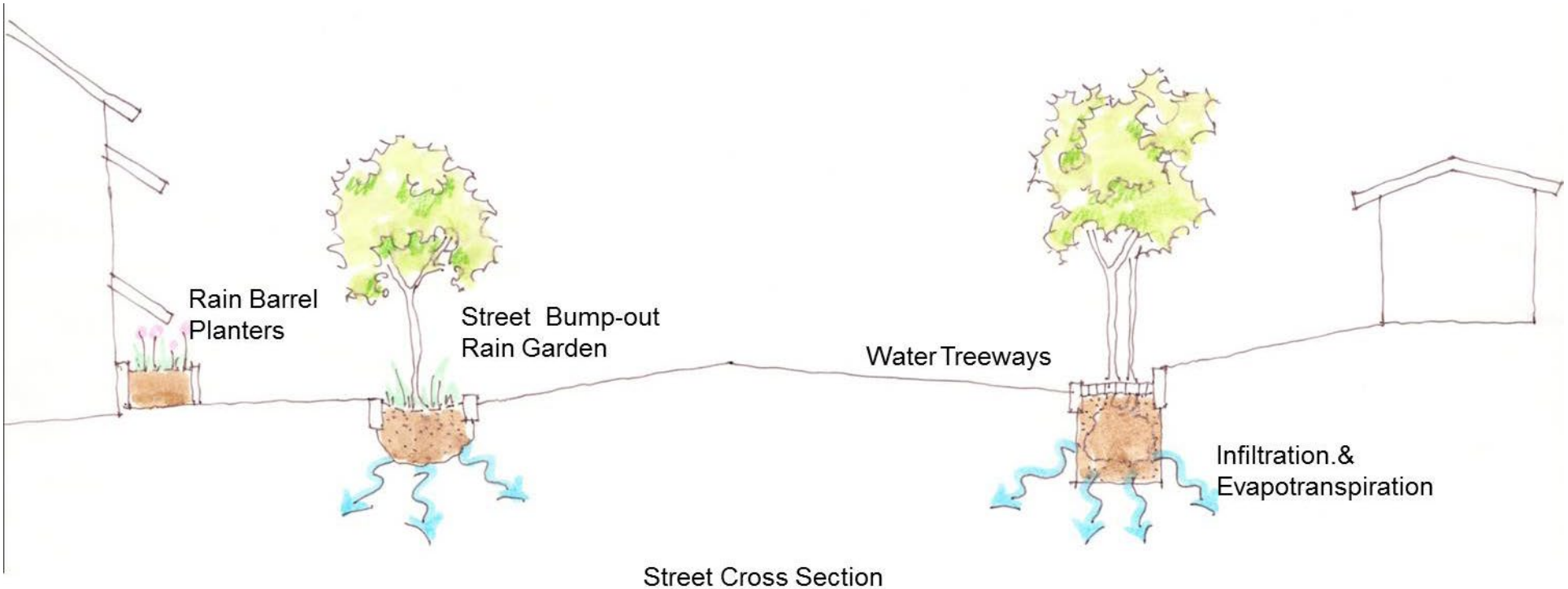
A green infrastructure retrofit strategy for the study area was considered an approach that could provide a range of solutions for maximizing source side infiltration and reduction of stormwater volume. This approach could be piloted in key areas of the

study area, such as high streets, and then replicated throughout the areas neighborhoods. The package of strategies could include:

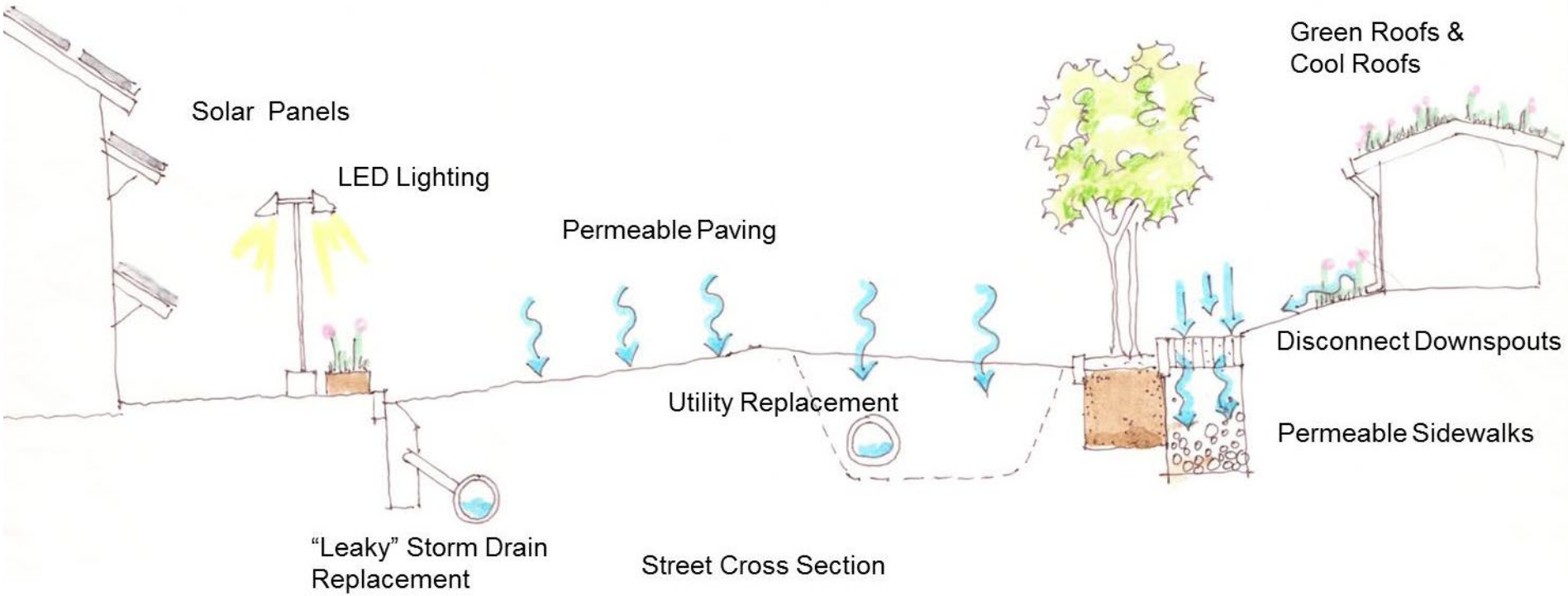
- green roofs;
- infiltration planters;
- rain gardens; and
- permeable paving practices.

