John McCaull
13-5-4
4/25/13

California Farm Bureau Federation
California Rangeland Trust
American Farmland Trust
California Grain and Feed Association
California Bean Shippers Association
California Pear Growers Association
California Association of Wheat Growers
California Seed Association
California State Floral Association
California Warehouse Association
Pacific Egg and Poultry Association
Sierra Business Council
California Climate and Agriculture Network
Sonoma County Agricultural Preservation and Open Space District
California Association of Resource Conservation Districts
Resource Conservation District of Santa Cruz County
Audubon California
Mendocino Land Trust
Peninsula Open Space Trust
Marin Agricultural Land Trust
Land Trust of Santa Cruz County
Land Trust of Santa Barbara County
Sonoma Land Trust
Save Mount Diablo

Working Lands Coalition Funding Proposal

The Working Lands Coalition (WLC) has developed the following proposal to fund a comprehensive agricultural land and open space protection program with greenhouse gas (GHG) cap and trade allowance auction revenue. This program will serve as a necessary complement to sustainable community investments, and will help the state address both the greenhouse gas (GHG) reduction goals of AB 32 (Chapter 488, Statutes of 2006) and the land use and transportation planning objectives of SB 375 (Chapter 728, Statutes of 2008).

The key to attaining the land use and transportation planning objectives of SB 375 is to shift development closer to existing urban areas and encourage more compact, higher density communities. In order to fully achieve these objectives, California needs an effective strategy to protect the productive agricultural and open space[1] lands around urban areas to reduce the potential for sprawl and thereby encourage infill.

California has effective techniques and existing programs for protecting agricultural and open space lands that can be repurposed to support our SB 375 goals and SCSs in a cost-effective manner. The WLC requests that the state provide funding for three interrelated programs in order to reduce conversion of agricultural and open space lands, and help reinforce the urban limits established in the SCSs:

[1] There are several definitions of "open space" in state law. We are including the reference to open space lands in our letter to ensure consistency with the term's use in the Williamson Act and the Open Space Easement Act of 1974.

- **Restoration of Williamson Act subventions program.** The Williamson Act slows conversion of agricultural land through rolling 10 and 20 year "no-development" contracts between landowners and counties. The state's investment of nearly $1 billion since 1972 has provided ongoing protection for more than 16 million acres of productive agricultural and open space land by helping to finance the property tax relief provided to participating landowners. Continuing a modest annual investment leverages the state's historic investment and local funds to help keep farmland from fragmenting in ways that lead to low density development, and eventually suburbanization. State subventions have not been paid since 2009 and counties are now beginning to pull out of the program, or are struggling to meet their administrative responsibilities under the Act. Keeping this program going provides a highly cost effective way to slow development of agricultural and open space lands.

- **Link Subvention incentives for counties and planning money for cities and counties to the adoption of strong agricultural and open space protection programs that support the regional Sustainable Communities Strategies.** A few counties have strong protection for agriculture and open space built into their general plans, but most do not. Establishing incentives for the adoption of strong policies to reduce conversion of agricultural lands at the local government level supports the state's SCS goals at a very small cost. Our coalition of agricultural and environmental organizations proposes a modified two tiered subvention program that will provide counties a higher percentage of property tax backfill if they meet specific criteria to enhance the protection of agricultural, open space and watershed areas.

- **Funding for existing conservation easement and farmland mapping programs- including the California Farmland Conservancy Program, and the Rangeland, Grazing Land and Grassland Protection Program and the Farmland Mapping and Monitoring Program-can directly guide the path of development toward the compact scenarios.** Local planning is an important part of the SB 375 process, but every region experiences strong pressures for sprawl in directions that are not consistent with the SCS. Purchase of voluntary easements to protect lands on the periphery of existing urban or developed areas can permanently reinforce urban limits and thereby shift development in the preferred direction, while providing protection to important farm and resource lands. In addition, the California Farmland Mapping and Monitoring Program produces maps and statistical data used for analyzing impacts on California's agricultural resources. Providing sufficient funding to this program will allow California to adequately monitor compliance and progress with SCS land conservation strategies.

Funding for these three interrelated programs will:

- Help avoid or reduce transportation emissions from "business-as-usual" development patterns
- Result in significant climate change benefits
- Provide a cost-effective addition to our efforts to implement the goals of AB 32 and SB 375
- Provide important co-benefits connected with land conservation strategies
- Continue the historic and laudable goals of preserving soil productivity and food security.

