

Bayview Village Summary

Bayview Village would be a large real estate development in the foothills near California State University East Bay in Hayward (CSUEB Hayward). It is designed to meet six complementary goals:

- **Affordable housing:** For sale housing under 110% of HUD median income
- **Sustainability:** building, energy, landscaping, water
- **Green mobility:** Village Bus, car share/rental, walk access, reduced auto dependency
- **Health and safety:** Clean, safe, secure; more walking, recreational opportunity
- **Good Design:** High quality visual design and layout of site and buildings
- **Community:** balancing privacy and neighborliness.

Bayview replaces the labor-intensive, high resource-consuming, extensive land use system of suburbia with one that is inherently more efficient economically, environmentally, and socially.

Project Description of Bayview Village

The site is located about 1000 feet east and uphill from the intersection of Carlos Bee Blvd. and Mission Blvd. in Hayward, California on the way to CSUEB Hayward half a mile further up. The site is accessible from the dead ends of Overlook Ave. and Palisade St. See Area map and Village Bus route below. "CSUH" is CSUEB Hayward.

The City of Hayward has site control and intends to sell the land for development in 2019.



Area map and Village Bus route

Existing Site Geography

Bayview Village would be built on an abandoned quarry. The original name was Quarry Village, and it still has its partisans. The ultimate name is to be decided by what sells the best. The site has 29.63 acres and features steeply-sloped open space perimeters around most of the developable area, giving the project strong geographical separation from adjacent land uses. On the north the site has a long arc of a heavily-wooded deep ravine with Dobbel Creek; further north is

a single-family neighborhood along Highland Blvd. On the east side is a steep rock face left by quarrying, and further east is a PG&E utility corridor 200 feet wide and then the existing City View Apartments. The site narrows down to the south, stopping short of Carlos Bee Blvd. On the west side the site connects to Palisade St. and then drops down steeply to the single-family neighborhood on Redstone Place well below the site.

APN	Location	Acres	Zoning
445-0180-001-00	North of Overlook Ave. and Palisade St.	29.42	Sustainable Mixed Use
445-0170-020-06	Lot, northeast corner, Overlook & Palisade	0.21	Sustainable Mixed Use
	TOTAL	29.63	

The limited access and geographic buffering would make Bayview Village a community with its own distinct identity and ambiance.

The site has 18.56 acres of developable area. Dominating the area is the large flat floor of the old quarry. The narrower south side has higher ground and a long pile of overburden left over from quarrying. On the west side is a knoll with views of the Bay and the quarry floor.

Bayview Village is designed to be a community free from vehicular traffic, with homes on walkways providing a sense of neighborhood and shared informal space. See Site Plan below. The site plan currently proposes 702 units, with a mix of unit types: studio and one-bedroom condominiums in the Palisade Building; two-bedroom one bath and two-bedroom two bath condos in sixplexes; and townhouses with three, four, and five bedrooms. The sixplexes have three condos on each side of the building with a central stairway, a very efficient design. Unit sizes would vary from 440 to 2,100 square feet and most of the buildings would be three-story, wood-framed structures.

Densities persons/unit	unit density			person density		
	# of units	# of persons	per neighbor- hood acre	per net acre	per neighbor- hood acre	per net acre
2.50	704	1,760	28	51	69	128

(See Location and site plan\ Bayview site areas 702 units.xlsx for details.)

The project plans more larger units than most condominium projects in order to appeal to larger families and higher incomes. The use of bedrooms in the townhouses is flexible for a family room, study, work room or guest room, or storage. The three-bedroom ground floor has a large flex space for a bedroom, home office or secondary unit.

The site plan also has parks, trails, open space, a Village Center with a small park, busway, and a Community Center. One hundred parking spaces would be located in a parking lot on an extension of Overlook Ave. The PG&E corridor would have a community orchard and garden and would compost vegetative waste from the project.

The walkways are for walking, not cars, but they would also accommodate public safety and emergency vehicles, moving vans, garbage trucks, and recycling trucks. These walkways would use a green paving system, grasscrete, to maintain the aesthetic of the Village. The Village Center would be a short walk away from the units.

The nascent 238 Foothill Trail would cross through the site. It would ultimately be five miles long and run from Foothill Blvd near I-580 in Castro Valley. "238" refers to the old State Route 238 Bypass proposal, now abandoned, resulting in surplus right of way, including the quarry site. Just north of the site and Highland Blvd, the 238 Foothill Trail would connect to the Ward Creek Greenbelt, with trails down to the municipal swimming pool and band shell, and up into the high hills. Going south, the 238 Foothill Trail gives access to Garin Dry Creek Park and reaches Industrial Parkway. The Master Development Plan shows the route shown in the Foothills Trail (SD-7) overlay zone, which is too wide for the steep slopes of Dobbel Creek and on a roundabout alignment. The plan, however, allows realignment. The Bayview Plan makes the trail an asset for residents and a way for new people to learn about the project.

Bayview Village would plan, construct, and manage the section of the 238 Foothill Trail coming through the site and would dedicate a conservation easement for public use during the day-time.

In addition, within the Bayview site, the project would build the Bayview Trail, climbing up from the Village Center to a picnic spot high enough to have a spectacular three-bridge view of the Bay Area. The trail then gradually descends to the north to come into Village Park C by Dobbel Creek.

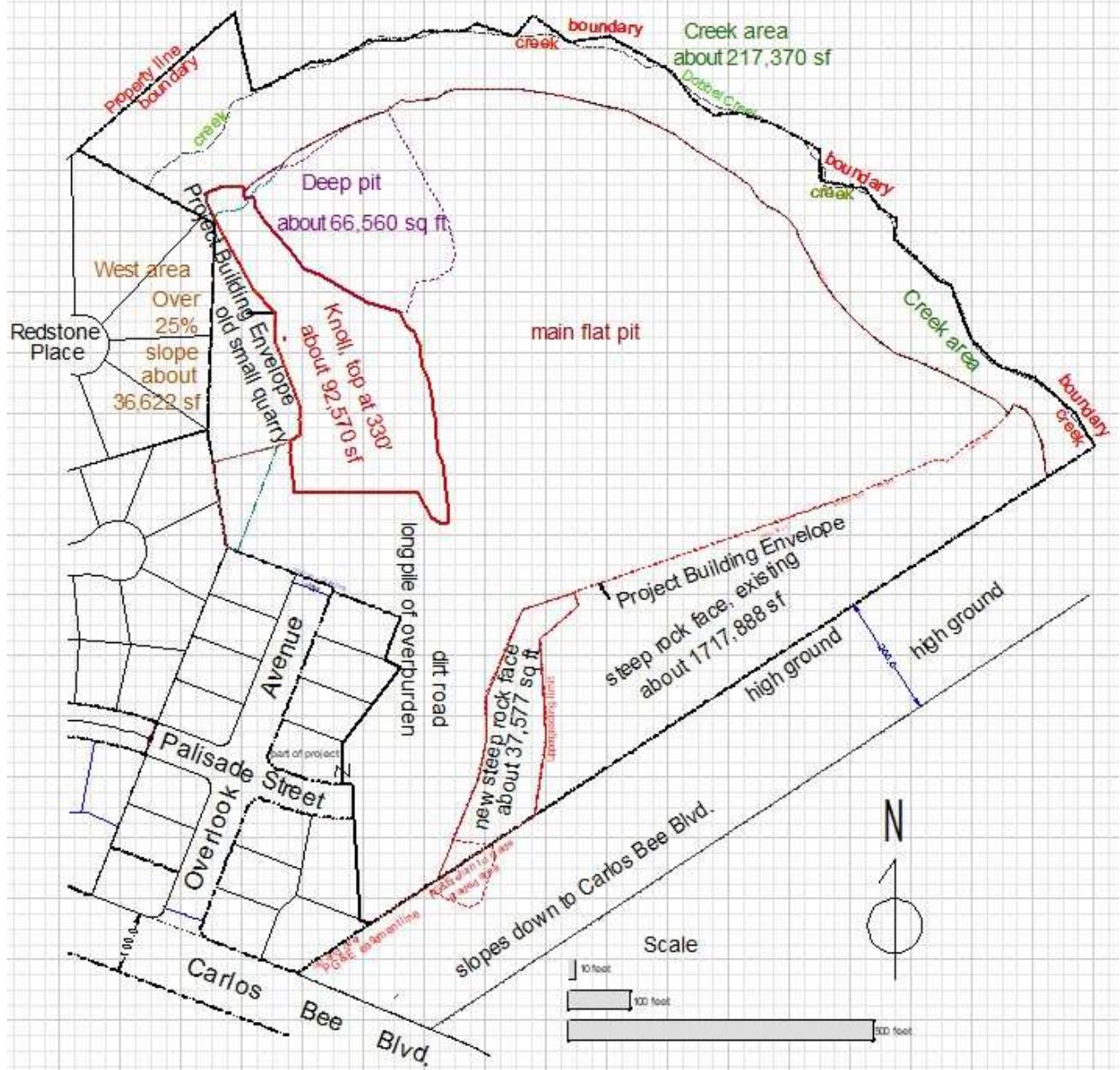
This Bayview plan has been carefully evaluated by the civil engineering firm of Lea & Braze Engineering, Inc. to verify that it is feasible from the perspective of (1) incorporating wet and dry utilities into the rights-of-way; (2) complying with City of Hayward right-of-way street criteria such as maximum slope, minimum width, and minimum turning radius for fire; (3) estimating cut and fill to balance and to provide drainage and ADA-approved slopes; (4) staging grading to optimize delaying cost to close to when needed for phases; and (5) meeting State Water Board regulations for storm water treatment with an underground storm water detention pipe-network with metered release into the creek or storm drains on Palisade St.