Examples of how these strategies could be delivered as part of street improvement works are illustrated below and on the following pages.





Street Cross Section


Solar Panels
LED Lighting
Permeable Paving
Green Roofs &
Cool Roofs
Disconnect Downspouts
Utility Replacement
Permeable Sidewalks
"Leaky" Storm Drain
Replacement
Street Cross Section

The SDAT also recommended that the City consider existing programmed improvement works that could be leveraged, and green infrastructure principles be embedded into all street reconstruction works in the study area as they are undertaken. Sidewalk widening and street bump-outs are opportunities to re-purpose civic land to be more water-responsive than the current conditions provide.

Successful delivery of such strategies will rely on a number of key success factors, including:

- The establishment of common green infrastructure goals among the City, local businesses and neighborhood advocates. Shared ownership of the need to invest in such improvements is a key starting point;
- Ensuring that the green infrastructure improvements are replicable at scale, thus potentially requiring innovative funding solutions and support from the private sector;
- Ensuring that the delivery of green infrastructure solutions are seen to provide not only an environmental dividend, but also an economic benefit, by enhancing street scape, walkability and therefore street vibrancy; and
- A strong monitoring and reporting program that collects data to demonstrate outcomes are being achieved, and that the value of investments is being realized.

KEY STRATEGIES	COST	BENEFIT
Buildings + Infrastructure		
• Utility Replacements	H	M
• Permeable Sidewalks	L	M
• Overlay Permeable Pavements	H	H
• Curb Bump-outs	M	H
• Street Tree Replacements	M	M
• Detention Structures	L	H
• Downpipe Disconnection	L	M
• Structured Treeway	M	H
• Rain Garden	L	H
People + Behavior		
• Main Street Engagement	M	H
• Green Streets/Alleys Policy	L	H
• Demonstration Projects	M	H
• Community Awareness	L	H

SUMMARY OF INVESTMENTS	PROGRAM		
	Now	Next (1-3 yrs)	Later (5+ yrs)
Public			
• Utility Replacements	✓	✓	✓
• Permeable Pavements		✓	
• Policy	✓	✓	✓
Private			
• Downpipe Disconnection	✓		
• Residential Rain Gardens	✓	✓	
• Green/Cool Roofs		✓	✓
Public Private Partnership			
• Permeable Sidewalks	✓	✓	
• Curb Bump-outs		✓	✓
• Rain Gardens		✓	
• Structured Treeway		✓	✓
• Demonstration/Research	✓	✓	✓
Third Sector (Non-Profit/Academia)			
• Demonstration/Research	✓	✓	✓
• Main Street Engagement	✓	✓	✓
• Community Awareness	✓	✓	✓

