Sierra Club Comments on the Notice of Preparation for the Climate Action Plan, General Plan update, and Belmont Village Specific Plan.

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Thank you for the opportunity on the Notice of Preparation.

COMMENT SUMMARY:
Address long term requirements and trends. SB32 and AB197[1] require CARB to develop guidelines for us to cap statewide greenhouse gas (GHG) emissions at 40% below 1990 levels by 2030. AB 197 ensures that low income communities are not stuck with pollution by addressing the social costs of emissions. The problem is imminent- earth has passed the 400 ppm threshold[2] where 350 was considered safe[3]. Many of the policies inherent in achieving targets within new laws like SB32 are already within the proposed new general and specific plans. What's needed is to make SB32 strategies work quickly. We need almost 3% per year reductions to meet SB32 goals. Walkable communities are both in the Belmont Village plan and General Plan. They are solutions to the

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[1] http://www.latimes.com/politics/la-pol-ca-jerry-brown-signs-climate-laws-20160908-snap-story.html : Cutting emissions will affect nearly all aspects of life in the state — where people live, how they get to work, how their food is produced and where their electricity comes from…. A second measure signed Thursday by the governor, AB 197, shifts the trajectory of the state's environmental policies. It creates a legislative committee to oversee regulators, giving lawmakers more say in how climate goals are met. It pushes the state to take stronger steps to curb local pollution, rather than simply seeking a statewide reduction in emissions.

[2] http://www.scientificamerican.com/article/earth-s-co2-passes-the-400-ppm-threshold-maybe-permanently/

[3] http://sustainabilityadvantage.com/2014/01/07/co2-why-450-ppm-is-dangerous-and-350-ppm-is-safe/

state's goals[4]. But walkable communities need to function as part of the community for pedestrians- most of the service needs should be available within the walking footprint[5].

COMMENTS
PARKING
Current conditions are that the downtown in Belmont is 30% over-parked (per the ECHO Stanford Study,) residents demand more parking, and business needs street front parking. These conditions create opportunities for how a Park-Once-And-Walk district would be configured, paid for, and used to reduce the greenhouse gas footprint of the city. Resident concerns can be addressed through adequate impact fees and a location where the parking will be located. In the interim the impact fee can be used for shared parking with Caltrain, charged parking with Belmont Village, and subsidized valet parking.

The walkable community must be integrated with a future of driverless cars and higher land uses of parking lots. A starting point, highly recommended by the Sierra Club, is to install Residential Permit Parking (RPP) within a 1/4 mile of any potential objectionable plan or project. With RPP the project can be presented to the public with the main objection neutralized. Beneficial strategies like Car Share[6], electric bike share, employer shuttles and uber designated pick up drop off locations,

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[4] http://www.salon.com/2012/11/03/stop_climate_change_move_to_the_city_start_walking/ : tailpipe emissions are only one part of the footprint of motoring. As described by the strategic consultant Michael Mehaffy, this footprint includes "the emissions from the construction of the vehicles; the embodied energy of streets, bridges and other infrastructure; the operation and repair of this infrastructure; the maintenance and repair of the vehicles; the energy of refining fuel; and the energy of transporting it, together with the pipes, trucks, and other infrastructure that is required to do so. These add an estimated 50 percent more pollution to the atmosphere than emissions alone.

[5] http://depts.washington.edu/trac/concurrency/lit_review/trr1780.pdf : Trip lengths are shorter in traditional urban settings with central locations, fine land-use mixes, grid-like street networks, and activity centers expected to produce shorter trips. See more from the SMC Health Department at http://www.gethealthysmc.org/healthy-neighborhoods

[6] http://www.accessmagazine.org/articles/fall-2009/tod-carsharing-natural-marriage/

transit passes like Eco Pass, secure bus stops, and unbundled parking can be implemented if RPP is in place[7]. Transportation Demand Management (TDM), multi-modalism and Smart Growth benefits for traffic safety should be measured and reported; residents of more compact and multi-modal communities tend to have much lower per capita traffic crash casualty rates, and strategies such as efficient pricing tend to provide significant safety benefits.[8] More importantly other strategies like zero parking, unbundled parking, and priced parking can be implemented. Brian Shaw of Stanford says they would not have been able to achieve their 50% drive alone rate were it not for priced parking that increases in cost every year. Good functioning examples of TDM exist in San Carlos, Menlo Park, and Stanford.

