

Treasure Island/ Yerba Buena Island Sustainability Plan

Revised Draft
April 13, 2011







Evolution of the Sustainability Plan

This Sustainability Plan summarizes how the Treasure Island and Yerba Buena Island Redevelopment Project (TI/YBI Project) will become an exceptional San Francisco neighborhood in terms of its environmental performance and social benefits. This plan draws from several planning documents, including the Final Environmental Impact Report, Infrastructure Plan, Design for Development document, Jobs and Equal Opportunity Program, Housing Plan, Parks and Open Space Plan, Transportation Plan, and the Disposition and Development Agreement between TICD and TIDA.

In 2006, a Sustainability Plan was prepared that outlined the long term vision for the TI/YBI Project covering ten key focus areas across the triple bottom line of sustainable development: environmental stewardship, community development, and economic vitality. A series of strategic goals, objectives, strategies, and potential partners were outlined, providing a guide for subsequent planning and design efforts. The 2006 Sustainability Plan was groundbreaking in its scope and approach to sustainable development for large scale mixed-use projects, and provided an exemplary yet practical pathway to sustainability that many international projects have since followed — emphasizing the integration of sustainability into the approach to the urban plan and form and social fabric, rather than technological add-ons. At the time, the project-tailored Treasure Island Green Building Specifications included in the 2006 Sustainability Plan were unique in terms of regulations for green building, and they represented a high bar for vertical developers to achieve. In 2008 the City of San Francisco adopted its Green Building Ordinance (SF GBO), thereby codifying many of the 2006 aspirations of the TI/YBI Project.

This 2011 Sustainability Plan draws from and builds upon the 2006 Sustainability Plan, and reflects enhancements of the current integrated approach, as well as how the TI/YBI Project will exceed green standards and ordinances in certain cases. For instance, strategies related to Energy, Water, Waste, and Materials have been grouped into the Integrated Sustainable Design Chapter to reflect the synergistic relationships between them. The Sustainability Plan also updates some of the 2006 targets to respond to changes in technology, local regulations, and additional commitments made by the Treasure Island Development Authority (TIDA) and Treasure Island Community Development (TICD), the project’s Master Developer. Since 2006, California has adopted a new Green Building Standards Code (CALGreen) and the City and County of San Francisco has adopted the previously mentioned SF GBO (2008 and 2010). Both of these regulations became effective in 2011 and the increased sustainability performance required under these new codes are incorporated.

Further, in 2009, the TI/YBI Project was selected as one of 17 projects worldwide to participate in the Climate Positive Development Program led by the Clinton Climate Initiative (CCI). In this role, the TI/YBI Project will support the City’s goal of climate neutrality and endeavor to set a global example in achieving large scale urban development that is climate positive and cost effective.

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This document includes both commitments and aspirations in regards to sustainability. Therefore, TICD has created a document that codifies its commitment as the master developer with regard to Land Use, Transportation & Infrastructure, Energy & Water, Building Design & Construction, Solid Waste, and Community Benefits. Please see TICD Environmental Sustainability Obligations in an exhibit to the Development Disposition Agreement (DDA) which explains these commitments in greater detail.





01 Introduction and approach

The Redevelopment of major portions of Treasure Island and Yerba Buena Island are an opportunity to create an exemplary model of sustainable living. A new urban neighborhood will be founded that incorporates best practices in smart urban design, low-impact development and green building. The 450-acre development will be transformed from a former military base into a vibrant, livable community and regional destination, where walking and cycling are prioritized and a transit-oriented lifestyle is promoted.

This Sustainability Plan

The Sustainability Plan presents a bold new vision for an area that has historically been physically, socially and economically isolated from the rest of San Francisco. As the build-out of the TI/YBI Project is phased in over time, new technologies and higher standards of resource efficiency will be explored with the intent of achieving progressively higher levels of sustainability. Vast acres of hardscape will be turned into green assets for the enjoyment of local residents and regional and international visitors. Innovative technologies, climate responsive urban planning design, right-sized infrastructure and forward-looking approaches will be employed to optimize the use of natural resources and support the creation of efficient operational systems. From contamination to liquefaction to climate change, risks will be addressed proactively to create a place that is healthy and safe for residents, workers and visitors. A diverse, mixed-income community will thrive. Extensive opportunities for recreation, education, arts and culture will enrich the quality of life for residents and visitors alike.

Vision & Guiding Principles

The vision of the Treasure Island/Yerba Buena Island Redevelopment Plan is to add to San Francisco's eclectic family of world-class neighborhoods, using an innovative design that embodies the city's most desirable characteristics: walkable, compact and eclectic; economically, ethnically, and demographically diverse; sensitive to topography views and aesthetics; progressive, memorable, full of character, and proud of its history. The following Sustainability Principles were adopted by the City at the start of the planning process. They have continue serve as a guide as the project evolves in response to the extensive public input.

Diverse Community

The concept of community is that of a wonderfully diverse group of people working together to live healthy, fulfilling and dignified lives. By achieving equity in access to community facilities, services and environmental quality, the TI/YBI Project will foster human potential and self-reliance.

Thriving Ecosystems

Treasure Island and Yerba Buena Island are inextricably linked to their surrounding ecosystem—the San Francisco Bay. The sensitivity of this connection is paramount. The TI/YBI Project will minimize its environmental impact and create new naturalistic habitats and eco-corridors on the islands and protect and restore naturally occurring habitats on Yerba Buena Island.

Healthy Neighborhoods

Individual and community health is affected by the quality of the built environment. Clean air and clean water will be enhanced by a development that privileges bikeability and walkability, preserves open space, fosters local organic agriculture and strategically locates higher density, mixed-use development adjacent to transit centers.

Affordable Solutions

The City and TICD recognizes the importance of partnership between public and private investment in establishing a development that is affordable, contributes to the economy of the City and creates a mixed-income community that promotes social justice and encourages local businesses to thrive.

Global Responsibility

The TI/YBI Project recognizes and embraces its regional significance and global interconnectivity with the global community. The TI/YBI Project will assess and monitor its carbon footprint in line with internationally accepted protocols.

Integrated Design and Lasting Beauty

The life of the built environment at Treasure Island and Yerba Buena Island will be measured over generations, not decades. By creating beautiful, intelligent, adaptable and easily maintained systems that ensure continued sustainability performance, the TI/YBI Project will withstand the test of time.

Public Participation and Transparency

Sustainable development is built upon a process that is transparent, participatory and fully informed by social, economic and environmental values. The best plans are based on assessment of alternatives and a determination of the alternatives that best promote human and ecological health. These values guide all actions undertaken by the City and TICD toward achieving the current objectives for the TI/YBI Project.



The foregoing principles have been used to shape the strategies for each focus area, described in the “At a Glance” Table on the following page. This table summarizes the goals, strategies and targets that are embedded into the plan, many of which that are incorporated into binding documents governing the design and build-out of the TI/YBI Project. Each of the focus areas is discussed in detail in the following chapters.

Sustainability at-a-glance table for the TI/YBI project

Site Design and Land Use (Chapter 2)

OBJECTIVES	
To create a vibrant livable community that is mixed use, dense, compact, walkable and preserves biodiversity and open space	
STRATEGIES	RESPONSIBLE PARTY
• Maximize solar exposure and deflect wind currents	TICD, TIDA & Vertical Developers
• Design a compact and balanced community	TICD & Vertical Developer
• Enhance the public realm	TICD & TIDA
• Promote habitat conservation and protect local wildlife	TICD & TIDA
• Protect valuable historic resources	TICD, TIDA & Vertical Developer
• Enable local food production by allocating land for an urban farm	TICD & TIDA
• Clean up contaminated areas to levels consistent with the plan	TICD, US Navy & TIDA
TARGETS	SOURCE
• Average Density: 95-105 dwelling units per net residential acre	D4D
• Access to retail services: 1/4 mile for 90% of residents	D4D
• Adaptive reuse for all buildings in the National Register of Historic Places	D4D
• 300 acres of parks and open space	DDA
• Tree canopy over 50% of available sidewalk spaces at tree maturity	D4D
• Use of native or regionally appropriate species for all new landscaping, excluding urban farm	YBI Habitat Management Plan and D4D
• 20-25 acre Urban Agricultural Park	D4D
BENEFITS	
• Expand the acreage of public parks and open space in San Francisco by 300 acres; roughly one third of Golden Gate Park	
• Enable approximately 18,600 residents to benefit from sustainable, pedestrian-oriented living	
• Enable the creation of the largest urban farm in San Francisco	
• Most residences and commercial activity located within 15 minute walk from retail services and the transit hub	
• Construct up to 8,000 new housing units, with 25% to 30% affordable to very-low, low, and moderate-income households	
• Stormwater managed on site	
• Protect and enhance 311,000 square feet of historic properties	
• Provide 10-15 acres of new wetland habitat areas on Treasure Island	