PACIFIC BEACH SDAT STAKEHOLDER ENGAGEMENT SESSION
GREEN INFRASTRUCTURE AND SUSTAINABILITY

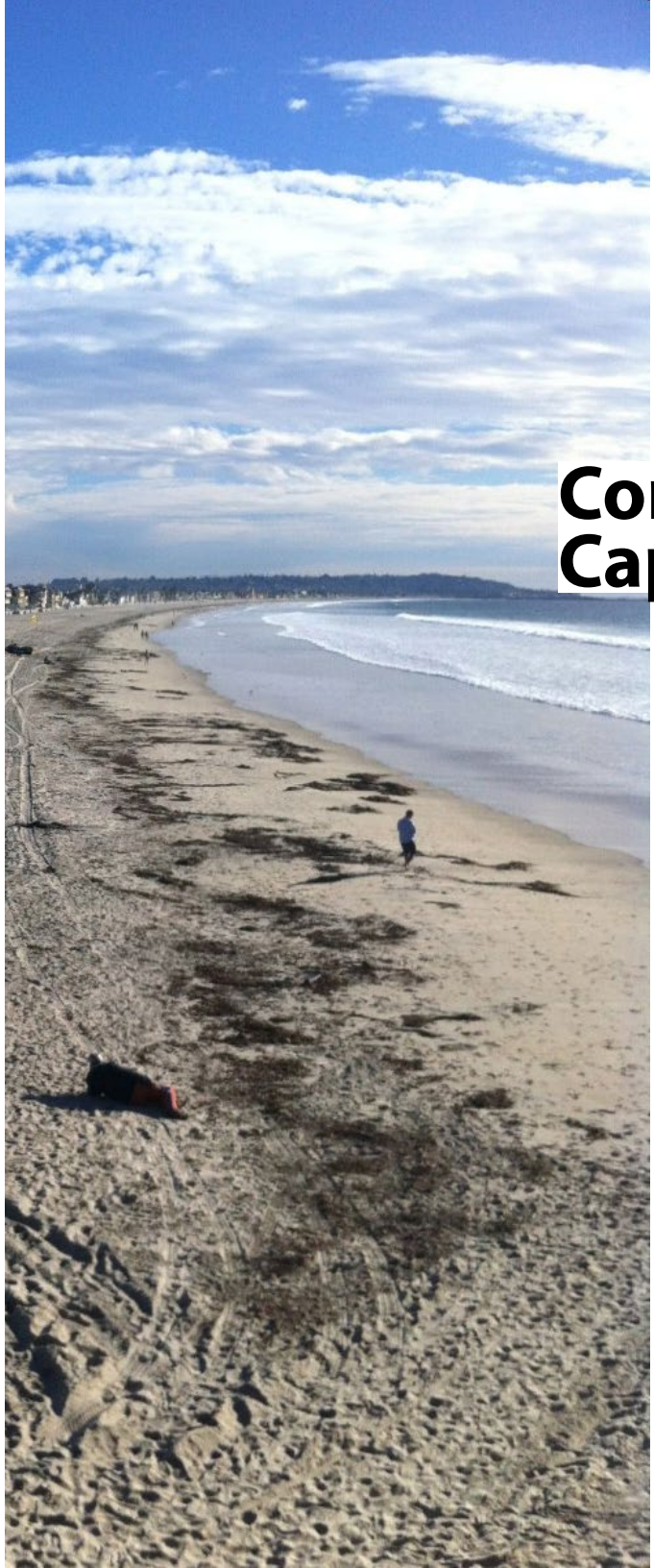
Introductions/Motivations

- Understand ROI on GI
- How do we catalyze private investment
- How we use our water
- Understand the community vision (city officer)
- What role the school districts serves and what pilot projects they can get involved in
- How we can make something happen, planning can take a while
- How can we implement things
- Inspire people to do great things
- Want to drive sustainable architecture, but broaden to a neighborhood level
- Create a model that can be used to implement and then replicate
- Learning how local government can play a part, and replicate elsewhere
- Change behavior to ensure water conservation is the norm
- To make plans with the rest of the community to protect the marshes in the area
- For the educational community to engage locally and help facilitate better outcomes
- Ensure we have protective policies that get developed and enforced
- Ensure collaboration results in creativity
- Not to water-down everyone's goals
- To connect with the community to better design the projects that will achieve the goals the community sets (city officer)
- Protection the beauty of the area, nature/recreation etc
- How do we contribute beyond the 3 days, the implementation
- Would like to see the marshes improved, and rose bay expanded
- Corridors for connection, natural and human made
- Protect upper watershed, to prevent any further paving of the catchment
- Would love to see projects funded, beyond the studies
- I want to hear what the community is interested in
- On-site non-potable water reuse, lets do more of it
- Appreciate the natural resources, and vibrancy
- Want to support projects through the Federal Government (congressman's rep)
- Want to see what the priorities are for the ecodistrict (congressman's rep)
- To listen and understand, and how it ties to the regulatory environment for water permitting
- How does regulation impede the outcomes we want
- Enhance Rose Creek
- Protect habitat value
- How can the Mayor's office connect with the community, and understand the importance of climate change

What are the Issues (Popcorn Session)

- Demonstrating the value of sustainability to residents is important. A lot of larger scale projects cost a lot, and not everyone understands the benefits (eg. Water improvements)
- What are the issues of the shoreline that cannot occur elsewhere
- The protection of the watershed – drains to the Bay
- Recreation is the important part of the bay, a food source for fishing, nursery for important species, contribute to biodiversity, it's a major economic resource for the city
- Mission Bay makes a lot of money for the City
- Mission Bay Park Masterplan developed in 1994, doesn't need updating, needs implementation
- 4-5 officers work in Mission Bay Park, daily water quality monitoring, particularly in the inlets
- discharges from land use now becoming a priority, previously was wastewater management/discharges
- retrofit existing areas for improved water quality
- City of San Diego is the co-permitee for water quality improvements
- City of San Diego responsible for preparing Water Quality Improvement Plan(s)
- Mission Bay sewer interception system, catches before hits Bay, Is really out of date, threatened by sea level rise
- Paving over the watershed is a significant problem
- Audobon looking for funding for a wetland protection program
- Leasehold revenue from Mission Bay Park, if over $20M, 75% goes to Mission Bay to implement projects, mainly maintaining navigation, dredging etc
- The amount of money is peanuts though