Today the state has achieved much of the goals of AB32 by decarbonizing electricity. Going forward the image of solar panels does not fit the problem which is coming from transportation. According to SAMCAR more than 90 of commuters leave Belmont to go almost equally to Santa Clara County and San Francisco County. They are adding to the problem of solving climate change- California consumes about 50M gallons per day; about a 1/6 of which comes from the destruction of the Amazon.[9]

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[7] San Mateo has had considerable problems reducing parking in its Transit Oriented District because they have not installed RPP as a programatic feature of TOD. http://www.smdailyjournal.com/articles/lnews/2016-09-29/hillsdale-terrace-proposal-elicits-housing-debate-meeting-contrasts-the-concerns-of-neighbors-affordability-advocates/1776425169047.html : The potential impacts to traffic, parking, schools and aesthetics frequently prompt neighbors to voice concerns — as was the case Tuesday when dozens of neighbors and members of a group called Livable San Mateo spoke in opposition to the Hillsdale Terrace proposal.

[8] http://www.apta.com/mediacenter/pressreleases/2016/Pages/Hidden-Traffic-Safety-Solution.aspx

[9] https://www.theguardian.com/environment/2016/sep/28/amazon-crude-oil-us-imports-rainforest-destruction-study/ :And California, despite its green reputation, refines an average of 170,978 barrels, or 7.2m gallons, of Amazon crude a day, with the Chevron facility in El Segundo accounting for 24% of the US total alone.

The image going forward should be a person in a suit using efficient buses linked to Caltrain and bike share in order to meet the goals of SB32. This is also an equity issue that can be seen in the increased Disease Adjusted Life Years as a Belmont Resident moves from 101 to 280. It is also visible in who has been injured and killed on Belmont streets over the last 20 years. And in the GIS data for Adjusted Daily Attendance of students because of asthma.

TRANSPORTATION DEMAND MANAGEMENT
The expected Transportation Demand Management guidelines will also be a SB32 solution in this regard- transportation is more than 50% of travel and vehicle fleet emission for most Bay Area cities[10]. TDM needs to function so that key transportation outcome variables- trip frequency, trip length, mode choice, and composite measures of travel, vehicle miles traveled and vehicle hours traveled- are measured relative to their magnitude on walking from the Built Environment. What isn't accessible on a walking footprint needs to accessible by bikes, then transit, and finally carshare in a transportation hierarchy[11] within the expected Circulation Element. The Climate Action Plan should have annual measurement and reporting to meet the state's 2030 timeline with adequate adjustments possible through council.

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[10] http://www.cityofsanmateo.org/DocumentCenter/View/45410 : see page iv where transportation is 58% of emissions in neighboring San Mateo.

[11] http://www.reliableprosperity.net/transit_access.html : Improved transit access will occur through the creation of effective competition between many different travel modes. The hierarchy of least cost transportation mode alternatives runs from: walking (least expensive), biking, bus, para-transit (vans, pooled transit), light-rail, commuter train, inter-city rail, ferry, carpool, to personal car (most expensive)…Such systems greatly enhance the appeal of human-scale neighborhoods, connecting them to nearby work, shopping, and recreation without making them car-dependent. In turn, as compact towns and cities provide a physical form allowing neighborhoods to grow more dense, alternative transit modes grow increasingly cost-effective, with more riders served per dollar of investment.

Street speeds should decline as one approaches the transit center in order to have complete streets[12]- a program to which Belmont has subscribed. Streets that cannot be effectively enforced for crash causes such as distract, drunk and dangerous driving should be reimagined as community streets within the Circulation Element. Transportation Demand Management (TDM), multi-modalism and Smart Growth benefits for their traffic safety should be measured and reported; residents of more compact and multi-modal communities tend to have much lower per capita traffic crash casualty rates, and strategies such as efficient pricing tend to provide significant safety benefits[13]. The built environment should be safe and comfortable to be a walkable. Palo Alto is creating a Safety Element, which we recommend Belmont also do, or add to another element. A safety element should function in three areas where the walkable city is comfortable and safe for young women, a single mother of two children, and a grandmother.