Community (Chapter 3)

OBJECTIVES	
To foster the development of a strong, and diverse community that has access to ample opportunities for recreation, arts, and education To undertake the redevelopment through a process built on transparency and public participation	
STRATEGIES	RESPONSIBLE PARTY
• Provide high quality community facilities and amenities	TICD & TIDA
• Provide a range of housing types for all income levels	TICD, TIDA, TIHDI & Vertical Developers
• Offer a transition housing program for existing residents	TICD & TIDA
• Create jobs for local residents	TICD, TIDA & TIHDI
• Actively engage the community and stakeholders during the redevelopment process	TICD, TIDA & Vertical Developers
TARGETS	SOURCE
• 303,500 square feet of community service space	Infrastructure Plan
• 75,000 square feet of neighborhood-serving retail	Infrastructure Plan
• 25% to 30% affordable housing	Housing Plan
• Provide transition housing benefits to all qualifying households	Transition Housing Rules and Regulations
• Create 2,000 construction jobs	Employment & Contracting Policy
BENEFITS	
• New facilities for the community may include: community center, senior facilities, youth center, public library, public performance space, sports facilities, and urban farm • 90% of residents within 15 walk from parks, public facilities, transit and retail • Expand the supply of permanent affordable housing in San Francisco by 2,000 to 2,400 homes • Support existing residents who remain on Treasure Island through its redevelopment • Increase employment opportunities and spark local economic development through creating jobs that are filled by San Francisco residents and economically disadvantaged persons, including those who are formerly homeless	

Transportation (Chapter 4)

OBJECTIVES	
To develop a model community where the predominance of walking and cycling, complemented by clean transit service, can help achieve the objective of carbon neutrality	
STRATEGIES	RESPONSIBLE PARTY
• Provide a safe and inviting pedestrian and bicycling environment	TICD, TIDA & Local Transit Authorities
• Provide high quality, frequent and easily-accessible transit	TICD, TIDA & Local Transit Authorities
• Implement a transportation demand management program to encourage transit use and reduce traffic and capture revenue for islands transit	TICD, TIDA & Local Transit Authorities
TARGETS	SOURCE
• 90% of population will have less than a 15 min walk to transit hub and town center	D4D
• Walkable blocks: 400'- 600' in length with mid-block passages	D4D
• 15 minute headways for ferry service during peak hours	Transportation Plan
• 7 minute headway for bus during peak hours	Transportation Plan
• Limit of 1:1 parking for residential units, up to 8,000 spaces, that are economically decoupled from the units	Transportation Plan
• 40-45% non-auto mode share	Transportation Plan
• 1 car-sharing parking space for every 200 residential units	GBS
• Accommodate potential electric vehicle charging stations in public and private areas	TICD Environmental Sustainability Obligations
• Include bicycle parking spaces for residential and commercial uses, in accordance with the D4D	GBS
BENEFITS	
• Expand Bay Area’s bicycle opportunities by adding 10 miles of dedicated bicycle trails on Treasure Island and Yerba Buena Island • 4 miles of new pedestrian trails and hiking trails • New frequent ferry service provides 45 ferry trips daily during weekdays between Treasure Island and the Downtown San Francisco • Enhanced clean bus service provides the capacity for 12,000 daily person trips to and from downtown San Francisco • Avoids the addition of 12,000 person trips on the Bay Bridge during peak hours • 2,800 metric tons of transit-related CO ₂ e will be avoided per year • Energy capacity and infrastructure to support electric vehicles as needed • Connect to the new bicycle and pedestrian trails on the new eastern span of the Bay Bridge and preserve the option of a connection to the west span in the future, increasing the network of San Francisco Bay Trails	

Energy (Chapter 5)

OBJECTIVES	
To conserve and reduce energy demand and create a sustainable energy supply	
STRATEGIES	RESPONSIBLE PARTY
• Reduce building energy demand	TICD, TIDA, Utility Providers, Vertical Developers & Future Residents
• Employ district-wide systems to increase efficiency	TICD, TIDA, Utility Providers & 3 rd Party
• Generate renewable energy on-site	TICD, TIDA, Utility Providers & 3 rd Party
• Meet demands from the grid with hydropower or other no carbon source	Utility Providers
• Employ smart grid technologies to manage renewables and demand	TICD, TIDA, Utility Providers & 3 rd Party
• Rotate existing street grid and building orientation to decrease energy demand	TICD & TIDA
TARGETS	SOURCE
• Generate a minimum of 5% peak power demand from on-island renewable sources such as solar PV	Green Building Standards Infrastructure Plan
• 15% energy efficiency in infrastructure compared to lowest cost alternatives	Infrastructure Plan
• Partner with a third party to deploy and deliver district energy and/or waste to energy services should they be technically and financially viable	Infrastructure Plan
• Use renewable energy or hydro power for 100% of the grid source power supply	DDA
BENEFITS	
• 15% improved energy performance over Title 24 (2008), this is ~35% better than original Title 24 (2005) benchmark • Central Utility Plant would reduce electricity consumption by 12% due to efficiency gains compared with building or unit level systems • Natural ventilation and daylighting result in a more pleasant indoor environment • Potential for \$380 annual savings on an average California home’s energy bill • 41,600 MMBtu of energy saved per year; enough to power 885 average homes in California for a year • 6,190 fewer tons of CO ₂ e emitted per year with a potential of 10,780 fewer tons emitted if all district systems and variants are implemented	

Water (Chapter 5)

OBJECTIVES	
To achieve a sustainable water cycle by reducing potable water demand, enabling use of recycled water, and treating wastewater and stormwater on-site	
STRATEGIES	RESPONSIBLE PARTY
• Reduce water demand	TICD, TIDA, Utilities, Vertical Developers & Future Residents
• Treat all wastewater on site and enable use of recycled water	TICD, TIDA & Utility Providers /3 rd Party
• Meet all non-potable water demands with recycled water	TICD, TIDA & Vertical Developers
• Construct wetlands to treat stormwater runoff	TICD & TIDA
• Local Best Management Practices and Low Impact Development	TICD & TIDA
TARGETS	SOURCE
• Consume 40% less potable water in fixtures than Energy Policy Act fixture performance requirements	GBS
• Achieve an average potable water demand of 50 gallons/person/day for residential use	GBS
• Treat 100% of waste water on-site	Infrastructure Plan
• Recycled water and/or rainwater to meet 100% of non-potable demands (estimated 420,000 gallons/year)	GBS
• Support all irrigation needs with recycled water	Infrastructure Plan
• At least 10 acres of land dedicated to wetlands	D4D & Infrastructure Plan
• Treat 100% of storm water from storms with intensities ≤0.2 inches/ hour on-site	GBS
BENEFITS	
• 45% reduction in potable water consumption compared to baseline demand • Reduction in use of municipally supplied water to approximately 50 gallons/capita/day for residential use, which is 46% less than SF’s 92 gallons/capita/day average • Approximately \$150 in savings from water costs per residential unit per year • 397 million gallons of water saved every year on TI/YBI. Enough to provide water to 11,800 San Franciscans for a year • Minimizing stormwater runoff has reduces operational impacts on treatment facilities and improves the quality of water that is discharged to the San Francisco Bay • Wetland habitat creation	

Waste (Chapter 5)

OBJECTIVES	
To support the diversion of waste from the landfill and to use organic waste as a resource on TI/YBI	
STRATEGIES	RESPONSIBLE PARTY
• Minimize construction and demolition waste	TICD & Vertical Developers
• Implement a strong-source separated recycling and composting program	TIDA, TIDA & Recology
• Evaluate opportunities for automated waste collection	TIDA, TIDA & Recology
• Use all organic waste to generate energy and/or produce compost	TIDA, TIDA, Recology & Future Residents
TARGETS	SOURCE
• Recycle or salvage 75% of the non-hazardous construction and demolition debris	Infrastructure Plan & GBS
• Maximize recycled content in infrastructure	Infrastructure Plan & GBS
• Use concrete containing 30% or more fly ash, slag, or other fill that is recycled	GBS
• Include bins for recyclables and compostables in all public areas	D4D & Infrastructure Plan
• 100% organic waste generated on-island to be used for energy and/or compost	Infrastructure Plan & GBS
BENEFITS	
• Of the 16,500 tons of annual waste expected to be generated onsite, approximately 8,700 tons of organic waste is expected to be diverted from the waste stream and treated onsite	
• Anaerobic facility could generate approximately 0.23 Megawatts of energy, enough to power 150 homes	
• Approximately 190 metric tons of CO ₂ e would be saved per year using an automated waste collection system versus traditional truck hauling methods	