- 5 year investment of $155M for stormwater improvements
- always need non-motorised mobility options
- San Diego is very 'water vulnerable'
- What's the vision of a neighborhood that supports water quality improvements?
- Need to form quickly an 'integrated vision', it does not exist
- Need the broader community to embrace water conservation
- We need artistic representation of what the value of water conservation/quality
- What is the role of schools? They all learn about marsh ecology etc
- Need constant repetition of messages
- How about a pilot project, try it and replicate it
- All of the grant writers that use to be on staff at the City got let-go
- How do we avoid unintended consequences – need to step back and understand what the real issue is that we are trying to address
- Need to highlight the importance of joining dots
- Incentivize the direction you want to go
- Need to consider lifecycle costs



Community Capacity

BUILDING COMMUNITY CAPACITY

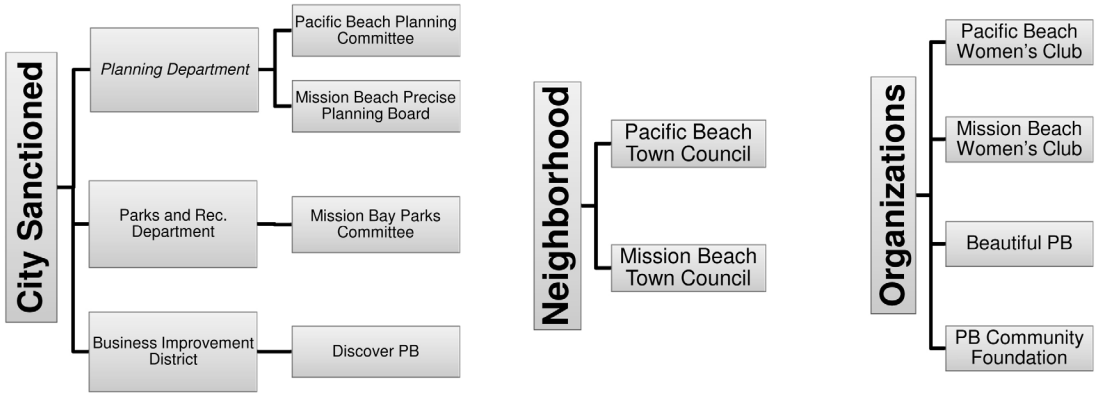
Citizens have the ability to both influence and build the type of neighborhood in which they desire to live. Community groups and organizations can take leading and participatory roles in shaping the development their neighborhoods and cities. For Pacific Beach and Mission Beach neighborhoods, community capacity building will be necessary to engage resources, support, activities, and skills to transform these beach towns into sustainable places to live and grow.

Residents of Pacific and Mission Beach speak proudly of their neighborhoods, the beautiful beach environment, and their healthy lifestyles. Aging community members want to be able stay in the area and young professionals are hoping to be able to raise families here. The community wants to manage tourism and transient populations in a sustainable way which includes developing an attractive main street, public realm, and community gathering spaces for use year round.

There is opportunity for the community to take effective action within their neighborhoods to improve quality of life, build social capital, and create a sustainable structure for community involvement.

TIERS OF GOVERNANCE

Pacific Beach and Mission Beach host a number of community groups, business organizations, and government affiliated committees. In order to build capacity, it is important to first understand the current role of each group, their resources and responsibilities, and each group's level of commitment. The following matrix explains the affiliation of city sanctioned boards, neighborhood councils, and autonomous community organizations.



The city sanctioned committees and boards provide recommendations on behalf of the neighborhoods to the City of San Diego Planning Department and Parks and Recreation Department. Discover PB is the city sanctioned entity which manages the Business Improvement District for Pacific Beach and is funded through an assessment of businesses in Pacific Beach.

The Importance of Partnerships

Each group within these tiers represents a portion of the existing capacity; however, the combined capacity of these groups is significantly greater. Creating partnerships between already established boards and organizations is the first step in building the community capacity of Pacific Beach and Mission Beach.

Additionally, partnerships between these community groups and local and/or regional government agencies could increase the impact and effectiveness of the overall goals of the two neighborhoods. Partnerships should also include combining resources, funding, and support for projects that serve common community goals.

Example: Tampa Heights Youth Development and Community Center Project

In the City of Tampa, the Tampa Heights Neighborhood Association, Tampa Heights Junior Civic Association (THJrCA), and the Florida Department of Transportation (FDOT) established a partnership which would allow the THJrCA to restore a vacant church building and surrounding property, owned by FDOT, in order to transform it into a community center. The project has brought together these organizations, residents, and private businesses to donate time, supplies, and professional services to achieve a neighborhood goal of restoring an historic building, using vacant property, giving a home to the Junior Civic Association, and creating playground and park space.