ZONING GUIDELINES FOR ELECTRICTY
Both the passed 400 ppm threshold and the approaching CalGreen 2020 Net Zero Residential target require that we electrify everything[14]. This is

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[12] http://www.vtpi.org/compstr.pdf : Complete Streets refers to roads designed to accommodate diverse modes, users and activities including walking, cycling, public transit, automobile, nearby businesses and residents. Such street design helps create more multi-modal transport systems and more livable communities… For many decades, transport planning assumed that transportation primarily means driving, so the most important goal is to increase automobile traffic speeds, often to the detriment of other modes, activities and objectives. This type of planning can have undesirable, unintended consequences; it degrades walking and cycling conditions, creates automobile dependent transport system and sprawled development patterns, increases total transportation costs, and creates unattractive roadways…Road space requirements increase with vehicle size and speeds (faster vehicles require more "shy distance" between them and other objects), and declines with more passengers per vehicle. As a result, single-occupant automobile travel requires ten to one hundred times as much road space as walking, cycling and public transport.

[13] http://www.apta.com/mediacenter/pressreleases/2016/Pages/Hidden-Traffic-Safety-Solution.aspx

[14] http://www.vox.com/2016/9/19/12938086/electrify-everything : Replace technologies that still run on combustion, like gasoline vehicles and natural gas heating and cooling, with alternatives that run on electricity, like electric vehicles and heat pumps. Get as much of our energy consumption as possible hooked up to the power grid…as long as we are reducing carbon on the grid, every single electrical device is getting cleaner throughout its life.

particularly true in CA where we have a significant and growing surplus of solar[15] and the nascent Peninsula Clean Energy provides a mechanism to decarbonize the local grid[16]. Building codes should call for 100% electric cars, electric stoves, and heat pump electric water heaters similar to codes in Palo Alto.

TRANSFER OF DEVELOPMENT RIGHTS
Walkable communities that address different housing types are inherently smaller footprint[17]. Use Transfer of Development Rights (TDR) to restore watersheds, grasslands, and forests[18] as the city strategically shrinks to restore ecological services for storm water sequestration, creek restoration and flood prevention, and wildlands fire mitigation. A good example of TDR is King County in Washington State. And Belmont has a functioning example for preserving steep hillside openspace in San Juan Canyon through TDR. It should be expanded to restore wildlife corridors, creek water shed storage capacity, and ecological services.

ECOSYSTEM RESTORATION CREDIT TRADING
The general plan should consider compensation for preserving ecological services that should be components of future Cap and Trade funding. Many of the benefits provided by the environment are not captured by markets. If landowners received compensation from beneficiaries for the valuable ecosystem services they provide such as water purification, carbon sequestration, or storm buffering, their land management practices would be very different. At the simplest level, the goal would be

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[15] https://ww2.kqed.org/science/2016/04/04/what-will-california-do-with-too-much-solar/

[16] http://www.peninsulacleanenergy.com

[17] http://miplace.org/sites/default/files/Missing_Middle_Housing_0.pdf : Missing middle housing can achieve medium-density yields and provide high-quality, marketable options between the scales of single-family homes and mid-rise flats. They are designed to meet the specific needs of shifting demographics and are therefore a key component to a diverse neighborhood. And they can meet the market demand for walkable urban living. (Note- Middle housing is market rate affordable housing that is currently illegal under the zoning code.)

[18] https://www.edf.org/news/environmental-defense-applauds-working-lands-bill

to combat deforestation by making trees more valuable standing than cut down[19].

Other major trends to consider:

AFFORDABLE HOUSING
Many residents from the disabled to the elderly are having to leave friends, family, and community because the rent went up[20] in Belmont. According to the joint study with Harvard University[21], 60% of wishful buyers in Silicon Valley cannot qualify for current rents and home prices. Higher rents are a consequence of constrained zoning which has limited the supply of housing[22]. Especially for very low and low income Belmont has not provided housing[23]. People respond by moving to far away places, because the drive allows them to qualify[24] while creating the 400 ppm problem we need to solve. Greening the housing stock, both of new and existing housing, is a means to insure long-term affordability while simultaneously improving people's health and living conditions[25]. More importantly it allow families to spend time with children and grandparents instead of commuting. The state has responded by providing additional tools to enable AB1866 secondary units[26]which should be included in the general plan and specific plan updates. A mix

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[19] http://www.perc.org/sites/default/files/ps48.pdf

[20] http://www.paloaltoonline.com/news/2016/07/05/san-mateo-county-attempts-to-take-on-housing-crisis

[21] http://www.jchs.harvard.edu/research/state_nations_housing

[22] http://www.lao.ca.gov/reports/2015/finance/housing-costs/housing-costs.aspx

[23] http://www.abag.ca.gov/files/RHNAProgress2007_2014.pdf : see page 5 for Belmont specific data- Very low and low income had ZERO permits issues, moderate had only 5%.