(AutoCAD/DesignCAD files of an aerial survey to two-foot contours, Preliminary Geologic Hazards Evaluation by TERRASEARCH (now AGS), Engineers Report by Lea and Braze, and related information are in a folder, \Engineering and site development. For APN maps see \ Maps and aerials of quarry and Bayview folder.)

Bayview Village

Existing Site Geography

Hayward CA
August 2018



Bayview Village Site Plan

Hayward CA
August 2018



Village Center

The Bayview Village Center would consist of:

- **Village busway:** The busway would be an extension of Palisade St. across the PG&E corridor to Carlos Bee Blvd. The busway would have elevated sidewalk bus stops for fast boarding.
- **Community Center:**
 - Ground floor: lobby, mailboxes HOA service counter with mailing services and mail too big for mailboxes, ATM, security video surveillance office, small laundry, room for child care, bicycle shop, reading room with coffee bar, books and a wood-burning EPA-rated stove.
 - Second floor: café and flexible multi-purpose room with a small kitchen and small locker rooms used for a fitness center, meetings, banquets, performance, parties, clubs, movies, and events. This floor looks out over the Bay and would have a balcony.
 - Top floor: two Homeowner Association (HOA) manager apartments, HOA office. On-site management supports high quality attention, security, and services.
- **Neighborhood Café:** The neighborhood café on the second floor has sweeping views of the Bay, Mount Tam, downtown San Francisco, and down the peninsula to San Jose. Ideally, it would be a combination of bakery, pastry shop, café, restaurant, take-out, ice cream parlor and coffee shop.



- **Village Square:** A small park with native trees (redwood, live oak, laurel, sycamore, buckeye) and benches around a pool with a fountain is at the heart of the center, a place to meet friends and visitors or relax in warm weather.
- **Palisade St.:** Parking reserved for public cars (car share/rental, taxi, shared ride).

Major policy framework

Generally, American neighborhoods are very inefficient at consumption, but the cultural focus is on efficiencies of production. The cost of housing, energy, and transportation is high, as are the environmental and social costs. The walkable neighborhood system is not understood in the U.S. because of the dominance of a system of dispersed, auto-dependent, high-cost suburbs, a culture which limits thinking about large, complex, alternative systems. Even new “transit-oriented development” pays homage to the car by subsidizing large amounts of underpriced, bundled, and, actually, expensive parking.

The Bayview project provides a comprehensive, holistic alternative to the dominant system. Bayview Village takes “smart growth” to a higher level, incorporating compact development, mixed use, and alternative travel modes in a setting convenient for work, home and play. It pulls together proven but usually isolated ideas into an integrated whole. The project has economies of scale that achieve a high quality of life with fewer resources, lower costs, and a different system of pricing, land use, housing, energy, and transportation.

Bayview Village would have the look and feel of a traditional walkable neighborhood. It would have a high quality of life based, in part, on the functionality of high density to increase purchasing power and transit ridership with short walk distances. The project supports a cost-effective Village Bus service and other mobility features to equal or surpass the mobility of suburbia.

A successful development would demonstrate the viability of the Walkable Neighborhood Systems. Walkable Systems significantly lower living costs of housing, energy, and transportation combined. Compared to suburban development, Walkable Systems use dramatically less fossil energy, on the order of 70 percent compared to a typical subdivision, for both housing and transportation. They reduce economic dependency on fossil fuels, foreign suppliers and related military costs, and reduces pollution and greenhouse gases.

Policies for global warming are likely to increase. Reducing greenhouse gases is mandated by AB 35 and SB 375. Also, the regional planning process in the Bay Area, cap and trade, and possibly carbon taxes would improve the market for Bayview. The Climate Action Plan of the City of Hayward and its planning and zoning are already in place for Bayview.

Affordable Housing

Bayview Village would provide 702 high-quality homes at prices affordable to moderate incomes in Alameda County. Affordability includes housing, energy, and transportation costs combined. The project achieves affordability with more efficient land use, low-cost housing design, and lower home maintenance costs.

- Parking is optional and spaces are leased, reducing the cost of housing. Parking pays its own way, separate from housing.
- Less land is used for streets and parking, allowing more land to be used for housing and reducing the housing cost.
- Energy-efficient integral roofs with mechanical underneath support zero net on the grid
- Efficient foundations serve several row houses and sixplexes, efficient three-story construction, and advanced energy and water savings built in, saving on utilities.
- Phasing of site development reduces carrying costs, getting sale income closer to outlays.
- Added costs of sustainable mobility are more than offset by savings.
- The plan supports living without owning a car, saving more money.

Bayview is intended for a mix of incomes, kinds of families, and ages. Bayview includes more large units than usual for multi-family housing—three, four, and five bedrooms—as well as studios, one bedroom and two-bedroom units. The current plan calls for 6 studios, 26 one-bedrooms, 336 two-bedrooms, 185 three-bedrooms, 88 four-bedrooms, and 61 five bedrooms. Student housing needs to be added. Actual types will respond to sales.

For land use, suburban single family usually has two parking spaces on the street, two on the apron and two in the garage. Bayview Village has one seventh of a space per unit and less roadway, allowing more housing on the same amount of land. Bayview avoids wider streets, street parking, driveways, parking aprons, garages, traffic controls, and big storm drains. Less ROW width allows more land to be developed and serve more units with access and utilities.

Bayview would use low-cost housing design that reduces cost without affecting quality. Using only rectangular foundations and efficient floor plans lowers costs. Foundations using spread

footings with stem walls and piers or post-tensioned slabs would use reusable steel forms and factory-assembled rebar inserts. The modular sizing of foundations allows reuse of the forms and many uses of the same rebar format.

Computer-aided Design (CAD) can be used to minimize minimal waste of lumber, walls, and other building materials and increase efficiencies in construction. Repeated wall panels with the same design may have economies of scale that make it efficient to make them as modules in a factory on large jigs. Labor hours are predictable, inspections for quality control are systematic, and weather problems are all but eliminated. Modules are transported and assembled onto foundations and bolted into place. Modular floor plans with common dimensions make it easy to shift among unit types to respond to market demand.

The design saves about 20 percent on housing construction costs. Some of these savings are invested in HOA assets, for a net price reduction of about 15 percent below market price for the same interior space and floor plans as a single-family house. The comparison is complicated because Bayview provides more than a typical suburban house. Some of the investment is needed for mobility, like the Bus, and some is extra amenity, like the Village Center.

HOA services eliminate many direct maintenance costs of home owning, save time, and alleviate homeowners of work they may not want to do, or be able to do.

All these features lower housing costs. All units meet HUD guidelines for affordable equity housing as affordable at 110% of median income. (Walkways vs. cars; affordability\Housing Affordability 2019 Bayview HUD.xlsx.)

Sustainability

The sustainability of Bayview is a result of the features discussed in other sections: The housing uses sustainable materials and minimizes construction waste. The energy system is sustainable. Green mobility reduces fossil fuel use and reduces pollution. This section discusses water, parks, land conservation and biodiversity.

Water

Bayview would have low water consumption and low pollution. There would be no private over-watering of the yard, hosing off sidewalks, or washing cars.

Walkways would be permeable grasscrete for ground storage of water. Rain barrels would retain rain from roofs for irrigation. Walkway permeability and unit density significantly reduce the impacts of pavement, reducing storm-water runoff and heat-island effect.

The storm water system would meet “C.3” requirements for on-site retention. Storm water would be stored and filtered mechanically in two-foot diameter retention pipes running underground on walkways and courtyards. These pipes would have a one-inch outlet pipe at the downhill end for slowly trickling out the water. Water is gradually released for landscaping (bio-retention), percolation into onsite soils, Dobbel Creek, or storm drains. This solution is less costly than setting aside otherwise buildable land for surface treatment and storage, and it almost eliminates irrigation costs.

Hayward enjoys pristine Hetch Hetchy potable water, with service already on the site. Water use would be conserved through EPA WaterSense certified fixtures: dual flush toilets using 1.6 gallons per big flush, showerheads restricted to two gallons per minute, and washers using 14 gallons per load.

The plan would have greywater systems, such as going from sink to toilet tank, and from washing machines to landscaping. No potable water would be used for irrigation.

The City does not have data on available sewer capacity. Sewer flows reduced by green water policies may fit within the capacity on Palisade St.

Parks, land conservation, and biodiversity

The parks and open space are sustainable.

The site plan envisions eleven acres of surrounding natural open space and steep rock face, two acres of parks, the 238 Foothill Trail, a trail up to a picnic area overlooking the San Francisco Bay, and even two small plazas, a tot lot, and a bocce ball court.

Five small parks and other landscaped areas would have drought-tolerant native plants and be irrigated with a combination of stored storm water, filtered rain water, greywater, and seasonal ponds. The parks would have fire pits, grills and sheltered picnic tables.

The Bayview Village project would benefit the environment by replacing sparse vegetation and rock of the quarry with native plants, enriching habitat and bird life. Existing historic habitat, the wooded slopes in the Dobbel Creek area, would be protected.