Information & Communication Technology (Chapter 5)

OBJECTIVES	
To use information technology as a means to improve efficiency, monitor resource impact, and foster transparency regarding sustainability performance. To bridge the digital divide by ensuring universal access to broadband	
STRATEGIES	RESPONSIBLE PARTY
• Empower residents to save money and make low-carbon decisions	TICD, TIDA, Utilities, Vertical Developers & 3 rd Parties
• Explore opportunities to provide universal access to high-speed internet and broadband connectivity	TICD, TIDA & 3 rd Parties
• Explore the feasibility of an integrated platform to monitor performance of the various utilities in real-time	TICD, TIDA, Utilities, Vertical Developers & 3 rd Parties
• Explore opportunities to encourage innovation, efficiency, and transparency by making non-sensitive data publicly available	TICD, TIDA, Utilities & 3 rd Parties
TARGETS	SOURCE
• Smart meters connected to every residence	Infrastructure Plan
• 100% of households with broadband via fiber optics	Infrastructure Plan
BENEFITS	
• 10-15% additional energy and carbon savings can be attributed to changes in user behavior	
• Connects people and bridges the digital divide	
• Enables residents to better engage and participate in their community	
• Enables residents to monitor their own resource use, prioritize decisions with respect to energy use, and maximize monetary savings	

Climate Change & Resilience (Chapter 6)

OBJECTIVES	
To be a global leader in climate change mitigation by minimizing Green House Gas (GHG) emissions associated with the project, while proactively safeguarding the health and welfare of the community by fostering resilience and addressing physical risks such as seismic activity and sea-level rise	
STRATEGIES	RESPONSIBLE PARTY
• Participate in the Clinton Climate Initiative Climate Positive Development Program	TICD, TIDA, Utilities, Future Residents & City of SF
• Stabilize and elevate development areas on Treasure Island to avoid geotechnical hazards, and risks associated to sea-level rise	TICD & TIDA
TARGETS	SOURCE
• Carbon neutrality in operations over the long-term if economically and technically feasible	DDA
• 3.2 metric tonnes of CO ₂ e per capita carbon footprint in 2020 including consumption, travel and embodied carbon	EIR
• Use of alternatively fueled construction equipment for at least 15% of the construction fleet	DDA
• Use at least 10% of building materials that have been extracted or manufactured within 500 miles of the project site	GBS
• Ability to manage more than 55” of sea level rise	Infrastructure Plan
• First floor and garage entrances elevated a minimum of 42” above current Base Flood Elevation	GBS
BENEFITS	
• 90% reduction in GHG emissions from a AB 32 2020 Target • First floor and garage entrances elevated a minimum of 42” above current Base Flood Elevation • Redundtant water supply, including both potable water and fire fighting • 240,000 fewer tons of carbon emitted per year. Equivalent to the sequestration capacity of 33,333 acres of California forests or 2.6% of the California State Parks system (using 7.2 metric tons of CO ₂ e per acre per year: Brown, et. al, Baseline Greenhouse Gas Emissions for Forest, Range & Agricultural Lands in California, 2004)	

Economic Vitality (Chapter 7)

OBJECTIVES	
To achieve significant levels of environmental and social performance while maintaining financial viability. To reduce development costs and risks and increasing property values and maintaining reasonable affordability to Island residents	
STRATEGIES	RESPONSIBLE PARTY
• Generate revenue streams that create long-term positive impacts on the City’s General Fund	TICD & TIDA
• Promote commercial opportunities for green businesses	TICD, TIDA & Future Residents
• Provide excellent value for residents	TICD, TIDA & Vertical Developers
• Explore sustainable financial mechanisms	TICD & TIDA
TARGETS	SOURCE
• Positive net revenue for the City’s General Fund	DDA
BENEFITS	
• Added revenue to the City & County of San Francisco General Fund—additional \$13 million per year at build out, totaling \$144 million over next 20 years (in 2010 dollars) • 25% to 30% of homes will be affordable • Funding mechanisms created for the following needs: Transportation operation subsidies, parks and open space maintenance, adaptive management strategies, affordable housing development.	



02 A comprehensive plan for sustainability

The master plan for the TI/YBI Project represents integrated sustainable design at its best. Principles of environmental and social stewardship are embedded into the approach and permeate all the elements of the plan, from the street grid orientation and urban form to the mix of uses and green infrastructure.

TI/YBI is a carefully conceived model community, which emphasizes architectural excellence, high quality of life, and environmental conservation. It will become a strong and attractive San Francisco neighborhood and a unique regional destination. The plan for TI/YBI is the result of a participatory and transparent planning process in which a wide range of stakeholders—including City agencies, developers, and the community at large—collaborated to conceive an ambitious plan that meets the highest aspirations of San Francisco residents.

Notable Accomplishments and Awards

- 2009 Selection as a Founding Member in Clinton Climate Change's Climate Positive Development Program (CCI's CPDP)—one of 17 international projects striving to attain carbon neutrality in operations
- 2008 Governor's Environmental and Economic Leadership Award for Sustainable Communities
- 2009 AIA Institute Honor Award for Urban Design

Objective

To create a vibrant livable community that is mixed use, dense, compact, walkable and preserves biodiversity and open space.

Strategies

1 Maximize solar exposure and deflect wind currents

- The Treasure Island street grid is rotated to 68° to maximize sunlight penetration into the parks, streets, and buildings. The enhanced solar exposure improves the quality of parks and open spaces and enables the use of passive energy strategies such as daylighting.
- The non-orthogonal street grid protects streets and open spaces from the prevailing westerly winds, fostering a more comfortable outdoor environment. Landscaping and other wind breaks will also be utilized to create a more efficient and comfortable environment.
- The grid orientation creates view corridors aligned with the San Francisco skyline and provides public and private spaces with magnificent views of regional landmarks including downtown Sand Francisco, the Golden Gate Bridge, Angel Island, Alcatraz, Mt. Tamalpais, and the East Bay Hills.

2 Design a compact and balanced community

- The land use plan for the TI/YBI Project concentrates development towards the west and south sides of the island, on approximately 1/3 of the available land area, creating a compact, pedestrian-oriented environment. The densities and scale will be comparable with other San Francisco neighborhoods, but the natural setting and urban form will give Treasure Island its unique character.
- The program for Treasure Island is based around the principle of creating a thriving, complete community with a mix of uses, from homes and parks to office space and retail. While Treasure Island will remain strongly connected to mainland San Francisco, the local retail, services, and amenities will enable residents to live, work, learn, and play on the island.
- The proposed densities will provide the population necessary to support social, commercial, and public transit infrastructure.
- Low density, clustered development on Yerba Buena Island will minimize impacts on the natural land form and provide new scenic amenities.