California can meet its AB 32 and SB 375 GHG reduction goals for the transportation sector, but this can only occur if we change our approach to growth and land use. When agricultural and open space lands are protected over a span of decades through mechanisms such as Williamson Act contracts, when strong land use policies are adopted that result in more efficient growth patterns, and when purchase of strategic agricultural or open space conservation easements near our urban areas bolster land use policies, we have a much more realistic opportunity to achieve the level of compact growth necessary to create and maintain sustainable communities.

CALIFORNIA STATEWIDE PRELIMINARY SCENARIO RESULTS

BUSINESS AS USUAL: Growth pattern based on past trends. A significant portion of growth takes place at the edges of urban areas, with a fair amount of larger-lot single family development.

COMPACT GROWTH: Focuses a majority of growth in and around existing cities and towns and aligns with the housing demand profile presented in recent studies of California regions (details on following page).

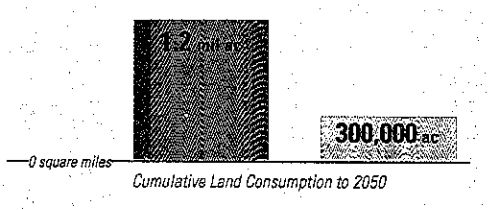
2050 SCENARIO RESULTS

Scenarios analyzed using Calthorpe Associates' RapidFire Model (See reverse for assumptions.)

LAND CONSUMPTION

Trend development patterns will expand the state's urban footprint by 2050, consuming an additional 1.2 million acres of farmland, open space, and recreation areas. The Compact Growth scenario ***saves 860,000 acres*** of this resource.

Saves over 12 times the land area of the City of Fresno.

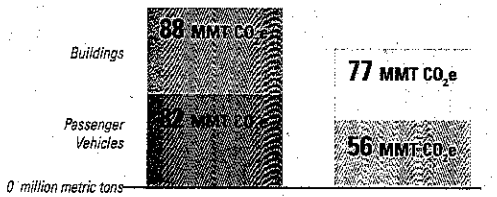


Cumulative Land Consumption to 2050

GREENHOUSE GAS EMISSIONS

More compact development patterns, along with more efficient cars and buildings, cleaner fuels, and a cleaner energy portfolio are all essential in reducing GHG emissions. The Compact Growth scenario prevents the release of ***37 million metric tons*** of carbon dioxide equivalent in 2050, or 22% less than a Business as Usual future.

GHG reduction equivalent to taking 18 million cars off California roads for a year.

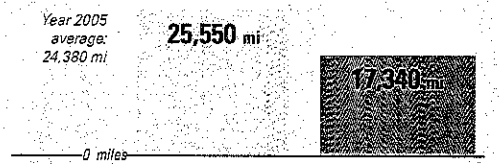


Annual Greenhouse Gas Emissions in 2050

VEHICLE MILES TRAVELED (VMT)

Automobile emissions account for about 40% of carbon emissions in California. The Compact Growth scenario, with more walkable, transit-oriented development, reduces passenger vehicle VMT by over ***2.9 trillion miles*** to 2050.

VMT reduction equivalent to taking ALL cars off California's roads for almost 10 years.

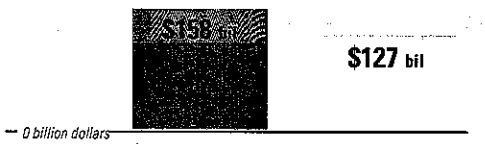


Annual VMT per Household in 2050

INFRASTRUCTURE COSTS

Infrastructure costs rise in line with land consumption, as dispersed development calls for longer extensions of sewers, water pipes, local roadways, and utility lines. Through 2050, the Compact Growth scenario ***saves more than $31 billion*** in infrastructure capital and operations and maintenance costs, about $6,300 per new housing unit.

Saves $6,300 per new housing unit, or over $785 million per year.

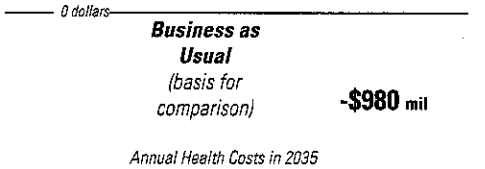


Cumulative New Infrastructure Costs to 2050

PUBLIC HEALTH

Auto-related air pollution results in a spectrum of respiratory and cardiovascular health issues, leading to hospital visits, work loss days, and premature mortality. Health incidences, and their related costs, are reduced along with VMT. The Compact Growth scenario avoids ***75,000 health incidences and $980 million in health costs*** in 2035.

