# Walking-oriented development

## General

Walking-oriented development is near high-quality mainline transit with access to a job center and within 15 minutes total travel time of a good grocery store. Walking-oriented development densifies in a center or along a short corridor without adding subsidized parking. Pricing, density and design replace car trips with non-private-auto trips for more efficiency and better health.

## Affordable and Sustainable Site Development

Housing is affordable and sustainable, best accomplished by:

* Mid-density: about 50 to 100 persons per neighborhood acre
* Four square construction for major cost savings
* Three- to four-story building height for insulation, human scale, and active solar energy
* Net zero on the grid (roof-top PV and thermal solar energy, three stories optimal; wind energy)
* Parking cost paid by parkers, reducing unit cost by 15% to 20%.
* A resident association with social events and procedures to foster community.
* Built to condo standards and registered as condo properties even if rented.

## Green Mobility

The Bay Area has wasted almost **$200,000,000 on 3,882 unused parking in affordable housing** **projects**. See <http://database.greentrip.org/>.

Walking-oriented development uses green mobility:

* **Parking**
  + Surface parking; no structured parking unless it pays its own way (land, construction, operating, external costs) with parking charges.
  + Parking management on public streets to prevent spillover parking from new development: resident parking permits; hour limits or smart meters for businesses
* **Parking charges**
  + Unbundled parking, charged like living space rent to make a profit (for example, $2,930 rent for two bedroom unit and $370 for two parking spaces, $3,300 if bundled)
  + Public parking charged at 75% to 90% occupancy; no time limits; smart meters for efficient fare collection (no currency); use of funds for local improvements; involvement of local people in deciding use of funds, probably have free parking nearby with signage to find it.
* **Public autos**: Carshare/rental; taxi; ehail (Uber, Lyft); paratransit
  + Dedicated curb space, based on demand, for public autos
  + Arrangements with public auto providers
  + Easy pick up, drop off, payment for public autos
  + Guaranteed ride home voucher for residents from mainline transit for taxi/e-hail when the shuttle is not running.
  + A limited number of taxi/e-hail vouchers for healthcare when other modes are inefficient.
* **Rapid Shuttle**; rapid bus
  + **Short corridor**, less than two miles, allowing frequent service with one or two buses, with one end of route at mainline transit.
  + **Frequent**: every ten minutes or more frequently most of the day
  + **Fast**: Uses rapid bus concepts: maneuverable bus—30 feet long or less, dual mode motor for fast acceleration, hill climbing, and regenerative braking; low floor bus, elevated sidewalk stops with no step entry; guided docking for fast roll-on, no fare collection, “proof of purchase” fare enforcement, signal preemption, use right turn lane to bypass queue at red light.
  + **Free:** Residents have eco-pass; students have class pass
  + **Land-based finance**: Developers, institutions, and property owners provide capital at time of development or as buy-in; residents provide operating as part of rent or HOA dues.
  + **Ownership** by capital contributors, management by RFP and contract operator.
  + Typically serves downtowns, major employers, large institutions (health, education).
* Easy, safe, attractive **walk paths** to important destinations, like a downtown and mainline transit; walk route improvements for attractive and safe crossing of streets.
* **Bike share** and supporting facilities for easy one-way bike trips.
* **Multimodal social centers**, a small pedestrian friendly area where a transit stop, dense housing, public auto availability, food service, and retail are located.
* **Education** and technical assistance for residents in green mobility: how to get around without owning a car, using public autos, walk, bike, transit; cost and travel time analysis.
* **Deparking incentives** to not lease a parking space, save on parking rent, possibly save on not owning a car, possible incentive payment to allow more green development.

## Financial feasibility

* Estimate housing absorption rate for key markets—mainline transit riders, corridor workers, retired, work at home; estimate market using travel diaries and focus groups.
* Phasing: Reduced parking ratio for initial phase of residential development; subsequent phases adjust parking supply to demand and allow more units if parking demand is lower..
* As residents transition away from parking a private car on site, leaving unused parking spaces, new phases are built.
* Unbundled housing costs about 15% less than automobile-based housing, making it very competitive in the marketplace.
* As surface parking is freed up, it is used for the next stage. The amount of parking to be built can be adjusted to reflect the demand for unbundling. Developer has incentive to reduce parking on site in order to get more units.

# Definitions

Density is best measured by persons per neighborhood acre.

**Neighborhood acre**: Lot plus street plus local neighborhood-serving land uses

Low density: 50 persons or fewer per neighborhood acre

Mid density: 50 to 100 persons per neighborhood acre

High density: 100 persons per neighborhood acre

Low-rise: 1 to 2 stories

Mid-rise: 3 to 7 stories

High-rise: 8 stories on up

# Problem

The SGC AHSC program is unwittingly and unknowingly subsidizing GHG by unnecessarily subsidizing parking. **Needed:** A SGC data base with information for each project, starting with green mobility data.

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# Funding

The California Strategic Growth Council (SGC) has $400 million to award to housing and non-auto transit access projects in 2016 in the Affordable Housing and Sustainable Communities (AHSC) program. In 2016, the Notice of Funding Availability (NOFA) came out in January, so the same may occur in 2017. Projects following the principals of walking-oriented development will score well.

# Regulation

City zoning requirements may mandate building large amounts of free and bundled parking, thus subsidizing more cars and more traffic at the expense of affordable housing and less car dependency. Zoning should go the other way, for example, by allowing no more than one parking space per ten units and requiring market-rate unbundling.

City parking regulations may allow free use of expensive public parking paid for by tax payers. Parking is so over-supplied that much of it goes unused where there could be productive development, and some of it is in high demand with no turnover for efficient use. In some areas, the city has neighborhood parking permit requirements and time limits that help to some extent, but are inefficient. Parking management can prevent parking spillover into existing neighborhoods and can generate funds for downtown improvements.

# Retail Economics

Many people tend to be unrealistic about how much retail downtown can support. Retail requires a large residential population to be viable. Consultants can provide ideas about what is realistic for retail, so the city does not withhold land from residential development hoping for retail when it is not realistic.

The value for real estate developers of revitalizing old centers is promoted by Smart Growth America. “Walking-oriented development” focuses on nearby neighborhoods and supplements revitalizing employment in old centers.