The renovation is a community-driven effort with a full-fledged volunteer campaign. There was an outpouring of support from Tampa Heights' residents as well as the business communities within Tampa Heights and the surrounding area raising nearly $700,000 through donations and grants.

The property is ideally situated adjacent to another successful project which was developed through a partnership between the neighborhood and the City of Tampa. The Tampa Heights Community Garden was developed on city-owned property through a volunteer effort. The community garden has become a place of learning for members of the Tampa Heights Junior Civic Association.

Inclusive Decision Making

Creating a shared vision for the Pacific Beach and Mission Beach community is an essential component in planning a sustainable future for these neighborhoods. As partnerships are forged there must be a vision and set of goals that will provide all councils, boards, organizations, businesses, and citizens with community intentions, desired improvements, and action plans that all groups can work towards.

A shared vision will maintain a path or direction for the community and serve the greater community rather than the interests of a few individuals. It is important that each group share in the decision making process, and share the responsibility of leadership toward the community's vision. This will build the consensus necessary for each organization to carry out its mission as a function of the greater community's goals.

In order to sustain participation, organizations cannot work in silos. The PB Collaborators is an excellent way for different and diverse groups to share ongoing projects, advice, and information. This group needs to expand to include organizations from Mission Beach as well as representation from Discover PB.

Maximizing Resources for Common Goals

Multiple groups working together will yield more results, accomplish more projects, increase sweat equity, and shorten timelines. Integrating budgets from multiple group partnerships will allow the community to implement projects and/or increase the scale of community improvements.

With 1,300 business members, Discover PB has an opportunity to be a major community partner. Collaborating with organizations from Pacific Beach and Mission Beach, the Business Improvement District is rich with social capital. A large portion of the Discover PB annual budget should be directed toward community-directed improvement projects that will have sustained positive impact on the neighborhoods as part of its mission to revitalize and promote the Pacific Beach community physically and economically. Through collaboration and partnership with other community organizations, these inclusive projects could meet substantial, desired improvements in the built environment by programming public spaces.

Crowdsource funding will help Discover PB and organizations from Pacific Beach and Mission not only generate monetary support, but can serve as a tool for allowing the community to decide which projects are the highest priorities. Websites such Kickstarter.com are a valuable resource for citizen-driven efforts.

RECLAIMING MAIN STREET AND PROGRAMMING PUBLIC SPACE

Public spaces help build community capacity by providing citizens with places to gather. These spaces become part of the community's identity, its assets, and its collective spirit. They are places to collectively celebrate, grieve, share, or simply get together. Each should represent aspects of the character of the community.

Transforming Underutilized Space to Space Activation

Public lands and spaces that have no programmed activity are often empty, a void in the urban landscape. These are spaces that could serve the community if programmed for active uses with recreation equipment, street furniture, or planned events. One of PB and MB's strengths is the beautiful outdoor environment surrounding the

community. The beach and waterfront of Pacific and Mission Beach give a "beach town" identity to the neighborhoods. However, the waterfront is at one edge of the neighborhoods and more programmed public spaces are needed throughout the block structure and residential areas. This would provide residents and visitors access and opportunity to engage in more outdoor activity and engage with each other.

Most residents identified that being outdoors was part of a healthy lifestyle. Programmed public spaces throughout the community will provide residents with active space a short walk or bike ride from their homes. These public spaces become community assets and gathering spaces.

Example:

The open green space around the Pacific Beach Library is a play space waiting to happen.

Vacant storefronts to Community Contributors

Pacific Beach and Mission Beach have very walkable streets. Small scale, mixed-use buildings line many of the commercial streets. Unfortunately, many of the storefronts are empty such as on Turquoise Street. Filling empty storefront with community organizations and projects until there is a demand for more retail and commercial space would help activate the street edge, make residents feel safer, and bring awareness to citizens of community organizations, events, and programs. This is particularly helpful as PB and MB are building their community capacity and adding to social capital.

Example:

Several cities in Australia adopted a program through Renew Australia to support creative community activity. Renew Australia is now commissioned through the Chamber of Commerce and provides do-it-yourself tools for filling the gap when there is an abundance of retail storefront. The guides and resources include guidelines for approaching property owners, legal issues, insurance, budgets, development planning, temporary use classification, and building codes.