The project would conserve land relative to suburbia. The density of Bayview about 48 units per net acre, is twelve time denser than suburbia at about 4 units per acre. Bayview uses about eight percent of the area used by suburbia. The figures for other kinds of density measurement—units per gross acre, persons per net acre, and persons per gross acre—have similar ratios. Bayview uses far less land than suburbia, saving agricultural and natural land.

Solid waste in Bayview seems likely to be similar to other neighborhoods. The project would make segregation and recycling of waste materials easy, but the HOA still have to keep litter picked up.

Bayview Village would be the most sustainable development built in California to date, reaching the equivalent of a LEED (Leadership in Energy and Environmental Design) platinum rating, which is the most advanced standard for sustainability in buildings. Bayview would also score high with the Green Building Rating System and with LEED for neighborhoods. (More discussion of ratings is in Bayview archive Green ratings of Bayview Village.)

Energy

Green energy has two major components, passive energy to reduce the need for active energy and active energy to supply what is needed. Both are helped by three-story construction, which is about 30 feet high.

Three stories

Three-story construction has a cross section that balances roof area with the living space below. The roof has most of a building's heat losses and gains, until the building gets too high and the walls become more important. Three-story construction optimizes the wall to roof relationship. The depth of a row house is influenced by how far sunlight can come in from either end and how much windowless area can be in the center. Condo and townhouse units are all 32 feet deep and 30 feet high, the optimal energy conserving cross section. Row housing maximizes common walls, further minimizing heat gain and heat loss. The width of the row of building does not matter above 32 feet. The roof area of three stories can provide solar energy of the three floors be-

low; a higher building has too little roof and a lower one has excess roof space (see active energy below).

The aesthetics of three stories have less density than higher buildings (see design below).

Three stories are the maximum Americans generally tolerate for climbing stairs. One purpose of Bayview is to get people more active, but being realistic about what they may be willing to do. Elevators add a significant expense, especially in a single-family dwelling.

The situation changes in a hallway building, where an elevator can serve many units off the hall. Then the number of units per distance of hallway becomes important, as larger units require more hall distance. Bayview has the Palisade Building for studio and one bed units, which get the most units per distance of hallway. These units are 24 feet deep and have less light penetration than the 18 feet in the condos and townhouses. The kitchen, bathroom, and closets are on the inside and the living dining bedroom on the outside, where they get enough light. The hallway building thus has greater depth, about 54 feet, with more room for solar to support four floors underneath. The incremental cost for the elevator to go four floors is small, so the economic and sustainability issues for a hallway building of studios and one beds are different from the larger units. Four stories increase density, which is useful for economies of scale. The Palisade Building is on the Village Square and the locational advantage justifies a higher density. People are likely to pay more to walk a shorter distance.

Passive energy

Passive energy is in the building, using tight construction, insulation, and energy efficient windows and doors which insulate the unit against outside temperatures, reducing the need for active energy. Additional passive energy design includes building orientation to the sun, larger south facing windows to gain heat in winter, thermal mass to absorb heat, and overhangs outside to increase shade during summer. Bayview will use computer modeling to design efficient buildings.

Active energy

For active energy, buildings in Bayview Village will have optimal roof orientation for solar energy. A three-story building has just enough roof area to have solar collectors which, when combined with building efficiency, supply all the energy needed for three floors of living space below. For example, the electrical and thermal needs of the two-bedroom condo require a PV system capacity of 2.82 kilowatts (kW) and for a four-bedroom townhouse require a capacity of 4.32 kW. Three-story construction using wood frame and no elevators (excepting the Palisade Building and Community Center) also avoids the higher cost of higher buildings while using land more efficiently than lower buildings.

PV and solar thermal energy until recently have not been competitive in the American market because of the underpricing of fossil fuels, but declining prices for PV panels, improved construction methods, and increasing fossil fuel price are changing the balance. Tax breaks improve the competitiveness of green energy, and an expanding market is driving down costs in the future.

The active energy would come from PV-T AIR, which is photovoltaic plus thermal with insulation, glazing, and diffuse reflectors using air rather than water to move heat. The system is a sloped roof, meaning that it is not built on the roof; it is the roof, with no need to build a roof

and then put collectors on top. The integral roof makes it easy to design panels that extend out from the top of the wall as eaves and have gutter attached, providing weather protection and getting more area and reducing costs.

PV panels get hot; their heat is usually wasted and lowers the efficiency of the PV. The PV-T AIR panels have glazing on top and an open-air channel below which conducts warm air up and then down into the equipment in the attic. The PV-T AIR channels help combine PV and thermal for greater efficiency.

The tight construction of the house requires a heat exchanger with an air filter to keep the air fresh and clean and to avoid loss of heat (or heat gain) in the house.

The mechanicals in the attic are the fans, heat exchangers with air filters, heat pumps or hydronic space heater, wires, conduits, dampers, louvers, thermostats, and controls of the energy system for electricity, space heat, hot water, and air freshening. In some implementations, an Energy Transfer Module (ETM) uses hot air to heat water and for space heat. The ETM also recovers outgoing heat from the living space, and brings in night air to cool the house. A heat pump or hydronic space heater next to the ETM can boost space heat if needed. The system would be accessible through a hatch in the ceiling of the third floor for installation and servicing.

Below the attic inside each unit, besides wire and pipe connections, is a solar hot water tank. The water tank achieves over 70 percent of hot water needs from the ETM, and the rest is supplied by an electric heating element near the top of the tank. Proper energy management would prevent the electrical back up from engaging in the late morning at a time when more hot water is not needed, thus allowing the sun to heat the water as the day progresses. PV electricity goes to an inverter and the main electrical panel.

The energy system would have user-friendly computerized controls which allow residents to monitor consumption and manage the system to meet their needs and minimize energy use. The controls could be a wall panel in each unit, or use software on a home computer. The HOA would have expertise to help residents manage their energy use.

Green energy would supply all electrical needs, space heat, hot water, fresh air, and clean air, and most space cooling with no fossil fuel use. Over the course of a year, a properly managed dwelling takes off the electrical grid no more electricity than it puts onto the grid, which is called net zero on the grid. Typically, a unit supplies surplus energy to the grid during summer and takes energy off during the winter to achieve net zero.

Green energy would be marketed in a particular way, to separate the cost from that of the house and to have comparability with a PG&E bill. The capital costs of passive energy above statutory requirements and of PV-T AIR would be paid for in the green energy purchase, separately from the home cost. The buyer would have a choice of buying the package directly or leasing it from an energy company that would own the PV-T AIR. The sales person would explain how the passive solar lowers energy costs over the long run and makes the solar energy more affordable, and how the amortized purchase cost is similar to what the PG&E bill would be. They would explain how PG&E still needs to be paid for maintaining voltage on the network and billing costs regardless of one's use of its electricity.

Bayview would use electricity and solar for cooking and clothes drying. Electricity has become more sustainable than natural gas but it is not clear if the roof area is large enough, so net zero may not be possible and non-fossil electrical will be needed. Natural gas has potential for replacement by bio-gas but cannot be planned on. Clothes drying can use lines in back yards and

on balconies. There are no technical or economic reasons why indoor dryers could not be designed for solar thermal, but there are none on the market yet.

The carports in the parking lot will have PV canopies for energy, heat reflection, and water capture.

The energy system lowers costs compared to a conventional approach and is far more sustainable.

Green mobility

Bayview Village replaces a subsidized, destructive, unsustainable fossil carbon system with a system based on proximity, efficiency, and amenity. The project is not car-free, but travel modes would shift away from private autos. Bayview makes alternatives to a private car convenient and efficient. Cars play a role in Bayview, but in competition with many other choices.

Green mobility can make mortgages more affordable if the lender implements an analysis of how lower living costs can increase income available for the mortgage, thus qualifying somewhat lower incomes. The lenders can give credit for reduced transportation costs (the transportation efficient mortgage) and for improved proximity to destinations (the location efficient mortgage).

The design of Bayview is based on understanding mobility as more a matter of travel time than the model of travel used. Research shows that congestion and distance are not important in personal travel time decisions; what matters is the time and monetary cost of the trip in relation to its importance. The cost includes congestion, looking for and paying for parking, and time walking in from parking. The acceptable travel time in relation to the purpose is called a travel time budget. Personal and household trip-making is primarily controlled by travel time budgets.

If travel times can be made short enough, they compete with the car. For example, on average in the Bay Area workers are willing to spend 27 minutes to get to work in a car and a bit more by transit. (Commuters take longer transit trips than car trips because on transit they can do other things, like read the paper, read a book, study, unwind, or take a nap.) The Bay Area commute duration is longer than most other metro areas, not because of congestion, but because people are willing to spend more uncompensated time getting to higher-paid work, and the region has above-average incomes.

People optimize to balance commute time and housing value. The primary decision about where to locate is usually based on the work and home locations. Secondary locational decision criteria include reaching routine shopping within eight to ten minutes, schools, and social and recreation destinations, with a wide range of situations.

Research on dozens of different kinds of trips in Bayview finds them consistent with common travel time budgets. Travel times for all destinations, from getting to work, shopping, or a cup of coffee, would be comparable to, or better than, those of suburbia.

An important issue is, then, at what point a person can benefit from not owning a private car. The research shows that in Bayview people in its markets would have travel times comparable to the car-house system and all the mobility they need, with the economic savings and environmental benefits.

Mobility in Bayview would be so different from what people are used to that special efforts will be needed for buyer education (discussed under Marketing below). After move-in, the HOA managers would provide mobility assistance and create ways to deal with unanticipated problems.