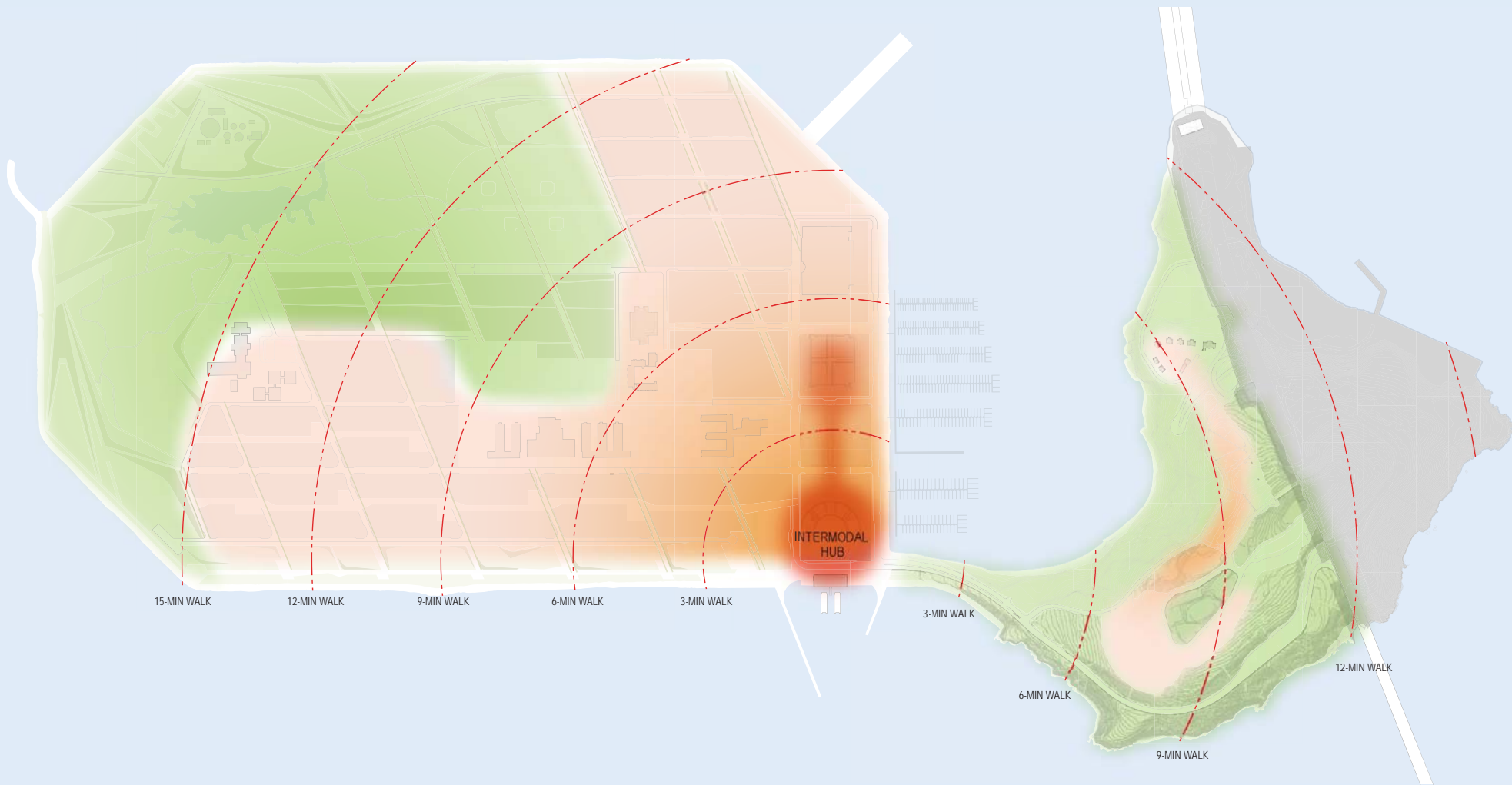




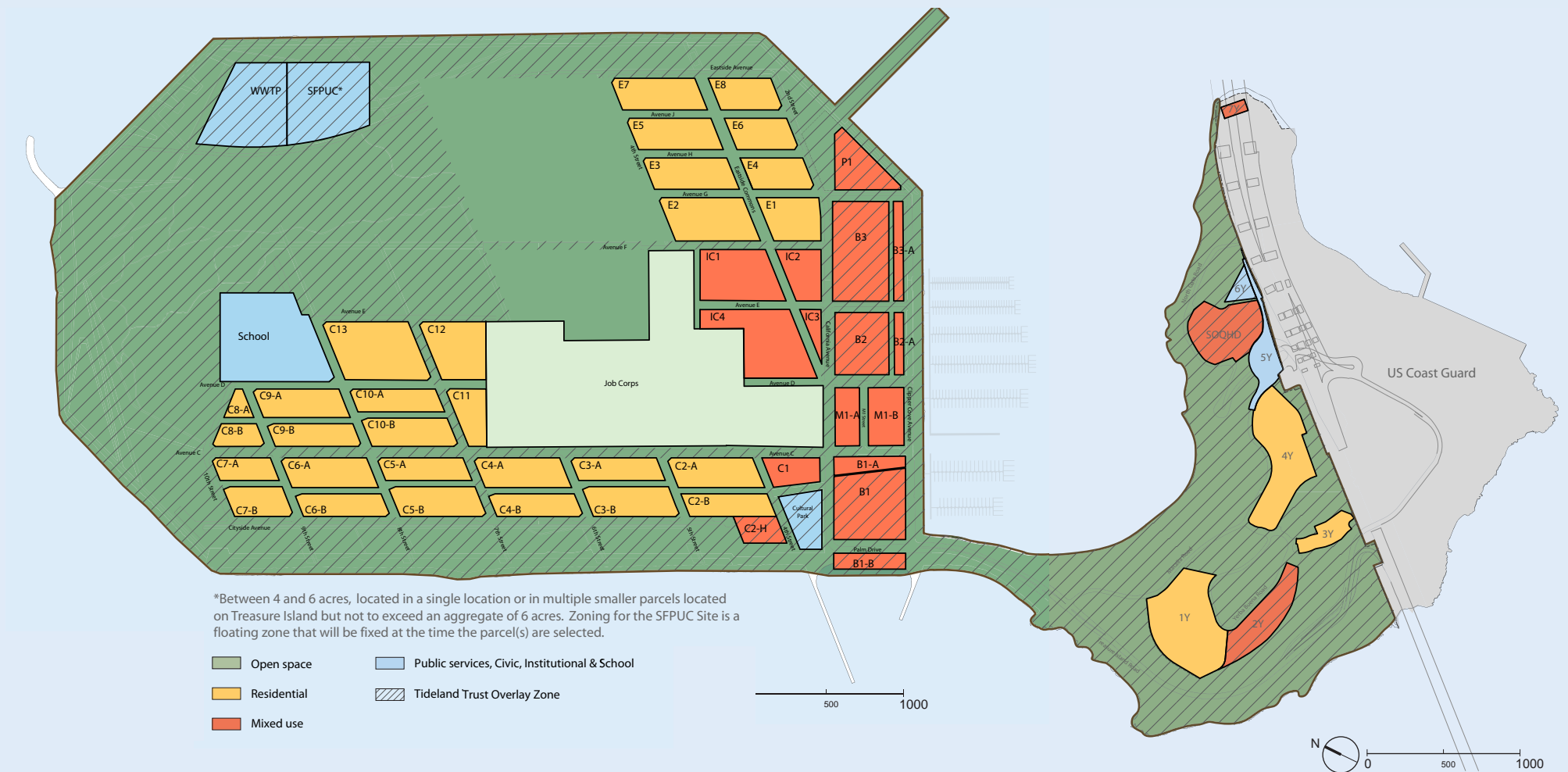
Estimated population - **18,640** | Estimated permanent jobs - **2,500 to 3,000**
Estimated construction jobs - **2,000** | Up to **8,000** homes | Up to **500** hotel rooms

Project land uses

Land use: Residential	
Treasure Island	7,700-7,850 units
Yerba Buena Island	150-300 units
Parking maximum	1 per unit
Land use: Hotel	
Treasure Island	450 rooms
Yerba Buena Island	50 rooms
Parking maximum	0.8 per room up to 360 spaces
Land use: Office	
Treasure Island	100,000 s.f.
Parking maximum	2 per 1,000 s.f. up to 604 spaces
Land use: New Construction Retail	
Neighborhood serving	45,000 s.f.
Other retail	95,000 s.f.
Parking maximum	2 per 1,000 s.f. up to 414 spaces
Land use: Adaptive reuse	
Building 1	76,000 s.f.
Building 2	85,000 s.f.
Building 3	150,000 s.f.
Land use: Open space	
Total	300 acres
Land use: Historic structures	
Yerba Buena Island	75,000 s.f.
Treasure Island	236,000 s.f.
Land use: Marina	
Off-island center district	400 slips
Land use: Community/Civic Centers	
Treasure Island school	105,000 s.f.
Police/fire	30,000 s.f.
Misc community facilities	13,500 s.f.
Pier 1 community center	35,000 s.f.
T1 sailing center	15,000 s.f.
Museum	7,500 s.f.
Community/civic total	273,500 s.f.
Land use: Utility facilities	
Wastewater treatment plant	10,000 s.f.
Corporation yard buildings at treatment plant and water tanks	4,000 s.f.
Utility facility buildings totals	14,000 s.f.