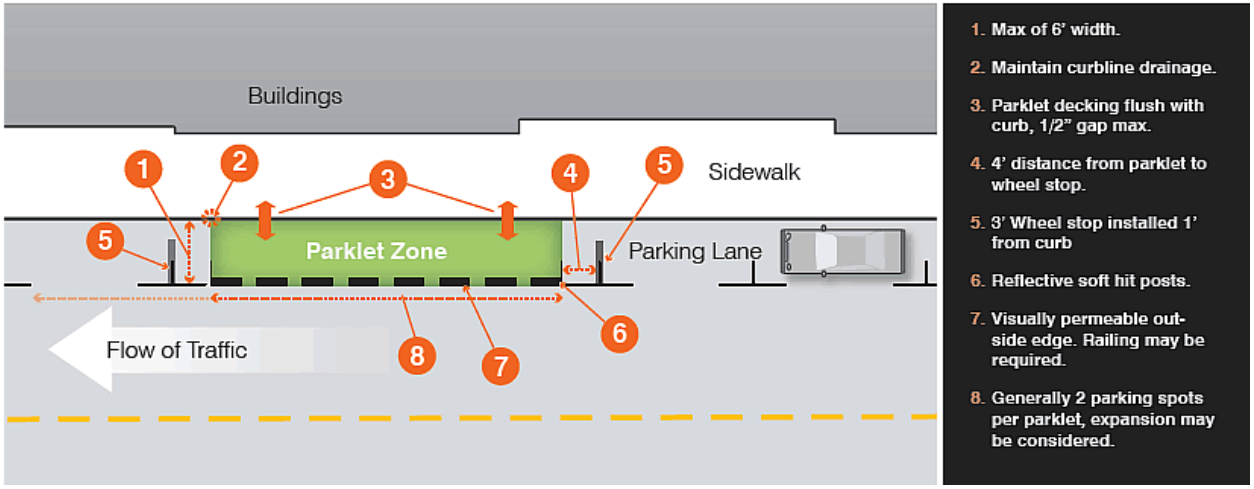
START HERE

Discover Pacific Beach should lead a "Renew" PB effort with partnering organizations such as Beautiful PB and the neighborhood Councils to create a program for activating vacant storefronts.

Parked Car to Parklet

The public realm can also be activated from the street edge. Parking spaces can be transformed into temporary or semi-permanent public parks to expand urban open space. A global movement, PARK(ing) Day has helped to shape the parklet trend in downtowns throughout the United States and around the world. Each parklet is unique with distinct functions or features to reflect the community spirit. Five to six parklets will create the equivalent of one acre of park space. These small scale projects are typically community-driven since no major road work is needed. These intimate public gathering spaces range from casual to formal in design. Some provide structured seating while others are spaces for recreation.

DESIGN AND PLACEMENT GUIDELINES



The City San Francisco has developed guidelines for parklets.

WAYS TO ENGAGE TO BUILD CAPACITY

Make it Meaningful

Meaningful participation is a key element in sustaining community involvement. Value every community member and the time they spend making contributions to improve the community. The Pacific Beach and Mission Beach community has a number advocates seeking neighborhood improvements which will address sustainability issues.

In building community capacity through meaningful participation, Pacific and Mission Beach advocates will need to roll up their sleeves and help in order inspire other citizens to join the effort. In doing so, make events and projects fun for community members even if they are labor intensive. Groups and organization leaders should always ask for input and be willing to share the load as well as the credit for community successes.

Engage People Where They Go

Tactical Urbanism and other demonstration projects or events are a great way to engage people in an experiential approach to development projects. A program that might transform a neighborhood block into a bike friendly zone can both educated and inspire fellow citizens to support or get involved with a community improvement project. Standard public meetings can often bring out more complaints than innovative ideas about how to transform our environments.

Pacific and Mission Beach organizations can partner with local businesses and the City of San Diego to create demonstration projects for the boardwalk, alley ways, residential streets, and parking spaces, and develop programs to build capacity through community events.

Example: Urbanism on Tap

Tampa's Urbanism on Tap is a series organized by the Urban Charrette and CNU Tampa Bay designed to give an opportunity for the community to engage in constructive conversations about current schemes shaping our

city. A quick slideshow provokes the conversation and then a lively dialog starts Open Mic style. Each series has three parts and is hosted at a different local Tampa tavern in an effort to get more young professionals engaged in the decisions that shape the City of Tampa.

Mobility Market

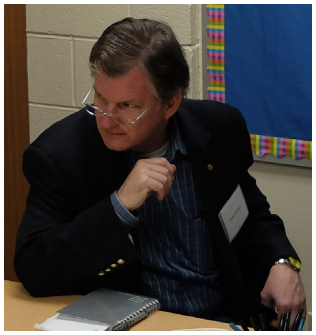
On February 19, 2010, The Urban Charrette, in coordination with the Tampa Downtown Market hosted a special transportation event called the Mobility Market, which included a Complete Streets demonstration on a portion of Madison Street in Downtown Tampa. The event allowed for downtown residents and commuters alike to experience the difference that thoughtful street design can make to the urban environment. The Urban Charrette, with help from partners and sponsors, temporarily turned Madison Street into a complete street with bike lanes, landscape islands, reverse angle parking, and an electric car charging station.