Less pollution avoids $980 million in health costs.

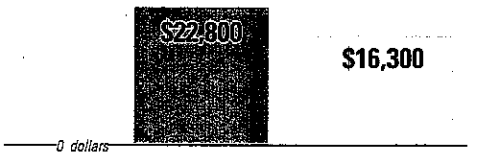


Annual Health Costs in 2035

HOUSEHOLD COSTS

More centrally located homes and more compact building types can dramatically reduce household driving and utility costs. Households in the Compact Growth scenario spend ***$6,500 less per year*** on auto-related costs and utility bills.

Saves $6,500 per household on annual auto costs and utility bills.

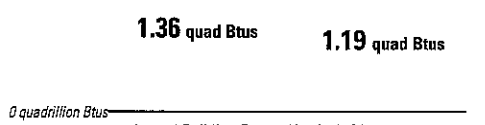


Annual Costs per Household in 2050

BUILDING ENERGY USE

Due to its greater proportion of more compact building types, the Compact Growth scenario ***cuts annual energy use in our homes and businesses by 12%***. This leads to lower household utility bills, greater energy security, and lower carbon emissions.

Saves enough energy annually to power over 2 million homes.

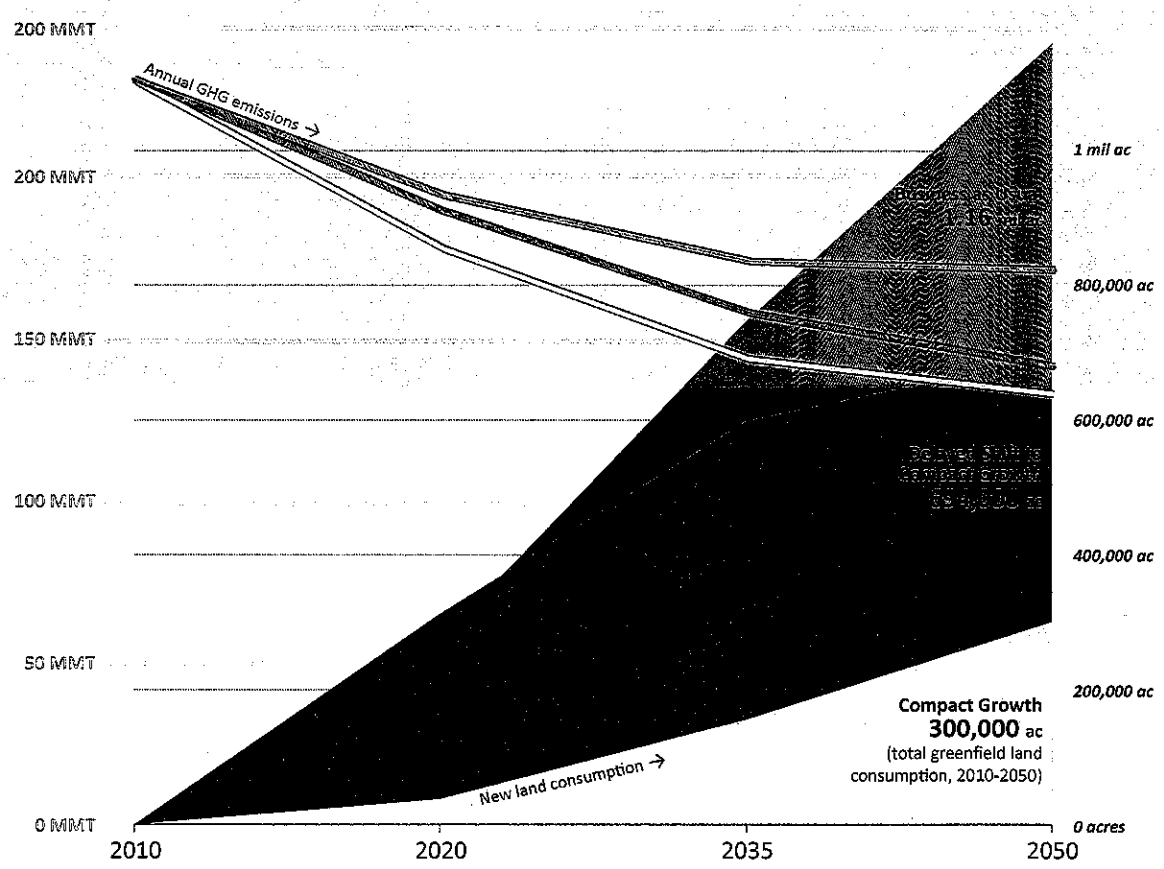


Annual Building Energy Use in 2050

LAND CONSUMPTION and GHG EMISSIONS TO 2050

GHG emissions from passenger vehicle transportation and building energy use vary significantly according to land use choices, as well as the timing of the shift to more compact development types. This chart shows growth in greenfield land consumption over time (represented by the lines) and GHG emissions from passenger vehicle transportation and building energy use over time (represented by the wedges) for three scenarios. More dispersed land uses result in higher greenfield land consumption and higher emissions. Timing plays an important role in emissions reductions, as demonstrated by the performance of the Delayed Shift scenario, which by 2050 achieves a similar development profile to the Compact Growth scenario but on a delayed timeframe.

*GHG emissions for all scenarios decline over time due to policy-based assumptions about improvements in vehicle and fuel technology and building energy efficiency. The same assumptions are applied to all scenarios, so variations between scenarios are attributable to differences in land use. The impact of land use on GHG emissions is substantial, with the Compact Growth scenario preventing the release of **37 million metric tons** of carbon dioxide equivalent annually in 2050, or 22% less than a Business as Usual future.*



Scenarios cover the State of California, with a projected population increase to 50 million people by 2050.

Housing demand profile of Compact Growth scenario based on:

- Nelson, Arthur C., 2011. *The New California Dream: How Demographic and Economic Trends May Shape the Housing Market.* Urban Land Institute. Available at www.uli.org/report/the-new-california-dream/
- Nelson, Arthur C., 2013. *A Home for Everyone: San Joaquin Valley Housing Preferences and Opportunities to 2050.* Council of Infill Builders. Available at councilofinfillbuilders.org/resources/valley-housing.html.