Walkability and density



Land use plan

3 Enhance the public realm

- The urban form in Treasure Island will support objectives of the plan which include showcasing excellence in architectural design, providing safe and engaging pedestrian environments, nurturing vibrant and lively public spaces, and fostering an urban relationship with nature.
- The project will generate over \$25 million to be invested in public arts and public art programs in the island. These resources will complement private investment in the infrastructure for performance venues.
- Each of the districts are based around the principles of sustainability and pedestrian-oriented design, but they vary in terms of the intensity of activities:
 - The Island Center District is a neighborhood in the Islands’ commercial core with the densest population. It is close to lively spaces, plazas, and an expanded marina and is anchored by a new inter-modal transit center.
 - The Cityside District, along the western edge of Treasure Island is one of two main residential neighborhood and affords tremendous views of downtown San Francisco and Bay landmarks; its primary social corridors include a waterfront park and a unique pedestrian oriented public way than runs the length of the neighborhood.
 - The Eastside District, located at the southeastern corner of Treasure Island, has great views of the East Bay, Yerba Buena Island and the new span of the Bay Bridge and is the other primary residential neighborhood on the island. The social focus of this district is the Eastside Commons, a linear park that acts as a community gathering place, recreation zone and as a pedestrian connector to the Island Center.



- Yerba Buena Island is characterized by its natural form and habitat with hillside neighborhoods, a hilltop regional park and links to regional bicycle and pedestrian trails.
- The Open Space District: hosts the Urban Agricultural Park and a range of open space elements to meet recreational and habitat conservation objectives.
- Funding for on-going operations and maintenance of the parks and open space will be provided by TICD, in accordance to the terms in the Parks and Open Space plan attached to the DDA.

4 Promote habitat conservation and protect local wildlife

- The TI/YBI project seeks to protect and restore indigenous biological communities, create new habitat, maximize habitat value in developed areas, and provide opportunities for people to interact with nature.
- The TI/YBI Plan focuses development towards the west and south of the island, converting previously developed lands so that approximately 2/3 of the available land area is dedicated for parks and open space.
- In accordance with the CEQA Mitigation and Monitoring Plan, and the YBI Habitat Management Plan, the existing marine and terrestrial habitat on YBI will be protected, with special attention to sensitive plants and wildlife. Coastal bluff, coastal scrub, chaparral, grassland, and Oak woodland areas will also be restored and enhanced.
- The CEQA Mitigation and Monitoring Plan includes a mitigation measure that requires every building in the project be designed to bird safe standards, considering

facade design, fenestration, lighting design, rooftop design, and lighting operations. Building designs will be reviewed by a qualified biologist to ensure that it sufficiently minimizes the potential for bird strikes.

- Mitigation measures also contain strategies to protect aquatic, subtidal, and intertidal habitats, which include enforcement of responsible boating behavior and responsible use of beaches to avoid smothering of vegetation.
- Residents of both islands will play a critical role in the protection of local wildlife. As new residents move in, it is essential that they receive information about how their choices impact the rich biodiversity of the Bay. Some of the areas where residents can have a positive impact include: respecting leash laws, ensuring trash and compost bins are animal-proof, and avoiding feeding or disturbing wildlife.



Left: Cityside waterfront park
Right: Brown Pelican on Yerba Buena Island

5 Protect valuable historic resources

- Adaptive reuse of existing historic structures will honor the heritage of the site and contribute to the uniqueness of the development.
- Historic buildings on Treasure Island will serve as major anchors of the Island Center district, with Building 1 serving as an entry point for the island and center for retail and services that will support the adjacent intermodal transit hub.
- The Great Whites Historic District in Yerba Buena Island contains gardens and historic houses, which will be restored to enhance and highlight the site's rich history and beauty.

6 Enable local food production by allocating land for an urban agricultural park

- The organic agricultural park at the heart of Treasure Island will serve as a main educational and recreational amenity. The 20+ acre park is intended to provide for visitors to experience farming and taste locally produced goods.
- The Urban Agricultural Park will have a series of areas for interpretation and demonstration to allow students and visitors to learn and appreciate sustainable agriculture.

- Local organic farmers and community members will have the opportunity to manage plots and create produce that satisfies TI/YBI resident's needs and market conditions.
- In nearby Building 2, grocery, food production, or food service will directly utilize the urban farm's production.
- The park will be irrigated with recycled water, treated to the levels specified by Title 22 State standards on water quality while soils will be enriched with compost generated by organic waste generated onsite.

7 Clean up contaminated areas to levels consistent with the plan

- Substantial work has been performed by the Navy regarding identification and cleanup of contamination, which resulted from previous uses on the island. The Navy will continue to conduct remedial actions to reduce contamination to standards acceptable for all proposed development activity.
- TICD will complete additional remediation work, beyond the scope of the Navy, to ensure the safety of future residents and users of Treasure Island. This work includes removal of hazardous building materials such as lead-based paint and asbestos, and land preparation to allow for intended uses.



Targets

- Average density 95-105 DU/acre
- Access to retail services less than 1/4 mile for 90% of residents
- Adaptive reuse for all buildings in the National Register of Historic Places
- 300 acres of land preserved for parks, open space, and farming.
- Tree canopy over 50% of available sidewalk space at tree maturity
- Use of native or regionally appropriate species for all new landscaping, excluding urban farm

Benefits

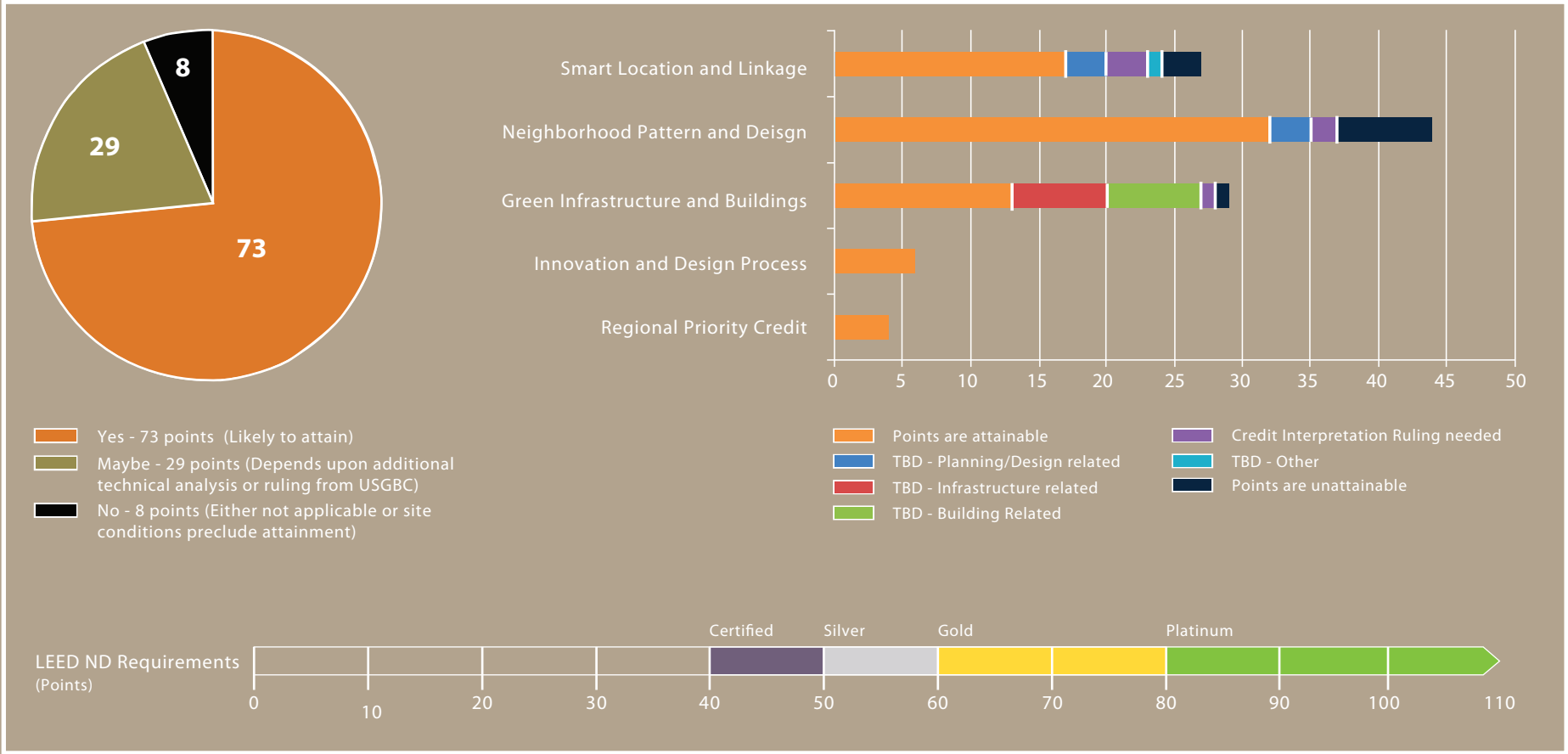
- Expand the acreage of public parks and open space in San Francisco by 300 acres—roughly one third of Golden Gate Park
- Enable approximately 18,600 residents to benefit from sustainable, pedestrian-oriented living
- Enable the creation of the largest urban farm in San Francisco
- Most residences and commercial activity located within 15 minute walk from retail services and the transit hub
- Create up to 8,000 new housing units, with 25% to 30% affordable, below median income
- Protect and enhance 311,000 square feet of historic property
- Provide 10-12 acres of new wetland habitat areas in Treasure Island
- Reduce the ecological footprint of San Francisco residents. The projected ecological footprint of a future Treasure Island inhabitant is nine acres per person, compared to 27 acres for other US cities