The demonstration included exhibits by a number of local organizations and private companies including the following:

- City of Tampa
- Tampa Downtown Partnership
- Hillsborough Metropolitan Planning Organization
- The Hillsborough County City-County Planning Commission
- Hillsborough Area Regional Transit
- Pinellas Suncoast Transit Authority
- Bay Area Commuter Services
- Tampa Bay Area Regional Transit Authority
- Tampa Bay Cycle
- We Car

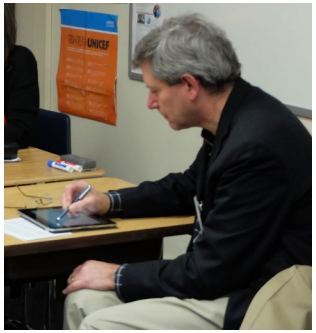
Team Roster

SDAT NATIONAL TEAM ROSTER



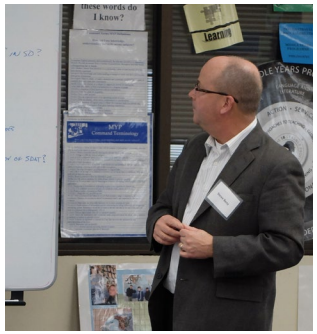
Tom Liebel, FAIA, LEED Fellow, NCARB – Team Leader

As one of the first 25 LEED Accredited Professionals in the country, Tom Liebel, FAIA, LEED Fellow has been involved in integrating sustainable design principles into a variety of ground-breaking adaptive use and historic preservation projects over the past twenty years. Projects Tom has worked on have received multiple local, state and national awards for design, smart growth, sustainable design and historic preservation. Author, critic and mentor, Tom has consulted on green projects nationally and internationally and has recently authored a chapter on sustainable design for the National Trust for Historic Preservation's Main Street Program publication, Revitalizing Main Street: A Practitioner's Guide to Comprehensive Commercial District Revitalization, as well as Industrial Baltimore, an illustrated history of Baltimore's industrial legacy. Tom currently serves as chair of the Maryland Green Building Council and chair of Baltimore City's Commission on Historical and Architectural Preservation (CHAP).



Steven Cecil, AIA, ASLA

Steven Cecil AIA, ASLA, is the founding principal of The Cecil Group, Inc., Steven brings over twenty-five years of professional experience to the firm, including urban design, planning, landscape architecture, and architecture projects throughout the United States and abroad. His practice brings creative solutions to planning and design challenges that are attentive to their cultural, environmental and community context. Steven brings a commitment and special skills in community participation as a dimension of the firm's successful planning and design projects. Prior to forming The Cecil Group, he was a founding principal of Cecil & Rizvi, Inc. and served as Director of Urban Design and Landscape Architecture at both CBT Architects and SOM/Boston. Mr. Cecil's academic contributions include teaching assignments in both the urban design and urban planning programs at Harvard's Graduate School of Design.



Steve Benz, PE, Hon. ALSA, LEED Fellow

As Partner and Director of Green Infrastructure, Steve Benz is responsible for leading sustainable design strategies within OLIN's projects. With over 30 years of civil engineering and construction experience, he has pioneered new green infrastructure solutions that create resilient and performative sites. He has worked on many of OLIN's award-winning projects, such as the Science Hill Master Plan and the LEED® Platinum-certified Kroon Hall at Yale University in New Haven, Connecticut and the Massachusetts Institute of Technology Ray and Maria Stata Center in Cambridge, Massachusetts.

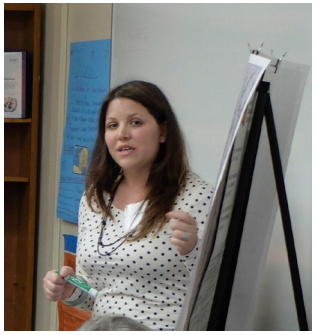
In recognition for his contributions to the field of landscape architecture and practice of green infrastructure, Steve was recently named an honorary member of the American Society of Landscape Architects and a LEED Fellow by the U.S. Green Building Council. Steve is a former longstanding member and immediate past Chair of the U.S. Green Building Council (USGBC) National Sustainable Sites Technical Advisory Group (TAG), in which he led the development of sustainability criteria for site development within the LEED program. He was also two-term and founding Chair of the Massachusetts Chapter of the USGBC, and currently serves on the USGBC's LEED Water Efficiency TAG and the Sustainable Sites Initiative's Technical Core Committees.

Paula Reeves, AICP CTP

Paula Reeves has been developing transportation projects for the State, cities, counties and transit agencies for 20 years. She currently manages the Community Design at Washington State Department of Transportation and serves on the Board of Directors for the American Planning Association Washington Chapter. In both these roles she provides a range of transportation planning and engineering services to cities, counties and transit agencies including: expert advice regarding transportation and livable communities, pedestrian and bicycle facility design expertise, safe routes to schools, scenic byways and transportation planning support relative to Washington's Growth Management Act. She has a broad transportation background that includes urban design, engineering, environmental experience and is a practicing mediator in Thurston County. She serves on the National Transportation Research Board's Pedestrian Committee and American Institute of Certified Planners' Community Planning Committee. She earned her master's degree with engineering and law school course work in urban and regional planning from the University of Florida.