The Vidanta resort at Puerto Nuevo, Mexico, Back Bay in Boston, European city centers, and many other places show that affluent people are willing to make many trips by walking.

Walking, cycling, shopping carts

In Bayview, proximity, density, and design make walking a major form of transportation. Walking increases when supported by design, the critical features of which are density, safety, aesthetics, direct routes which support short walking distances. Bayview Village tries to balance the need to get people to walk more with their varying reluctance to do so. The plan includes greatly reduces parking and increases use of walkways to reach the units. Five minutes at three miles an hour is a widely acceptable walk time, and goes a distance of 1,320 feet. The maximum walk distance from the most remote front door to the Village Center is 1,290 feet, taking 4 minutes 53 seconds. The majority of residents would have walk times under three minutes. Walking also provides access to the trails, local parks, and the nearby Hidden Hills Health & Racquet Club with a swimming pool above the City View Apartments. The campus has sports fields and tennis courts which can often be used.

The nearby CSU campus is walkable for some people, despite the hill. Residents of nearby City View Apartments and International House routinely walk up to the campus.

The steep hill location minimizes bi- and tri-cycle potential, except on-site. Most units would have space for cycle and personal shopping carts just inside the front door. Cycles could have baskets and could be designed for easy riding, with step-over seating, fat tires, one speed, and coaster brakes. They would have bicycle parking at The Village Center would have cycle and shopping cart parking for an easy transition when carrying goods from the bus to the units.

Village Bus

Instead of buying a house with vehicle parking bundled into it, residents would buy a house with a small bus system, the Village Bus. The unit price includes a prorated capital cost, and the HOA dues cover operating costs. The HOA owns and manages the Bus. Because the cost of the Bus is shared by everyone through home purchase and condo fees, it can provide service at a low cost.

The Village Bus would go from the campus, through Bayview on the busway, to the Hayward BART station and back. The Bus would make stops along the way, giving access to businesses on Mission Blvd. and downtown Hayward, and supporting transit-oriented development along the route.

The Bus would be **fast, frequent, and free** to residents, who would have passes ("eco passes"). Two buses would run every ten minutes most of the day, taking two minutes to reach the CSUEB Hayward campus (0.70 miles away) and six minutes to reach Hayward BART (1.53 miles away), dropping people off at the entrance. These short distances support the Village Bus integrating BART, downtown Hayward, Bayview Village, and the campus.

There is potential to integrate the project's Village Bus with City and university transit to increase frequency of service.

The Bus would use numerous rapid bus technologies to make it fast. The Bus would be small (30 feet) for nimbleness in traffic. It would have traffic signal pre-emption and right-lane queue jumping. The Bus would have wide doors and raised sidewalk platforms for fast, no-step boarding, guided docking to get very close to the platform, and "proof of purchase" fare inspection, so the driver does not collect fares. These features allow the Bus to minimize dwell times at stops,

and to accelerate and move in traffic like cars. The system could use two ISE-Thundervolt Diesel-Electric Hybrid buses for low emissions, regenerative braking, alternative fuels, and hill-climbing speed. ISE is a world leader in electric, hybrid, and fuel cell technology, and a provider of alternative energy systems for public buses.

The ability to reach downtown quickly, fifteen minutes total travel time, provides access to many destinations in one compact area. Downtown Hayward has the BART Station, City Hall, eateries like Buffalo Bills, Buon Appetito, Acqua E Farina, and The Bistro, a multi-plex cinema, banks, a big new library, a post office, a book shop, Lucky Store, liquor store, CVS drugstore, hardware, cleaners, the Odd Fellows, a pawn shop, the Historical Society, churches, furniture, and much more. B St. is often closed for community events and there is a Farmers Market every Saturday.

BART and buses then provide transit access to a large area. The Bus plus other transit makes the trip to downtown in San Francisco, Oakland, and Berkeley about as fast as by car, and with no parking problems.

Our research shows that CSUEB Hayward can support a two-bus system with 10-minute headways, and development along Mission Blvd. can support one more, with all three, Bayview, campus and Mission, providing service every four minutes—a bus bridge supporting non-auto mobility.

The sales and cash flow do not support a bus right away, and it would not be needed. As a transitional service, a smaller bus like the Toyota Gem Polaris for 6 people could be used.

Public Cars

Public cars are car share, car rental, taxi, and e-hail ride share, which are supported on site by arrangements with providers and with vouchers. The HOA would have arrangements with agencies for easy pick-ups and rentals. Palisade St. would have reserved spaces on the street for about 10 car share/rentals and drop-off/pickup for private cars.

Bayview is designed so that no household should need a car routinely. Residents may find they can park off-site, use a car less, own fewer cars, or not own a car at all. The small number of trips needing a public car achieve great savings relative to car ownership.

Certain trips are particularly important and best made by car, so the plan is to make public cars fast and affordable for some purposes. Residents would get an allowance of a few vouchers per month for taxi and ride share which could be used within Hayward and can accumulate to some limited total. They would be specifically for trips to clinics, hospitals, and other health care, and for a “guaranteed ride home” from BART when the Village Bus stops running. The Bus would stop running when it is not cost-effective compared with vouchers. The HOA would manage details and it might be possible to use vouchers for additional purposes. The HOA would develop policy to avoid the vouchers from going over budget or benefiting too few people. The current cost of e-hail between BART and the Village is about \$8.

Village Van, electrocart, deliveries

The HOA would own and manage a Village Van for several purposes. The Village Van is prioritized for taking kids to school and after school activities. The local schools are Stonebrae Elementary School, Bret Harte Middle School, and Hayward High School.

The Van would also be used for organized activities like trips to parks, outings for families, trips to shopping centers, downtowns, Costco, Trader Joe's, and similar places—even Walmart, theaters and other events in San Francisco, sports events, and so on.

An electrocart like a golf cart but designed to carry freight would be kept at the Community Center and used to carry heavy objects to the units. The electrocart would also be used for maintenance by the HOA.

The density of Bayview allows for efficient deliveries direct to the units. They would have lock boxes that allow secure delivery of, for example, groceries and prescription drugs inside.

Parking

Bayview goals are accomplished by a limited number of on-site parking spaces leased at a market rate to residents. There are fewer spaces than units, 100 spaces for an eventual 702 units, and no parking next to the units, which may be the most controversial aspect of the project. The site would have a long parking lot on an extension of Overlook Avenue, 50 spaces on each side.

Charging separately for parking saves on the cost of housing and encourages homeowners to own fewer cars and to rely more on walking, cycling and transit. The rate might start at \$125 per month. Bids for annual leases for 25 spaces every quarter would determine the lease rate. If the rate dropped, everyone would pay the lower rate. If it went up, only the new lessees would pay the higher rate. The revenue would go to the HOA as a return on the investment homebuyers made in buying their units. The pro forma indicates a high return on the investment. The rate is likely to be bid up as more units are built and surpass the available parking. Some old owners may drop out and new owners will have to buy without a space. Some owner may intend to lease a space only for transition, while learning other modes

In addition, Bayview would have other ways of managing parking. The project would arrange for off-site leased parking at a business such as a used car lot on Mission Blvd., for space on the back of the lot. The cost could be low, and especially serve residents who want a car for special trips, e.g., on the weekend. One possible location, the sloped land on the south side of Carlos Bee Blvd., is owned by the City and is in the Alquist-Priolo Earthquake zone. It is close by and could influence the character of the project by having more parking within walking distance.

Spillover parking might need to be regulated. It might occur on Palisade St., the only convenient neighborhood street near the project. Spillover parking occupies spaces needed by fronting homeowners. Parking policy in the US has rarely anything to do with economics; it is based on politics and subsidizing public parking, first come first served. That reality requires that economically efficient market parking has to mitigate impacts on subsidized parking. Fortunately, that turns out to be easy and inexpensive to do. Hayward already has neighborhoods that prevent spillover at virtually no cost to the neighbors or the City. One is at the main Post Office on Santa Clara, another is for the neighborhood south of Depot Road by Chabot College, and the largest is around the South Hayward BART station. Signs warn outsiders that they need a parking permit, or cannot stay longer than two hours or they get towed. Prevention is also important. People park where they should not because of a lack of information about where they should. Signage for Bayview would also include information about alternative access.

Longer Trips

Single family residents taking longer trips need to have the yard taken care of while gone and to provide for security, and they may need to pay for parking at an airport. In Bayview, HOA services take care of these problems, making it easy to go on trips.

Residents in Bayview would have about the same travel time to the Oakland Airport as people in the surrounding suburbia. They could take a taxi or e-hail all the way or take the Village Bus to the Hayward BART station and BART shuttle to the coliseum to the airport. Similarly, they could reach the Hayward Amtrak station and the major Amtrak station in Oakland's Jack London Square using the same modes.

Taken together, green mobility lowers costs and is far more sustainable than suburbia. Bayview reduces car infrastructure costs, car use, and car ownership. It reduces drive-alone vehicle trips, vehicle miles traveled, vehicle hours of travel, and congestion compared to the suburban alternative, with access comparable to or better than suburbia.

Health and safety

Buildings would be designed for health. Building materials would not contain formaldehyde to prevent off gassing and interior air pollution. Floor coverings would be from sustainable sources, such as natural-fibers like wool, cotton, or hemp, with minimal stain repellants, and installed with tacks instead of adhesives. Wall paneling would avoid plywood and particle board that use formaldehyde-based glues and resins. Paints, adhesives, and sealants would be low in volatile organic compounds (VOCs) and be Green Seal certified.