LEED ND Gold to Platinum

TICD has committed to achieving Gold certification under USGBC’s LEED (Leadership in Energy & Environmental Design) for Neighborhood Development (ND) Rating System, with a good faith effort to achieve Platinum. LEED ND integrates the principles of smart growth, urbanism and green building. Certification provides independent, third-party verification that the development’s location and design meet the highest levels of environmentally responsible, sustainable development.

The first LEED ND program was finalized in July 2010 and contains five point categories: Smart Location and Linkages (SLL), Neighborhood Pattern and Design (NPD), Green Infrastructure and Buildings (GIB), Innovation and Design Process (ID), and Regional Priority Credit.

Based on this analysis, the TI/YBI Project is positioned to attain LEED ND Gold certification level. The detailed analysis of LEED ND credits is included in Appendix B.





03 Nurturing a vibrant and inclusive community

A diverse population—one with varied ages, lifestyles, and income levels—is at the heart of every strong neighborhood. To transform Treasure Island and Yerba Buena Island into a lively community, the plan contemplates the creation of a diverse range of housing types and amenities, designed to meet the needs of the population.

Community facilities will enable those who live and work in Treasure Island or Yerba Buena Island to meet basic needs without having to leave the island, while recreational opportunities will provide on-island access for residents and the San Francisco community at large.

Equity and fair distribution of benefits are essential components of this project. Treasure Island will exceed the requirements of the City's inclusionary housing ordinance, ensuring that the high quality of life and benefits of the project are accessible to people of all income levels. Government agencies and non-profit organizations, including the Treasure Island Homeless Development Initiative, will provide training to San Francisco residents that seek opportunities for construction and permanent jobs on the site.

Public participation will continue to play a central role in shaping the community. This ensures that stakeholder needs are addressed and relative costs and benefits are shared fairly.

Objectives

To foster the development of a strong and diverse community that has access to ample opportunities for recreation, arts, and education.

To undertake the redevelopment through a process built on transparency and public participation.

Strategies

1 Offer a transition housing program for existing residents

- Transitioning Households are existing residents of the Treasure Island or Yerba Buena Island who reside on the Island as of the date of the DDA approval and who continuously remain residents in good standing during construction and development until they are asked to move.
- Once asked to move, Transitioning Households will be able to choose from a range of benefits, including the opportunity to rent a new unit on Treasure Island at the same or a reduced rent, the opportunity to receive downpayment assistance to purchase a new unit in the TI/YBI project, or the opportunity to take an in-lieu payment and move off-Island.
- The Transition Housing program will enable existing residents to remain part of the Treasure Island community as it is redeveloped.

2 Provide a range of housing types for all income levels

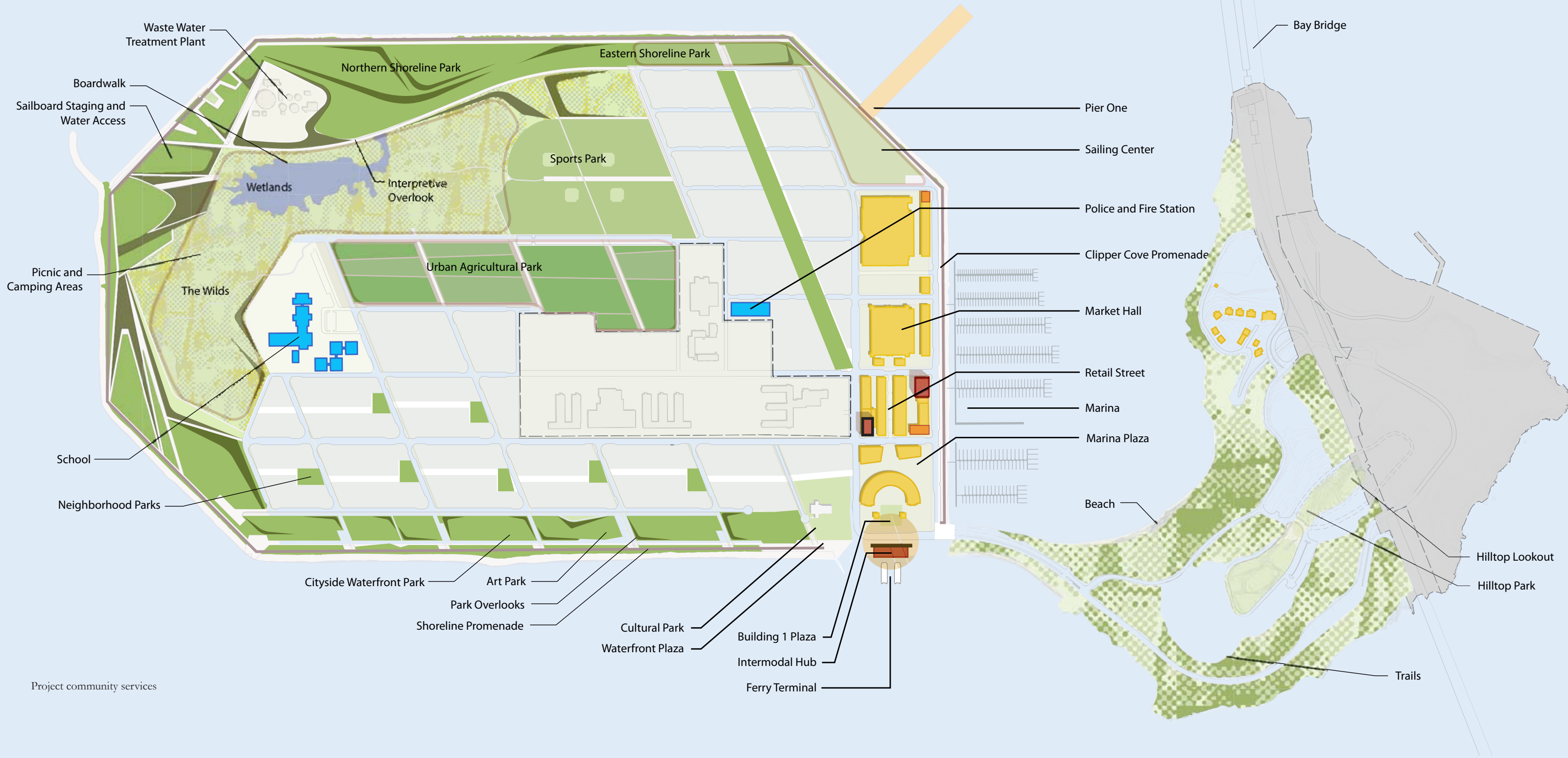
- Treasure Island and Yerba Buena Island will include a diverse and inclusive community that is home to people from different income groups, ages, and lifestyles. The housing program will consist of a variety of unit types and sizes, a range of affordability, and a mixture of building structure types.
- The varied units will include studios and apartments with multiple bedrooms to meet the needs of different households. The housing diversity will attract a varied population including singles, families with children, students, seniors, couples, and persons with special needs.
- Upon completion of residential development, 25% to 30% of all units will meet the City's definition of affordability. These will include supportive homeless housing and inclusionary units for ownership or rental.

3 Provide high quality community facilities and amenities

- Housing on Treasure Island and Yerba Buena Island will be clustered around parks, transit, and amenities. Residents will be a short walk to services, amenities, shops, and restaurants.
- San Francisco is known for its charming neighborhoods, which are hubs of creativity and innovation. The island community will offer a new destination to explore. The interpretive environmental features, sport venues, parks, museums, and other amenities will support the arts and education in San Francisco and the region.