Adam Beck

Adam Beck is Program Director at EcoDistricts. He has over 17 years of experience in environmental and social planning, with a passion for developing and implementing sustainability tools for built environment projects. Prior to joining EcoDdistricts in 2013, Adam spent over three years with the Green Building Council of Australia (GBCA) developing the Green Star – Communities rating tool in collaboration with government and industry. This work is highly respected globally, being one of few rating tools that covers the full spectrum of sustainability issues across the built environment. Adam has also been involved with the efforts by the World Green Building Council and the C40 Cities Initiative to strengthen global partnerships in sustainable urban development.



Taryn Sabia

Taryn E. Sabia, Ed.M., M.Arch, MUCD Is co-founder of the Tampa based Urban Charrette, Inc., a 501c3 non-profit organization dedicated to educating community leaders and young professionals about sustainable urban design and involving citizens in actively shaping the built environment, ultimately making their neighborhoods and cities better places to live. She also teaches courses on the City and Sustainability at the School of Architecture and Community Design at the University of South Florida where she is a Research Associate. Previously, Ms. Sabia has worked in the field of architecture on projects related to mixed-use development, historic preservation, and downtown façade redevelopment through the Community Development Block Grants program. Ms. Sabia's professional interest is the fusion of design and civics particularly related to transit modes and infrastructure. Her community interests focus on engaging citizens in participatory design experiences through tactile urbanism and events such as Urbanism on Tap. Ms. Sabia holds a Master's of Education from Harvard University, a Master's of Architecture from the Rhode Island School of Design, and a Master's of Urban and Community Design from the University of South Florida. Her Bachelor's Degree is from Eckerd College in St. Petersburg, Florida.

Ed Starkie

Mr. Starkie has 23 years experience in real estate that includes moving complex projects from conception and feasibility analysis to financing and development strategies. A particular career focus has been the economic structure of vital urban places, of downtowns and neighborhoods that are pedestrian and transit oriented environments. His work has received four awards from the American Planning Association in the areas of main streets and downtown revitalization, and he contributed to the current EPA guidelines for promoting Smart Growth. His recent work has also gained an award from the California Preservation Foundation and a Charter Award from the Congress for New Urbanism. Mr. Starkie is a financial advisor for private and public development who brings a unique, pragmatic approach that results in projects that are feasible, profitable, and contribute to community livability. Mr. Starkie also has also served on the faculty of the University of Oregon Urban Architecture Program and the Portland State University Urban Planning and Architecture programs.

AIA STAFF

Erin Simmons

Erin Simmons is the Director of Design Assistance at the Center for Communities by Design at the American Institute of Architects in Washington, DC. Her primary role at the AIA is to provide process expertise, facilitation and support for the Center's Sustainable Design Assistance Team (SDAT) and Regional and Urban Design Assistance Team (R/UDAT) programs. In this capacity, she works with AIA components, members, partner organizations and community members to provide technical design assistance to communities across the country. Through its design assistance programs, the AIA has worked in 200 communities across 47 states. In 2010, the Center was named Organization of the Year by the International Association for Public Participation (IAP2) for its impact on communities and contributions to the field.

Erin is a leading practitioner of the design assistance process. Her portfolio includes work in over 60 communities across the United States. A frequent lecturer on the subject of creating livable communities and sustainability, Erin contributed to the recent publication "Assessing Sustainability: A guide for Local Governments". Prior to joining the AIA, Erin worked as historic preservationist and architectural historian for an environmental and engineering firm in Georgia, where she practiced preservation planning, created historic district design guidelines and zoning ordinances, conducted historic resource surveys, and wrote property nominations for the National Register of Historic Places. She holds a Bachelor of Arts degree in History from Florida State University and a Master's degree in Historic Preservation from the University of Georgia.

Joel Mills

Joel Mills is Director of the American Institute for Architects' Center for Communities by Design. The Center is a leading provider of pro bono technical assistance and participatory planning for community sustainability. Its processes have been modeled successfully in the United States and across Europe. The Center has been the recipient of a numerous awards recognizing its impact. In 2010, the Center was named Organization of the Year by the International Association for Public Participation (IAP2) for its impact on communities and contributions to the field. In 2013, the Center received a Power of A Award from the Center for Association Leadership, and a Facilitation Impact Award, given by the International Association of Facilitators.

Joel's 20-year career has been focused on strengthening civic capacity and civic institutions around the world. This work has helped millions of people participate in democratic processes, visioning efforts, and community planning initiatives. In the United States, Joel has worked with over 100 communities, leading participatory initiatives and collaborative processes that have facilitated community-generated strategies on a host of issues. During the past five years, this work has catalyzed over $1 billion in new investment. His past work has been featured in over 1,000 media stories, including ABC World News Tonight, Nightline, CNN, The Next American City, Smart City Radio, The National Civic Review, Ecostructure Magazine, The Washington Post, and dozens of other sources. He has served on numerous expert working groups, boards, juries, and panels focused on civic discourse and participation, sustainability, and design. He has also spoken at dozens of national and international conferences and events, including the World Eco-City Summit, the Global Democracy Conference, the National Conference on Citizenship, and many others.