Noise pollution within buildings will be prevented by special sound-proofing between units, which are not expensive for new construction. Without cars there would be no traffic noise, but given the closeness of the units, the HOA will have to have clear rules about noise and enforce them.

The design encourages walking inside and out. With stairways to climb, reasons to walk to the Village Center, and parking a few yards away people, will walk more and be healthier, reducing over-weight and poor physical conditioning that result from a sedentary car-dependent lifestyle. Units in Bayview front on walkways, not streets with cars, with pedestrian friendly design. Health is further supported by small parks, a fitness center, and trails.

Without cars, safety would be improved, "walking streets" are inherently safe. Cars are used in many crimes, and no cars makes casing a target and getting away more difficult. There would be less air pollution from ozone and particulates. With less car use, the project would reduce vehicle accidents. More walking, however, requires high security.

Bayview offers high security. Security measures would include defensible space design (fencing, good sight lines, windows on the walkways, lighting, no hiding places) along the walkways. An on-duty manager, available by cell phone, would be on duty at all times and would patrol the site on an unpredictable schedule. We would develop a cell phone app for all residents that will be very easy to use to call security. The main walkways would have security video surveillance (CCTV) monitored from the Village Center. There may be entry gates at the entries to the main Foothill Trail which would be closed at night. Residents would plan ahead for various eventualities (most recently no electricity). Manager duties would include walking around a bit at random times. As in most places, the primary source of security would be social networking and community ties –neighbors looking out for one another. Catch things small and early.

Good Design

Streetscape

A major challenge of Bayview Village is to create a perception of spaciousness in a high-density neighborhood. The issue is not how dense to build it, but how to build it dense to not look dense. In spite of its density, the look and feel of Bayview Village design would be spacious.

The components of good design include building mass and setbacks, streetscapes, facades, and long views.

Building mass and setbacks are defined by the shape, height and lengths of building facades and their distance across the street or walkway from each other. Human-scale, three-story height has less mass than higher buildings and is only one story higher than typical single family. The buildings avoid massiveness by breaking up long walls with offsets among frontages, internal balconies, bay windows, and push-outs. Greenery on the walkways and ornamentation of facades would add visual appeal.

Three-story buildings would be set back from each other for a feeling of openness and less density, with 32 to 34 feet of space between building facades. about the height of the buildings.

The streetscape would look inviting, familiar, and comfortable, like an up-scale old neighborhood. Trees would be spaced to avoid too many trees that could darken the street, hide the buildings, and overpower the rest of the design. At intersections, Bayview could have statuary lions opposite old-fashioned street lights on short brick pillars to create entry ways. Six feet of width between the walkways and building fronts would be planted and maintained by the HOA. The main walkway would have two small plazas.

Facades

Facades would have ornamentation; nothing creates a feeling of oppressive density faster than a big blank wall. Bayview Village could use Neo-Victorian facades with design elements like (long list here) nine-light windows, lapped siding, roof cornices, transoms, slanted and square bay windows; balustrades, porches and porticos; decorative elements on walls, window hoods, window shields, and other window trim; cornices and gables, quoins, finials, bargeboards, spindle work, and sawn decoratives; decorative sticks and shingles; rosettes, buttons, bullets, and sunbursts; dentils and beading; brackets; pilasters, columns, and colonnettes with caps and capitals; friezes and panels with wreaths, rinceaux or garlands, balusters, and newel posts. (See Bayview brochure for illustrations.)

Bayview could use Victorian colors, probably sets of three-color palettes consisting of a light toned main color, a stronger contrasting trim color, and a flashy highlighting color used with restraint.

Other elements include window flower boxes at ground level, stylish street lamp columns

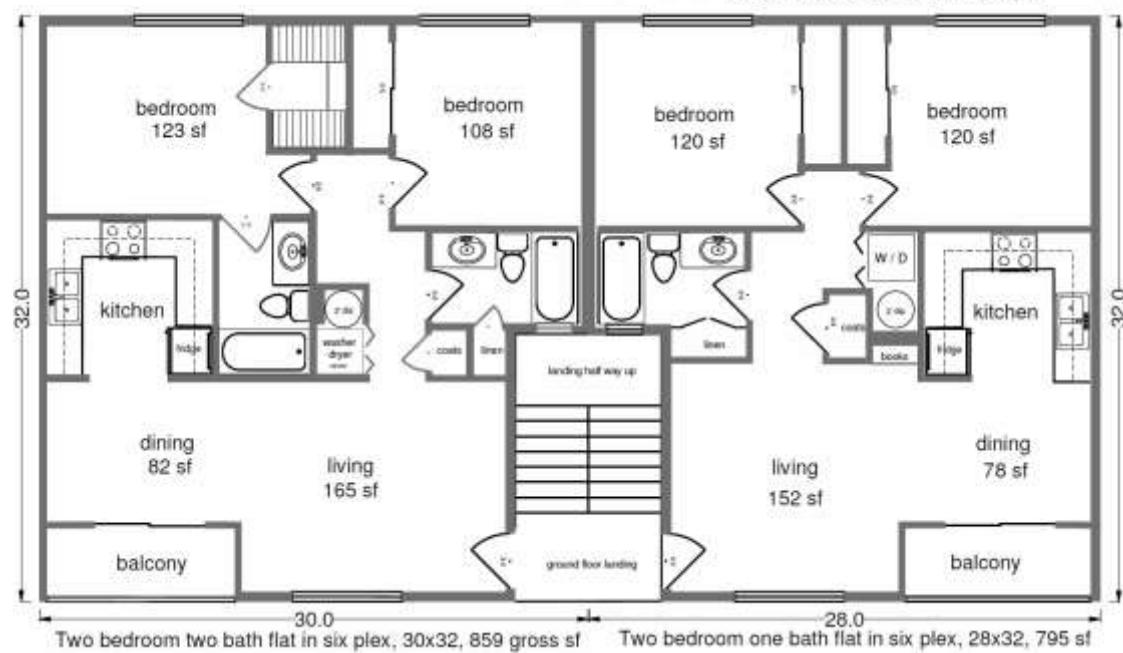
and the Hayward City logo. 

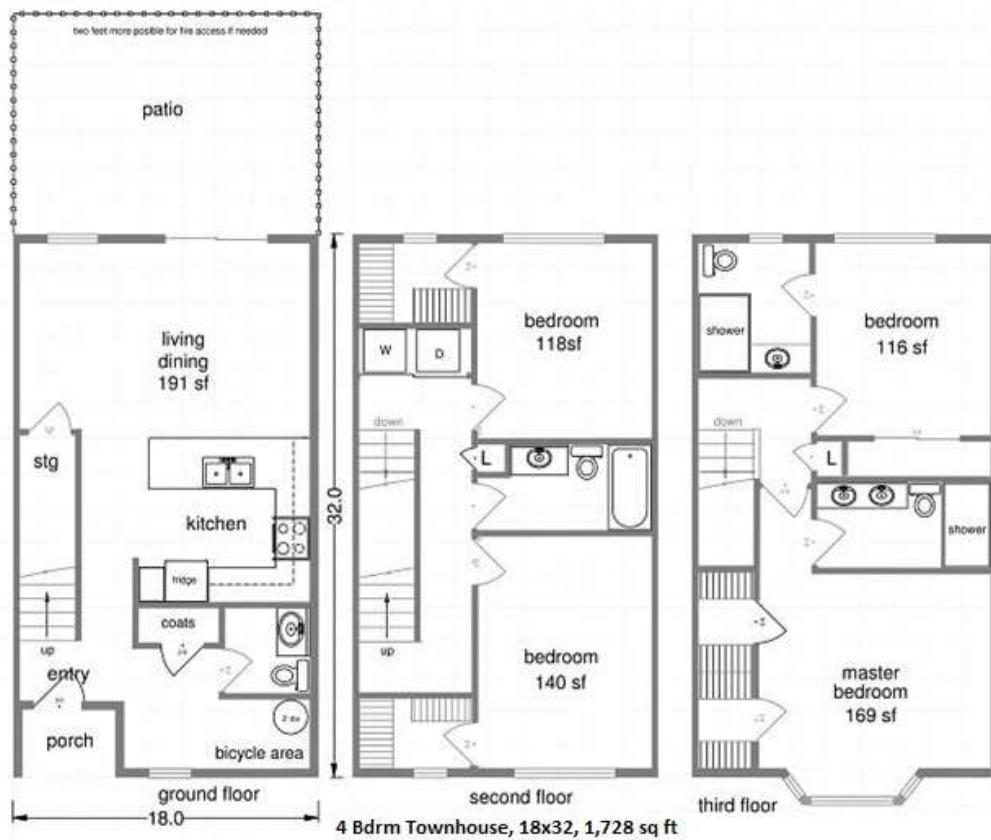
From this cornucopia of possibilities, Bayview Village would incorporate a limited, coherent, and affordable set of design choices like neo-Victorian and test them on focus groups. The best option would be chosen and offered to buyers, who would some choices within the theme. The result should be affordable and have enduring eye appeal and great variety within a consistent theme—a gift to the street.

Longer views down the walkways would be varied, such as a long graceful curve, views into a park, or facades at an angle from the viewpoint. Some views would be a short distance, others long. Five small parks provide for varied views. Some units will have views of the Bay to the west.

Floor plans.