[24] http://www.eastbaytimes.com/2007/09/16/buying-easy-access-home/

[25] http://uli.org/wp-content/uploads/2012/07/Report-7-Environmentally-Sustainable-Affordable-Housing.ashx_.pdf

[26] http://www.latimes.com/politics/essential/la-pol-sac-essential-politics-updates-more-granny-flats-to-ease-housing-1475012357-htmlstory.html

of housing[27] should be provided to accommodate the coming senior tsunami[28] and millennials[29].

MOBILITY AS A SERVICE

"Shared mobility" is a term for the smorgasbord of services ranging from carsharing to bikesharing, from private shuttles for tech workers to driver services like Uber and Lyft. Mobility As A Service (MAAS) seeks to seamlessly provide this service on your smartphone. Like a butler MAAS would be one step ahead of your travel needs in recommending services. About 90% of MAAS is currently available in google maps. Filling the rest will depend on the circumstances of individual cities like Belmont. TDM programs are integrated onto a smart phone app such that paying for shuttle or uber is seamless.

Uber and other carshare services have taken away the need to own a car today. Millennial are less likely to own cars[30]. Carshare makes it possible to link between the inefficient transit options.[31] Today owning a car is not the best way of guaranteeing mobility on demand because of the rise of applications like uber. Our family went for two cars and two children, who went through the schools in Belmont, to four incomes and one car. Self driving cars, currently rolled out by Uber in Philadelphia[32], will result in massive changes to landuse patterns because parking will be

27 http://miplace.org/sites/default/files/Missing_Middle_Housing_0.pdf

28 http://archive.peninsulapress.com/2013/11/07/san-mateo-baby-boomers-home-prices/

29 http://www.realtor.org/news-releases/2015/07/millennials-favor-walkable-communities-says-new-nar-poll

30 http://www.npr.org/2013/08/21/209579037/why-millennials-are-ditching-cars-and-redefining-ownership

31 Tony Sera, Clean Disruption of energy and transportation, Clean Planet Ventures, Silicon Valley, CA

32 http://www.nytimes.com/2016/09/11/technology/no-driver-bring-it-on-how-pittsburgh-became-ubers-testing-ground.html?_r=0

unnecessary[33], driving will phase out with the cost of insurance, and jobs will be eliminated currently employing everyone from the commuter to the Teamster; raising numerous policy issues for city planners. Seeking to integrate carshare into daily life, neighboring cities like San Mateo and Foster City have provided incentives for use[34]. Belmont should replace half it's car fleet with Zip Cars and provide electric bike and tricycle share downtown similar to European cities like Madrid. Mobility As A Service[35] should be included in the Circulation element.

EXAMPLES:
City of San Carlos has a good climate action plans. San Carlos goes further than other cities by building robust measurement and reporting into their plan. City of San Mateo also has a good, if long, Climate Action Plan. Climate Action Plans must have measurable and reportable goals and outcomes to satisfy mitigation measures[36]. There are more opportunities in San Mateo County to coordinate climate response through RiCAPs.

City of San Carlos has a good TDM policy built into it's zoning policy.

The County of San Mateo has done a Climate Change Vulnerability Assessment[37].

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33 http://www.nytimes.com/2016/01/22/business/dealbook/davos-self-driving-cars-may-get-here-before-were-ready.html : Many local governments see the potential for driverless vehicles to solve urban ills like parking, congestion and even mobility for lower-income residents… But drafting policy for a technology that is not yet on the market makes it much more complicated to answer important practical questions: Do we need extra lanes, but less parking? More curbside space? How will the cars communicate with traffic signals, and who will be responsible when there's an accident?

34 http://www.smdailyjournal.com/articles/lnews/2016-09-26/carpooling-toward-less-congestion-san-mateo-foster-city-partner-with-scoop-technologies-for-app/1776425168859.html

35 https://en.wikipedia.org/wiki/Mobility_as_a_service_(transport)

36 http://elr.info/litigation/43/20092/sierra-club-v-county-san-diego

37 http://planning.smcgov.org/sites/planning.smcgov.org/files/documents/files/Vulnerability-Assesment-Report---December-Final.pdf

Redwood City has parking policies that have resulted in a park once and walk downtown. However it has too much parking which has depressed the price.

Stanford has the best TDM in the area and the lowest Single Occupant Vehicle (50%) trip rate. Brian Shaw, director of transportation services, attributes their success to priced parking, which rises every year, and the traffic cap, under which it operates.