STATEWIDE SCENARIO ASSUMPTIONS:

Preliminary scenario results are calculated using policy-based assumptions for automobile and fuel technology, building energy and water efficiency, and energy generation and emissions. The assumptions used for these scenarios were developed in coordination with relevant state agencies to reflect the direction of adopted policy into the future. Assumptions for the year 2050 are as follows:

Transportation

- On-road passenger fleet average fuel economy: 37.2 mpg by 2050. (This reflects a passenger vehicle fleet mix (including sales rates and vehicle efficiency) that meets the Governor's Executive Order for 1.5 million ZEVs on the road by 2025. On-road new vehicle fleet average performance aligns with the EPA standard of 54.5 mpg by 2025, with the assumption that real-world fuel economy is typically a certain percentage lower.)
- Fuel emissions: 17.7 lbs per gallon.
- Fuel cost: $15 per gallon. (2012$)
- Auto ownership and maintenance: $0.40 per mile. (2012$)

Buildings and Energy Generation

- Energy and water efficiency of new buildings: 35% reduction from baseline usage rates for residential buildings, 60% reduction for commercial buildings.
- Energy and water use efficiency of existing buildings: 0.5% reduction, year-upon-year.
- Electricity emissions: 0.61 lbs CO_2e per kWh.
- Natural gas emissions: 11.7 lbs CO_2e per therm.
- Residential electricity cost: $0.35 per kWh. (2012$)
- Residential natural gas cost: $3.74 per therm. (2012$)
- Water cost: $1,634 per acre-foot. (2012$)

Public Health Impacts

- Estimated based on tons of criteria pollutants emitted, which in turn are estimated based on per-mile emission rates from the California Air Resources Board Emissions Factors (EMFAC 2011) model. Health incidence and valuation assumptions developed by TIAX, LLC for the American Lung Association (Oct 2011).

Fiscal Impacts

- Infrastructure costs are one-time costs that include the construction of streets, parks, water, and wastewater infrastructure. Operations and maintenance costs are ongoing costs that are incurred annually to maintain that infrastructure. Costs vary by dwelling unit type, and are based on data collected from a number of representative cities/areas in California.

All cost metrics are expressed in 2012 dollars.

SAN JOAQUIN VALLEY PRELIMINARY SCENARIO RESULTS

BUSINESS AS USUAL: Growth pattern based on past trends. A significant portion of growth takes place at the edges of urban areas, with a fair amount of larger-lot single family development.

COMPACT GROWTH: Focuses a majority of growth in and around existing cities and towns and aligns with the housing demand profile of the recent *A Home for Everyone: San Joaquin Valley Housing Preferences and Opportunities to 2050* report (CIB, 2013).