A more conventional aspect of design is flexibility in interior space to meet buyer preferences. Floor Plan Options have limits set by the front door, stairway, plumbing core and exterior walls. After that, the buyer could have some interior walls redesigned for walk-in closets, bathrooms, separate toilet room, bigger shower stalls, kitchen island, closet-bath combo, living room designed for Wii or a big TV screen, or nooks for a computer or dog bed. The Floor Plan Options would include affordable specific choices.







Options and upgrades are different from floor plan changes and less expensive. They would include choices for cabinets, countertops, flooring, lighting, plumbing fixtures, garbage disposal, appliances (magnetic induction stove top; bigger fridge), floor plan options within shell (kitchen island, walk-in closet, separate toilet room, closet-bath combo), solar upgrades, waste water heat recovery; color schemes, some exterior ornamentation.

For more ideas about streetscapes, facades, and floor plans for high-quality multiple-unit projects in the United States, go to the Bayview archive.

Community

In spread-out suburbia people pass each other in cars and may have few close neighbors on the street. They may feel isolated from easy social interaction. Others may have an empty nest and are tired of rattling around an empty house. Bayview makes sociability easy, with easy contact along walkways, in parks, and in the Village Center.

Bayview takes what we have learned about condominium owner associations and improves on them. Their reputation based on past problems is no longer deserved, as reforms have made dues adequate to cover on-going needs and professional association management firms have become more effective.

Bayview home prices cover the cost of common assets and dues cover the cost of management, with some income from parking. With about 1,700 residents, the completed Bayview would be large enough to need well-defined management to assure a neighborly social life and to create a special identity.

The Bayview Village Homeowners Association (HOA) would operate to have turnover on its Board, elections, and periodic rotating participation opportunities by all residents, balancing the need for institutional memory and competence from experience with new voices.

The Board would retain on-site professional managers. The current estimate is that the Manager could be paid \$110,000 per year and the Assistant Manager, \$75,000, in both cases including the value of their apartments. The Board would work with a professional HOA management company on personnel issues, which are difficult for a volunteer board.

The assets of the HOA are the walkways, landscaping, parks, open space, trails, the Village Center and its Community Center, Village Bus, Village Van, electrocart, and the parking lot. The HOA managers would manage them for their utility but also foster community. The managers would also manage collection of HOA dues, certain condo sales, rentals by condo owners, travel vouchers, various services and events in the Community Center, security services, events, and maintenance of the outsides of buildings.

The management would have an explicit responsibility to know everybody informally and manage problems before they escalate. The HOA would have clear rules for common nuisances and equally clear enforcement, well-understood before a person moves in. They would sponsor events that bring people together, such as holiday-related parties or movies or cook-outs.

Bayview Village would be a quiet oasis free from pollution, traffic, and noise. Walkways and courtyards make it easy to know neighbors. The Village Center encourages social interaction at the office, mailboxes, café, and Village Square. The design invites people outside in good weather to walk, jog, or sit on the porch. Those who want privacy will have it; those who want social interaction will enjoy the Village Center, the HOA, and community events.

The size of the project based on our research so far is too small to support a grocery store, but we could be wrong. The HOA management could probably run a commissary based on the most common needs people have, as well as helping delivery people get access to drop boxes.

Co-housing groups are a manifestation of a desire for community. Such groups live in one contiguous area, either multi-family or small-lot singles but also have a common space for regular meals with the group and shared work assignments. The major problem for co-op housing is the lack of land for groups who are ready to build. Bayview could accommodate one or more co-op groups, melding the co-op idea into Bayview.

City of Hayward Support for Bayview Village

A local planning association, the Hayward Area Planning Association, has been developing Bayview Village for 15 years. The City of Hayward has supported the project. On July 28, 2009, Hayward adopted a Climate Action Plan to make the City a more environmentally sustainable community. The City adopted a Program Environmental Impact Report and Sustainable Mixed Use (SMU) General Plan land use designation and zoning allowing the project. The primary use under the zoning is 25.0 to 55.0 multi-family units per net acre.

On May 6, 2014, City Council adopted Resolution No. 14-057 endorsing the Bayview Village concept as a transit- and walking-oriented village with minimum vehicle use and low greenhouse gas emissions, supporting the City's Climate Action Plan. City Council found that the Bayview Village concept would promote affordable housing, sustainable communities, clean transportation, energy efficiency, natural resources, and waste diversion.

In November 2019, the City adopted a master development plan with objectives including facilitating transit-oriented development, less auto dependency, neighborhood-serving retail uses to reduce car trips, affordable housing, walkability, preservation of Dobb Creek habitat, and the 238 Foothill Trail. (See City of Hayward Land Use and Zoning.pdf for succinct information on general plan, zoning and overlay.)

The plan is designed to cast a broad net for proposals and Bayview Village is a specific way to achieve the plan goals.

Project Development

The developer who buys the land from the City would control the property and the project. The developer could be an LLC formed by investors which retains a management team, or a development firm, with investors and management team already in one company. The eventual project could be similar to Bayview Village, something conventional, or anything in-between. HAPA's involvement and my role (Sherman Lewis) would be determined by the developer. I would like to find a way to continue working collaboratively, without compensation, on the Bayview concept, and my wife and I want to live there.

Bayview would need a relatively modest set of City approvals: Site Plan, a tentative map, and a final map prior to vesting and design. The property appears to be free of any protected plant and animal species, in as much as it is a former quarry site and currently consists mostly of bare granite largely devoid of any vegetation. (A listing of Site Plan requirements is at Hayward Development Submittal Requirements below.)

The Market

Developers typically consider comparables based on auto-dependency for all buyers. Bayview challenges developers to consider the viability of alternative mobility for specific markets. Bayview would primarily sell to a market that does not routinely commute by personal car: Cal State East Bay, people going downtown and to BART, home occupation and work at home, and retired.

Developers also consider housing growth rates and competing supply. City reports for economic development, employment, commerce, and housing and the Housing Element, indicate steady growth ahead for the City, and a lot is being built now. A NIMBY problem is reduced by the unusual isolation of the location. The updated Housing Element for 2019 is at <https://www.hayward-ca.gov/sites/default/files/documents/dtsp-eir-population-housing.pdf>.

CSUEB Hayward

Bayview Village and the Village Bus would serve administrators, staff, faculty, students, and visitors. They would have a two-minute ride on the bus or an easy walk to the center of the campus. People come to the campus for many reasons—classes, events, a large library, bookstore and eating places; it is a major cultural center.

Bayview would help the university provide affordable housing very close to the campus for students and faculty. Affordable rentals for students are a major Bayview market, helped by minimal parking.

CSUEB Hayward Climate Action Plan, May 2018: "Seeking out and supporting affordable nearby housing opportunities for faculty...;" "Investigate potential for building low-cost faculty housing on or near campus. Co-benefit of attracting qualified faculty on state salary given

prohibitive Bay Area housing prices...;" "Housing for faculty has a co-benefit of attracting qualified faculty on a state salary in an area that has a high cost of living." (May 2018, pp., 67, 85, 86)

We did two market surveys of CSU East Bay students. The first survey had 81 respondents and found about 22 percent of students would probably move to The Bayview Project. Probable movers had positive attitudes, wanted to save on rent, and could get where they needed to go without routine use of a car. The hypothetical estimated student market alone showed enough demand to fill the project. The students require, and would have, the ability to reach the campus, daily shopping, and work in an acceptable travel time. Rent savings were most important reason, followed by improving personal health and benefits to the environment and national security.

BART, downtown, and bus riders

Residents can reach Hayward BART, regional buses, downtown Hayward, and other local employment in the Mission corridor. The Village Bus reaches BART in six minutes with an estimated total travel time including walk and wait of 15 minutes. Hunt for parking, park and walk in? Nope; bus drops you off at the station entrance. Cost of parking at BART? Zero.

The BART station has a special express bus to San Mateo with stops in Foster City and Oracle's worksite. Its travel time is 45 minutes; it costs less and is more pleasant than driving.

Work at home, home occupation, home office workers

Bayview is ideal for working at home while being part of a peaceful, pedestrian-based community. Home office work has increased greatly due to congested freeways and telecommunications allowing work from home. Very little outside of San Francisco has been built for a work at home market, and it is uncertain how much special features for work at home will increase sales.

The three-bedroom townhouse has 340 square feet of flex space on the ground floor with a patio, especially designed for a home office, telecommuting, work-at-home, workshop, small living unit with a kitchen, or other use, and the other units can also serve these purposes. The other townhouses have bedrooms that can be used as home offices. The Community Center will have some rental office space on the second floor with the best affordable communications technology available at the time it is built.

Retirees and seniors

About 26% of Alameda County population is 55 and older. For retirees and seniors, life in Bayview Village is free of house and yard maintenance and makes travel easy—lock the front door and you're on your way. The Palisade Building has one bedroom and studio units with easy mobility by interior hallways and elevators to get to the front door and the bus, café, village square, and community center. If driving skills are declining, Bayview Village offers alternative mobility. Bayview provides a peaceful and safe environment with opportunities for social and recreational activities.

Bayview could have some features of a "Continuing Care Retirement Community," independent living without the higher levels of care, i.e., assisted living and nursing home care. Some arrangements for assisted living on site would not be obtrusive and there could be arrangements for moving to more care as needed.

Lifestyle markets

Lifestyle Markets groups together a number of categories that could be attracted to Bayview Village: moderate income households, families, people with disabilities, committed environmentalists, health seekers, and those attracted to the kind of social community Bayview would support.