Treasure Island's annual dragon boat race



- Access to community/public facilities is a key component to the fabric and health of a community. Therefore there will be a wide variety of facilities located within this single community. Many are identified to the left while a broader list includes:
 - Police and fire station
 - TI community center
 - Neighborhood reading room, library, and computer center
 - Senior/adult services
 - Youth center
 - Community performance space
 - Bicycle storage facilities
 - Health and wellness facilities
 - Community gardens
 - Treasure Island School
 - Childcare center
 - Great Park
 - Environmental education center
 - Regional sports/recreation facility & ball fields
 - Neighborhood Parks and playgrounds
 - Outdoor sports courts
 - Yerba Buena Island hiking trails & Hilltop Parks
 - Restored historic properties
 - Sailing Center
 - Multi-modal transit center
 - Information center
 - Urban agricultural park
 - Chapel
 - Grocery stores
 - The Great Whites
 - Other Neighborhood-serving retail

4 Create jobs for local residents

- Development of Treasure Island will result in the creation of new construction and permanent contracting and employment opportunities. The Economic and Contracting Policy for Treasure Island contains measures to direct contracts towards small businesses and jobs to priority groups such as San Francisco residents and economically disadvantaged persons, including those who are formerly homeless.
- The Economic and Contracting Policy also includes special programs to direct jobs and contracting opportunities to residents and members of the Treasure Island Homeless Development Initiative (TIHDI), a key stakeholder. TIHDI's Job Broker program will refer candidates for construction and permanent jobs within the TI/YBI Project; TIHDI's service providers will have opportunities to provide services such as grounds maintenance, janitorial, and recycling on an on-going basis; and there will be additional opportunities for TIHDI to create new enterprises to fulfill its mission of providing economic development opportunities for the formerly homeless.
- Currently Job Corps runs an education and career training program in Treasure Island. Development of the Treasure Island community around the Job Corps site will create a variety of employment for graduates of the program.

5 Actively engage the community and stakeholders during the redevelopment process

- A extensive stakeholder engagement process has been ongoing for over a decade. Over a hundred public meetings, including presentations, work sessions, discussions, and reviews of project materials have taken place. These meetings include sessions with the Treasure Island Development Authority Board (TIDA), Treasure Island/Yerba Buena Island Citizens Advisory Board (CAB), Committees of the Board of Supervisors and other regional and state governmental and public interest organizations.

Affordable Housing Breakdown

TYPE OF AFFORDABLE UNIT	TO BE DEVELOPED BY	AFFORDABILITY LEVELS	ESTIMATED NUMBER OF UNITS
Supportive homeless housing	Treasure Island Homeless Development Initiative (TIHDI)	To be determined by TIDA & TIHDI but generally very low income (50% AMI or less) serving formerly homeless persons and families	435
Inclusionary units	Vertical developers	60% of AMI for rental 80%-120% of AMI for sale	295 - 316
Authority units	Treasure Island Development Authority (TIDA)	To be determined by TIDA, ensuring that at least 6% of all residential units are affordable to households with incomes not exceeding 50% AMI.	1,249 - 1,670
Total Affordable Units: 2,000 to 2,400			

Targets

- 273,000 sq ft of community service space
- 45,000 sq ft of neighborhood-serving retail
- 25% to 30% affordable housing
- Provide transition housing benefits to all qualifying households
- 2,000 construction jobs
- 2,500 permanent jobs

Benefits

- New facilities for the community include a community center, senior facilities, youth center, public library, public performance space, sports facilities, and urban agricultural park
- 90% of residents within 15 minute walk to parks, public facilities, transit and retail
- Expand the supply of affordable housing in San Francisco by 2,000 to 2,400 homes
- Support existing residents who remain on Treasure Island through its redevelopment
- Increase employment opportunities by generating 2,000 construction jobs and 2,500 to 3,000 new permanent jobs on the islands
- Provide sustained support for the housing and resident programs of the Treasure Island Homeless Development Initiative

Urban Agricultural Park

Urban farms provide health and social benefits to the communities around them. In our industrialized society, city dwellers are disconnected from their food sources. Organic urban farms provide a glance into agricultural processes, nurturing an appreciation for the natural environment.

The Urban Agricultural Park on Treasure Island will be the largest urban farm in the Bay Area, approximately 20 to 25 acres. The park will offer educational activities, and provide a hands-on experience with organic agriculture. In addition to the educational components, a portion of the Urban Agricultural Park might be operated as a commercial farm producing suitable crops such as greens, root vegetables, or herbs that can be sold to residents on island or at other local farmers' markets.

The Urban Agricultural Park will play an important role in closing resource loops for water and organic waste in the island. A portion of the waste water generated on the island will receive tertiary treatment so that it can be used for irrigation. Organic waste generated on the site will be composted and used to enrich the soils. Growing foods adjacent to a strong consumer base will also reduce consumption and transportation related carbon emissions.





04 A transportation network
with a human scale

The transportation network for Treasure Island and Yerba Buena Island is designed to prioritize pedestrians and cyclists over vehicles and to encourage sustainable transit-oriented choices as part of everyday life.

A commitment to enhancing the public realm is reflected in the street design, the pedestrian and bicycle network, the enhanced transit service, and the demand management program.

Transportation measures in the plan encourage a mode shift from private autos to environmentally sensitive means of transportation. This program includes ferries, buses, electric or alternative fuel, on-island shuttles, car sharing, and a bicycle sharing program. An intermodal transit facility, located at the southwest corner of Treasure Island, serves as a gateway onto the island and as a transportation hub, providing links between all forms of transportation and connecting ferries and buses with on-island services and pedestrian routes.

The compact form and variety of amenities and services are intended to reduce discretionary vehicle trips and support the objective of creating a transit-first island community.

Objective

To develop a model transit-first community where the predominance of walking and cycling is complemented by clean transit service.

Strategies

1 Provide a safe and inviting pedestrian and bicycling environment

- The Treasure Island community is designed to allow access to essential services within a 10-15 minute walk. Pathways and streetscapes are designed to enhance the pedestrian experience.
- The design of the streets recognizes the role that streets play in social life and neighborhood comfort. Street furniture, lighting, public landscaping, and frontage design contributes to creating a walkable and bike-friendly environment that is appealing and engaging.
- Neighborhoods, parks and public spaces are connected via a pedestrian and bicycle network that invites use of an active environment that is tree-lined and wind-sheltered. A grand pedestrian boulevard, Eastside Commons, links the Transit Hub with the Eastside Neighborhood. Pedestrian streets called “mews will be an important connection within this intimate neighborhood that allows automobiles but does not encourage them.

- All streets accommodate vehicles, but many only at low or moderate volumes, and are designed with an emphasis on pedestrians and cyclists.