Many cities use traffic caps with electronic sensors that report the data automatically for new developments one of the better ones is Menlo Park and Facebook. Facebook faces fines of $50/- per car per day for exceeding its cap. The cap is based on the prior occupant auto rate at the site- Sun Micro Systems. The result is priced parking paying for a slew of seamless transportation options that result in a Single Occupant Vehicle rate below 60%.

Redwood City has a bike share system similar to MV, PA, and San Jose. San Mateo has two kinds of bike share systems. MAAS should be able to integrate these systems so that paying for them is seamless. Washington DC has had immense success with bikeshare because the docking stations are separated by only a 1 minute walk. Many european cities have electric assist bikeshare which would be amenable to the hilly conditions in Belmont.

Get Healthy San Mateo and Portland talk about complete neighborhoods. http://www.gethealthysmc.org/healthy-neighborhoods https://www.portlandoregon.gov/bps/article/531170 Build complete neighborhoods- Creating vibrant complete neighborhoods allows people to safely walk and bike, purchase daily goods and services such as healthy foods, and easily access affordable public transportation, parks and open space. Complete neighborhoods for energy- http://www.peninsulacleanenergy.com should include CalGreen's net zero program which requires residential to comply by 2020, Commercial by 2030, and 2025 for schools.

COMMENTS ON THE BELMONT VILLAGE PLAN-
Some of these may have already been addressed.

Overall we think its fairly decent. The plan scored 58 on our Sustainable Land Use guidelines which is attached. There are some questions in the goals and programs.

What happened to the Park once and walk? It is mentioned in the implementation plan at the end but there is no funding or location mentioned. They should take a full in-lieu fee and use it for the parking lot. Also they should price parking so as not to continue creating an artificial attractor by including Residential Permit Parking in the surround neighborhoods. Parking is mentioned in at least four slides which is a problem as if the plan was being designed for yesterday. Driving and commuting have trended down along with other other sources of roadway vehicle miles. (see slide 7 in this series based on NTSA data http://www.eia.gov/confere…/…/pdf/presentations/mcguckin.pdf) And Uber has released the first series of driverless cars https://www.theguardian.com/technology/2016/aug/19/uber-self-driving-pittsburgh-what-drivers-think which make parking which are expected to have a huge impact on the need for parking http://www.techworld.com/personal-tech/huge-impact-driverless-cars-will-have-on-parking-urban-landscapes-3637704/

Where are the plazas? "Public community gathering spaces" are mentioned in the Placemaking Framework but don't show on any of the maps. They should be included. Also Caltrain's parking is shown as a park but this has a couple of liabilities from the noise and pollution on both Ralston and El Camino and begs the question who controls that property and where will the Caltrain folks park?

How will community benefits be determined? They are mentioned in slide on Density and Intensity of Land Use Framework. They should have a community process to determine the benefits so that we can avoid the fiasco that occurs in South San Francisco.

Is the density sufficient? If they reduce parking the Village Corridor Mixed Use can be same density or higher than the Village Core.

What is the potential new right of way in the Urban Design Framework slide? They are specified on Fifth and on Flashner Lane. They should be pedestrian only; not another automotive street added into the downtown, especially new the intermodal station hub at ECR/Ralston.

Bus Stops are specified on the Transit Plan. Need better busstops that include systems like next bus locator, shade, and quiet. Also need places for carshare and bikeshare. San Mateo is a good example here and similar systems should be installed.

Why sharrows and not bike lanes in the proposed concept of the Emmett/6th crosswalk?

TDM is mentioned but there is no indication of what it will be.

There is a nice new circulation plan loop with two more under crossings of the train tracks mentioned on both the Pedestrian Plan and the Bicycle Plan. It needs to be safe, healthy, accessible, pleasant and efficient for people to walk or bike the loop. Via police walking the loop or riding their bikes, eyes on the street in the form of old main streets, closed to traffic during certain hours, trees and fountains, wayfaring, and uses that people would normally have to go to adjacent cities. Put in an intermediate land use category for the loop- Neighborhood Mixed use. An example is Menalto Ave in Palo Alto. Its mostly residential but sprinkled in with the houses is a grocery store (Hacienda Market), a nice cafe which I like to frequent (Zoe), a confectionary store (Cake Studio), a nail salon (Polished Look), Barber (Habibi's salon), dance wear apparel (Dancer Dejour) and a spa around the corner (Roble Cindy.) The loop should be prioritized in the implementation plan. Get a grant like the $2.1M grant that San Carlos got and used to complete a major multimodal renovation of Old County Road.