Moderate income households

For its target markets, Bayview substantially lowers the cost of living for housing, energy and transportation. Some people are willing to make changes in their lifestyles in order to live affordably in a high-quality home. Some buyers will seek protection from energy costs. You don't have to be a survivalist to see gas prices ratcheting up.

Families

Experience from car-free projects elsewhere shows that safe walkways are a magnet for families. The inconvenience of travel with children in a pedestrian environment is not much different from the inconvenience in a suburban environment. The HOA staff will have support for families as a high priority. It is fundamental to Bayview that all kinds of families and all ages can have a high quality of life.

Bayview can meet typical family needs. For example, the three-bed townhouse flex space is big enough to work as a small living unit, a home-within-a-home. Bayview has two Tot Lots and small parks. A few handy seniors might want to do some babysitting. Traveling with a baby on site in a baby carrier in your shopping cart is easier than in suburbia with a car using a car seat and stroller. Ground floor units allow the shopping cart to roll in to the kitchen counter. Traveling offsite would not be more difficult than using a car. The Village Van would chauffeur to schools and children's activities. (For more information, see Marketing.docx)

Environmentalists

Many people are willing to make changes in their lifestyles to be more sustainable. Environmentalist are a growing market in the Bay Area. Bayview Village is planned to be the greenest possible green development in the United States. Bayview Village is super green, achieving goals relating to greenhouse gases, passive solar, net zero solar energy reduced vehicle emissions, and habitat enrichment. For example, my wife and I want a five-bedroom townhouse at the top of the project, and we can afford it. In Bayview, environmentalists can not only find a personal lifestyle to live their values, but also demonstrate to the larger development world that an alternative system can be profitable.

People with Disabilities

Wheel-chair users, those with impaired vision, and those restricted from driving will benefit from no car traffic and no curbs. Walkways are easy for wheelchair use. Ground entries have no

Emails from Ben, ben <wordsforben@gmail.com>, October 2018, commenting on documents sent about Bayview Village. Edited for brevity.

I have a lot of feelings on car-free living. I'm still so baffled how the US can't really shake their attachment/obsession with them. Even reading this article, https://en.wikipedia.org/wiki/List_of_car-free_places, I find myself so embarrassed how few opportunities we have to get a break from it all. The areas that do go on a car-diet or eliminate them always end up thriving, so it's really sad to see how many communities and leaders continue to resist that way of life.

Thanks for sharing all of those documents. It's nice to know that more effort has been put in. If it comes to fruition, I'd want a property as far away from the parking lot as possible. Like one of the townhomes that back up to the green space on the outer limits.

I'm eager to get way from traffic and everything that comes with it. A few years ago, I was walking around the streets of Brussels and I couldn't stop thinking "HOW HARD IS THIS?!" Small low/no traffic streets work. Businesses thrive. People are safer. Public areas are peaceful.

Anyway, I'm pretty excited about what you've conjured up. The location is an 18 min bike ride / 45 min walk to my partner's relatives house. We are also big fans of the frequency of the shuttle bus that would take folks to the BART, market, etc. I totally support implementing solutions that discourage car-ownership. Make walking/biking/transit the more attractive/affordable/convenient/less stressful option for everyone.

I've spent the last 10-15 years keeping my eyes peeled on various car-free communities (realized and proposed). I've always said that it's probably the only thing that could convince me to ever get a mortgage. The standard noise/chaos/lifestyle of car-centric neighborhoods is just something I would ever soak 6 figures into.

I feel like communities are so much more vibrant when people aren't always hiding inside of big metal cages all of the time.

Please know there are people that appreciate that the concept even being discussed. It's nice to know other people would like to someday find the same thing. I've lived and traveled all over the globe. I love the weather and the job opportunities out here, but I don't want to spend my life stuck in traffic, commuting hours each day, staring at all of the trash on the side of 10 lane highways, and surrounded by other angry and stressed out people.

steps. Units in the Palisade Building accessed by halls and elevators. The Bus will have no-step entry with wide doors.

Health Seekers

Health seekers, recreationists, bird watchers, dieters, and people under doctor's orders to reduce stress will have low pollution and free access to a fitness center, parks, hiking trails, and nearby swimming pool, tennis courts, and playing fields. Some people want an environment where they walk more for health.

Community-seekers

Community-seekers value the kind of easy sociability Bayview provides along walkways, in little parks, and at the Village Centers, while in suburbia people pass each other in cars and may have few neighbors. Bayview could accommodate some co-housing, a small collection of families with separate units in a contiguous area, perhaps sharing a common space, like a garden.

Walkways vs. Cars

More land in streets with parking means fewer units. Parking underneath means a higher cost per square foot of living space. HAPA analyzed the quarry site using a land use design program, Design CAD, to change the ROW (right-of-way) and the units among plans. The analysis compared a Cars plan with narrow streets (36 feet wide; 8-foot parking lanes; 10-foot travel lanes) to a Walkway Plan with walkways 20 feet wide. The areas for parks, setbacks, floorplans, building height and so on were otherwise kept the same.

The analysis also assumed one underneath parking space per unit for two-bedroom condos and two underneath spaces for townhouses. We found that streets with parking and parking underneath caused a 36 percent reduction in the number of units possible—737 for walkways and 468 for cars. The wider right of way and wider units took more area per unit.

An analysis of building costs using Building-Cost.net for 2019 found that parking underneath increased costs for a three-bedroom townhouse for the same living space. Cost per lot went up 49 percent. Increased building costs and increased lot costs combined to make unit price go up from \$460,800 to \$653,400, 42 percent. Infrastructure costs were also higher with streets and parking.

The right-of-way shown in the Request for Qualifications in the figure for Roadway Typical Section was even wider: 50 feet wide.

Selling more units at a lower cost would be more profitable. (See Walkways vs cars.docx for more details.)

Market research

The kind of market research that conventional investors usually want cannot be done for this project because it is too different from what the marketplace usually offers. Traditional market research looks at the past and at the detached single-family auto-dependent market, and not at smaller, latent markets. Investors need to decide about Bayview Village (Bayview) based on their general knowledge and a willingness to invest in a worthwhile project that has more risk than usual.

Market Research to Date

Website, Surveys, Buyer Profiles

The Hayward Area Planning Association has been developing and advocating this proposal for several years. Our research, now out of date, produced a long list of enthusiastic people hoping to live in Bayview Village.

HAPA launched a website, <http://www.bayviewvillage.us/>, for this project beginning in December of 2006 for several purposes: (1) to build an interest list of potential buyers, (2) to test the market to verify interest in the concept, and (3) to identify market segments that a developer should target. The website provided detailed information about the project, including early versions of the site plan, floor plans, description of benefits, and preliminary pricing. An email address was provided for submitting requests to be put on an interest list or for further inquiries. The project was on Craig's List for about two years and publicized in other ways. Respondents were contacted and wrote profiles explaining their interest, or profiles were written by the Hayward Area Planning Association based on the survey answers and approved by the respondents.

Response to the project's website from some people has been passionate. For example, a San Diego urban planner said he would move to the Bay Area just to embrace the pedestrian lifestyle. He said, "I am very excited to be part of this. Keep me informed!" We found about 125 people interested in living in Bayview Village, but this research did not have the credibility needed with developers and investors.

Marketing

Marketing housing with no attached parking requires buyer education. Bayview would advertise prices like those just mentioned, a three-bedroom townhouse with parking for \$653,400 versus the same without parking for \$460,800. The advertising would point out the kinds of buyers that could live in the townhouse without needing to have a car next to it. The sales office could promote an education project to help the buyer figure out if the lack of parking would work. The perspective buyer would keep a two-week travel diary and then discuss the results with a Bayview mobility expert. The buyer would come to understand how those trips would be made in Bayview, how phasing, parking and other mobility would work, such as deparking incentives, about how visitors get access, and other features of Bayview.

The huge drop in price would be a hook to get a buyer to think about a new way of getting around to overcome the biases of American culture. (For more information, see Marketing.docx.)

Proforma

Several financial analyses of Bayview Village that cover hard costs, revenues, equity and financing requirements, and anticipated returns are in pro formas in the Dropbox and on the web. They are frequently adjusted. They provide projections given varying absorption rates, with 9 years as middle estimate: a year for entitlement, a year for design, a year and half for site improvements to first building pads, and six months to first occupancy.

Pricing estimates in 2019 range from about \$217,000 for a studio to \$704,000 for five bedrooms (pending review). Dues to the HOA (Homeowners Association) would run from about \$140 to \$200 per month.

Absorption

The pro forma allows "what if" testing of key inputs that then automatically ripple through the worksheets. The estimate for Internal Rate of Return requires two only entries at the end of the series by the user on the Cash Flow page and a macro estimates the IRR. The most important

assumption is the absorption rate at the assumed prices. Changing absorption rates are also a proxy for other factors that could speed up or slow down the project. The absorption rate is particularly difficult to predict. The building of units cannot be easily sped up. Demand could take off unpredictably, which is possible given the special appeals of such an innovative system.

Two factors which could accelerate absorption are peak oil and climate change. The price of gasoline has been, and is likely to continue to, ratchet up, given the cosmic ignorance of Americans, who will continue to buy gas as if there were no tomorrow and blame politics, oil companies, and speculators for a problem inherent in the climate. Some spike could during the build-out of the project, with a dramatic impact on sales. Policies to deal with climate change already play a role and will continue to do so with results that are hard to predict for market demand.