2 Provide high quality, frequent and easily-accessible transit

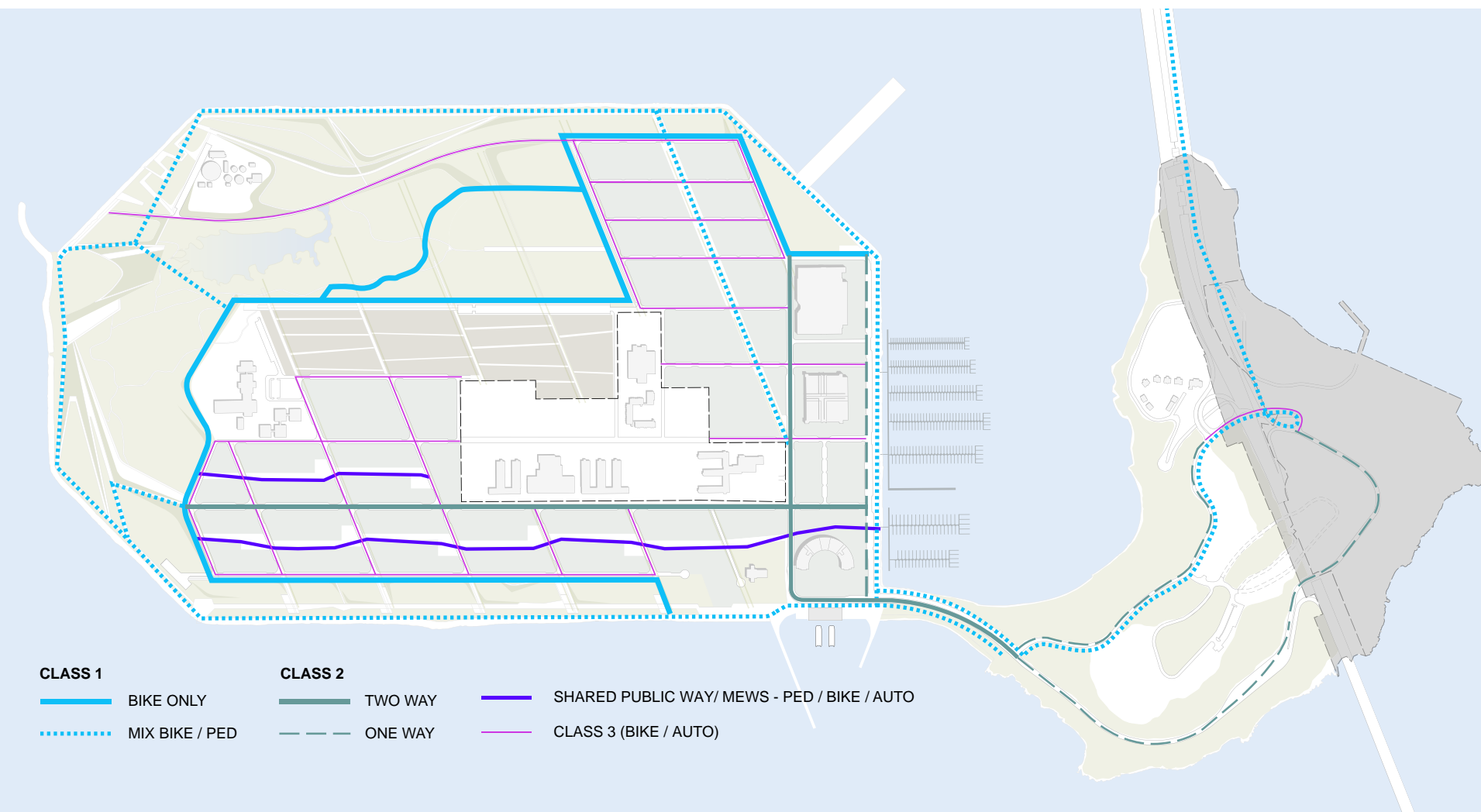
- The convenient internal transit infrastructure encourages residents and visitors to explore the islands without private vehicles.
- The on-island transit program proposed is centered around a clean/low-emission, wheelchair accessible, frequent shuttle connecting the transit hub to all of the neighborhoods.
- In accordance with LEED ND specifications, transit stops will be sheltered to buffer wind and rain, and will have seating and illumination.
- A new ferry service linking Treasure Island with San Francisco will offer frequent trips into downtown during peak hour. Expanded bus service to downtown San Francisco will operate 24 hours a day, with expanded frequency during peak hours. When combined with a bicycle, these services greatly expand the Islands’ connectivity.
- New bus service to East Bay will be provided.
- Frequent and dependable bus and ferry service, with space for bicycles, will offer visitors a scenic, efficient, and enjoyable trip to the islands.



Transit Plan	
Bus trips	334 trips per day
Ferry trips	45 round trips per day
Inter-Island shuttle (alternative fuel)	120 trips per day



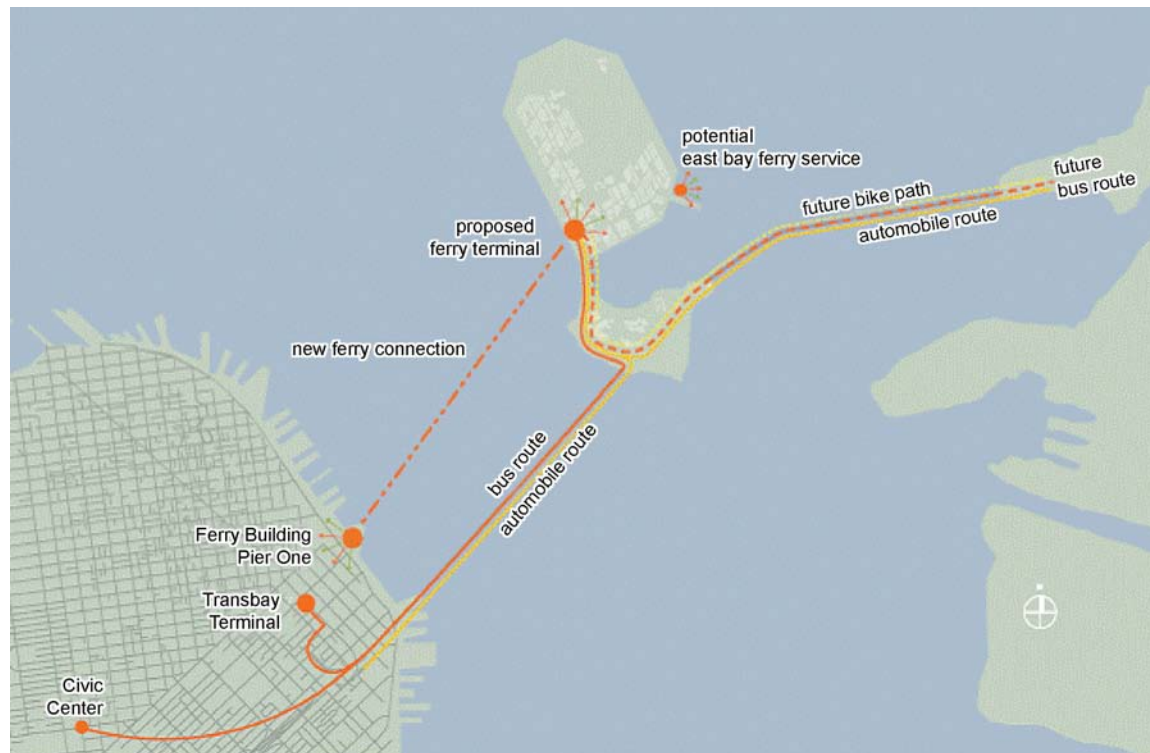
Public transit network



Bicycle network

3 Implement a transportation demand management program to encourage transit use and reduce traffic

- A Transportation Demand Management (TDM) program establishes a series of measures to incentivize alternatives to vehicular travel. Some highlights of the TDM program include:
 - Transportation Management Authority (TMA) governance structure
 - Congestion pricing program
 - Unbundling the cost of parking from the cost of housing



- Appointment of a Travel Coordinator
- Car share program
- Commuter benefits programs
- Comprehensive transit pass built into housing and hotel costs
- Free bike/bike share programs in collaboration with regional and/or on-island program
- Parking disincentives and pricing programs
- Guaranteed Ride Home program and support of other ridesharing programs
- Ramp metering
- Parking caps: 1 space per residential unit, up to 8,000 spaces, with parking spots decoupled from units themselves
- Parking will be managed, priced, and designed to reduce on-island trips and minimize impacts on the pedestrian environment. Parking maximums for all uses were established in the D4D.
- Congestion pricing will be used to charge fees to drivers who choose to use their automobiles during peak travel periods.
- To further reduce environmental impacts of vehicular travel, the infrastructure of the island will have the capacity to support charging stations for electric vehicles, as needed.



Street network



Targets

- 90% of the population will be have less than a 15 minute walk to transit hub and town center
- Walkable blocks: 400' - 600' in length with mid-block passages
- 15 minute headways for ferry service during peak hours
- 7 minute headway for bus during peak hours
- 40%-45% non-auto mode share during peak hours
- Limit of 1:1 parking for residential units, up to 8,000 spaces, that are economically decoupled from the units
- Bicycle parking provided for commercial and residential uses, in compliance with D4D
- Where off street parking facilities are provided, 50% of Class 1 spaces should be provided
- Accommodate potential electric vehicle charging stations in public and private areas

Benefits

- Expand San Francisco's bicycle network by adding 10 miles of dedicated bicycle trails
- 4 miles of new pedestrian trails and hiking trails
- New frequent ferry service provides 45 daily ferry trips between Treasure Island and the Ferry Building
- Enhanced clean bus service provides 12,000 daily person trips to downtown San Francisco
- Avoids the addition of 12,000 person trips on the Bay Bridge during peak hours
- 2,800 metric tons of transit-related CO2e will be avoided per year due to lessened reliance on vehicles
- Energy capacity and infrastructure to support electric vehicles as needed
- Connect to the new bicycle and pedestrian trails on the new eastern span of the Bay Bridge and preserve the option of a connection to the west span in the future, increasing the network of San Francisco Bay Trails