Site improvements can be phased into two or three stages to delay some costs and improve return. The project will be sold in phases of over 100 units each over a period of six years. The first hundred units generate cash flow some of the HOA amenities, many of which have to be delayed to be implemented as cash flow from sales allows. Scaling up needs to be carefully planned; both the bus and the community center are expensive. The DRE may allow relief from initial sinking fund requirements to have more funds for immediate needs, with higher allocations to sinking funds when there are more units to carry the load with no reduction in immediate services. (Additional analysis is in Bayview archive Phase One.)

The pro forma has 18 Pages: Inputs, Sales, Summary, GMA (Gross Margin Analysis) by Construction Phase, GMA by Unit Type, Cash Flow, Timing, Land, Project Team, Project Fees, Site Improvements, Site Improvements by Phase, Building Team, Building Fees, Residential Buildings, Energy, HOA Assets and Parking Pro forma. (Additional analysis is in the Bayview archive, pro formas, and HOA documents.)

There can be no assurance the project would perform as estimated in the various pro formas. It could do better; it could do worse; there are no guarantees. The pro forma assumptions are believed to be reasonable based on the best available current information.

For rent

While Bayview has been planned as a for-sale project, it could also be rental in part. Student housing may be managed directly by a student housing owner or through the HOA managers. Affordable housing could work the same with an affordable housing agency.

As condominiums, owners have some right to rent them and rentals will have to be managed. The project could have rental by an individual owner, and may be legally required to allow such rentals. The HOA manager should be the rental agent for the owner to maintain the overall value of the project and avoid problems created by absentee owners.

The economics of renting are different for ownership by one large firm for rentals, and ownership by individuals. Single buyers may decide that operating costs would be lower than usual assumptions, that costs may mostly be covered in the HOA fee, and that they would have no vacancies or short vacancies. Such owners may want to rent to family members; to sell in the future, counting on rising prices; to hold the property to live in at some future date; or to have the prestige of owning part of a paradigm-changing, sustainable project. These owners should be encouraged to use the HOA managers as their rental managers to assure that tenants fit into the community.

Rental by an affordable housing agency should be part of the project. The agency would take a portion of the units and the agency would have an arrangement with the HOA managers to manage them. Such agencies can bring credibility to the project as a whole because of their project management experience and their ability to reach a demographic that otherwise could not afford to live in Bayview. The project is mostly affordable for buyers at 110 percent of median income; a housing agency would provide for low income housing by rentals. Given the closeness to Cal State, many of the low-income tenants should be students.

Another approach would be an all rental project, with an interesting question of the market for four and five bed townhouses, which are usually a for sale market. We need the larger units to attract a fair share of affluent families and get the full range of incomes that is a goal of the project.

Rent to own

Rent to own could increase the absorption rate. Rent to own, also called an option to purchase, could be available to renters whose profile supported buying. Their profile would include a desire to live there long-term, support for the broad concepts of the project, and travel patterns that worked in the Bayview context, such as ability to get to work in an hour or less. Part of their rent, the rent credit, would go into an interest-earning down-payment fund. The option consideration (essentially a down payment), security deposit, sale price and rent are agreed to at the outset, so the rent does not rise even if the rental market does. The renter is responsible for maintenance and repairs as if it were their own house. The renter is building equity comparable to amortization of a mortgage loan. The qualification requirements are lower than for a mortgage, but higher than for renting.

The renter can see if living in Bayview works for them. They can practice less driving and ditch one or both cars, etc.

The owner of the unit has two motives, to get rent and to sell the unit. When the renter buys, the money is down payment to the owner. Since the profile would require a longer-term renter and possible buyer, the overhead for the owner would be less and the rent could be lower, another incentive to rent to buy.

If the renter leaves, they lose the option consideration and down-payment fund. The security deposit is returned if there is no serious damage. The incentives favor would-be buyers who need to test the system or build up their credit and income. Given the challenge of selling a new kind of mobility, rent to own could help absorption by reducing the cost and risk of outright purchase in Bayview.

Rental Apartment Complexes

The economics of rental apartments are very different from ownership units.

1. Turnover: rentals have higher turnover requiring more screening, while ownership has one screening and occupancy of many years.
2. Capital: Renters have high deposits of 2 months' rent, but down payments for ownership are much higher; income requirements for rentals are lower.
3. Rentals require more management of occupant behavior to enforce four rules: 1. pay rent on time, 2. take care of the place, 3. If you are broke, tell us, 4. be a good neighbor.
4. The cap rate needs to be 3% to 4% over T bills, but assumptions about expenses influence the cap rate and should be realistic.

5. Cash on cash return for a year should be over 100 percent (net income divided by initial cash outlay as a percent. Net income is gross income (the sum of all cash flows received) minus all operating expenses before taxes).
6. Operating expenses including utilities run about 40% to 55% of gross income.
7. The economic vacancy rate is usually 2% - 5%
8. Nuisances are abated under health and safety code 11570.

Tom Silva (Eden Realty, Hayward, 537-8181, spoke 8/22/2011) was our expert on the economics and management of rental apartments.

Hayward Development Submittal Requirements (Site Plan)

A proposal that follows the outline of the City's site plan review process will be easier for the City to consider and easier for the developer to pursue if their proposal is accepted. The City Hayward website has information on the details of the development process at <https://www.hayward-ca.gov/business/for-developers/development-process>

Site Plan (should be to scale)

- Show the entire property involved, including all property lines
- Show the location of all existing and proposed structures, including those to be removed
- Show the distances between existing and proposed buildings and property lines
- Show any existing and proposed easements
- Show the existing and proposed parking areas
- Show existing and proposed landscape areas
- Show the location of existing and proposed trees and other natural features, including creeks, earthquake fault traces, landslide areas, etc.
- Show location of existing and proposed fences and/or retaining walls
- Show the location and dimensions of the trash and recycling enclosure(s), if applicable
- Show the location of any signage such as a monument sign, if applicable
- Show the location and dimension of all group and private open space areas (multifamily residential projects only)
- Indicate the type of construction, occupancy and total building area for each building
- Show the location and width of all driveways and roads accessing site
- Identify and show the location of the nearest fire hydrant and provide water flow and pressure information for the hydrant, which can be obtained from the Public Works Utilities Division

Floor Plans (should be dimensioned and to scale)

- Show all interior improvements
- Indicate on the floor plan the use of each room
- Include dimensions of each space, including all parking areas

Elevation Drawings (should be dimensioned and to scale)

- Show all exterior building elevations, i.e. all sides of each structure, including building heights

- Show all fences and/or walls
- Show all trash and recycling enclosures, if applicable
- Show location and type of all exterior lighting
- Indicate building materials and colors (colored elevations are encouraged)
- Show any exterior building wall signage, if applicable

Landscape and Irrigation Plans (generally required to be prepared by a licensed Landscape Architect) *Refer to the Article 12 of the Hayward Municipal Code related to the Bay-Friendly Water-Efficient Landscape Ordinance and the Hayward Environmentally-Friendly Landscape Guidelines*

- Show locations of proposed plants, trees and ground covers
- Provide a plant legend that indicates plants' botanical and common names
- Indicate the quantity, size and spacing of all plant materials
- Show and label all existing trees to be removed or retained
- Show the layout of the irrigation system including the water meter, main and lateral lines, sprinklers, bubblers, drip emitters, etc.
- Provide a summary data table on the plans that includes (1) the total landscape area in square feet; (2) the project type, i.e. new, rehabilitated, public, private, homeowner-installed, etc.; and (3) water supply type, i.e. potable, recycled, well.
- Water Efficient Landscape Worksheet including the hydrozone information table and water budget calculations

Grading, Utility and Drainage Plans

- Show existing and proposed grades; contours for steep slopes are to be drawn at a minimum of 2-foot intervals
- Show the direction of storm water runoff and the existing facility that will receive the runoff
- Show all proposed utilities, including water connections, sanitary sewer, storm lines, street and parking lot lighting, etc.

Other items, as applicable

See Planner to determine what other items may be applicable for your project

May include Business Plan, Geotechnical/Geological Study, Traffic Study, Photosimulations, Arborist Report, Soil Management Report, Lighting Plan, Drainage Study, or other information to allow an environmental impact analysis.

Reducing Risk

Given the lack of comparables but the extremely strong pricing incentives for the specific markets to buy units, the absorption rate is particularly difficult to predict. Four risk reduction strategies are proposed.

Market research: A proposal by InterQ using travel diaries, interviews, and focus groups of the specific markets would be helpful; conventional market research is irrelevant. [link]

Reservations: A target for reservations could be stipulated before significant investment. The California Department of Real Estate allows a developer to take money down to reserve unit, based on having entitlement. The City could cooperate on expedited entitlement and getting an

Overall Preliminary Public Report from DRE. Falling short on reservations would alleviate the developer's obligation to build the project.

Parking: Parking supply could increase to the extent the non-car modes system falls short of minimal absorption, but still limiting parking to one per household and maintaining deparking incentives.

Fall back plan: If absorption falls short of a two-year target, it would allow shifting to an approved fall back plan with more parking.

Other savings are available from phasing site improvements and phasing the implementation of HOA assets.

Sherman Lewis, sherman@csuhayward.us, 510-538-3692, 11/13/2019. Email for access to the Bayview archive, Creation Care for Neighborhoods, Walkable Neighborhood Systems, and other articles on transportation and land use issues.