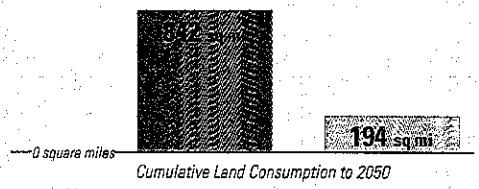
2050 SCENARIO RESULTS

Scenarios analyzed using Calthorpe Associates' RapidFire Model (See reverse for assumptions.)

LAND CONSUMPTION

Trend development patterns will expand the San Joaquin Valley's urban footprint by 2050, consuming an additional 842 square miles of farmland, open space, and recreation areas. The Compact Growth scenario ***saves over 648 square miles*** of this resource.

Saves nearly six times the land area of the City of Fresno.

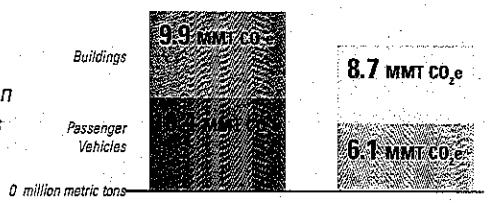


Cumulative Land Consumption to 2050

GREENHOUSE GAS EMISSIONS

More compact development patterns, along with more efficient cars and buildings, cleaner fuels, and a cleaner energy portfolio are all essential in reducing GHG emissions. The Compact Growth scenario prevents the release of ***5.4 million metric tons*** of carbon dioxide equivalent in 2050, or 27% less than a Business as Usual future.

GHG reduction equivalent to taking 2.4 million cars off San Joaquin Vallley roads for a year.

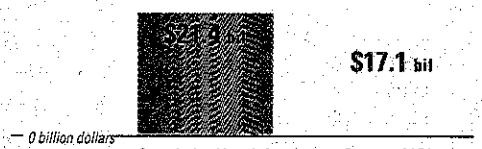


Annual Greenhouse Gas Emissions in 2050

INFRASTRUCTURE COSTS

Infrastructure costs rise in line with land consumption, as dispersed development calls for longer extensions of sewers, water pipes, local roadways, and utility lines. Through 2050, the Compact Growth scenario ***saves more than $4.2 billion*** in infrastructure capital and operations and maintenance costs, about $5,000 per new housing unit.

Saves $5,000 per new housing unit, or over $100 million per year.

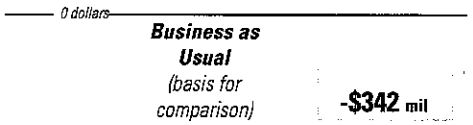


Cumulative New Infrastructure Costs to 2050

PUBLIC HEALTH

Auto-related air pollution results in a spectrum of respiratory and cardiovascular health issues, leading to hospital visits, work loss days, and premature mortality. Health incidences, and their related costs, are reduced along with VMT. The Compact Growth scenario avoids ***21,000 health incidences and $342 million in health costs*** in 2035. (Results for 2035 only due to availability of assumptions.)

Less pollution avoids $342 million in health costs.



Annual Health Costs in 2035

FUEL CONSUMPTION

The Compact Growth Scenario, with more walkable, transit-oriented development, significantly reduces vehicle miles traveled (VMT), which in turn saves ***nearly 14 billion gallons*** of automobile fuel to 2050.

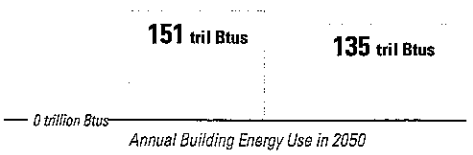
Saves the average household over $3,500 per year.

Cumulative Fuel Consumption to 2050

BUILDING ENERGY USE

Due to its greater proportion of more compact building types, the Compact Growth scenario ***cuts annual energy use in our homes and businesses by 16 trillion Btus***. This leads to lower household utility bills, greater energy security, and lower carbon emissions.

Saves enough energy annually to power over 300,000 homes.



Annual Building Energy Use in 2050

HOUSEHOLD COSTS

More centrally located homes and more compact building types can dramatically reduce household driving and utility costs. Households in the Compact Growth scenario spend ***$7,900 less per year*** on auto-related costs and utility bills.

Saves $7,900 per household on annual auto costs and utility bills.

Annual Costs per Household in 2050

Scenarios cover the eight counties that comprise the San Joaquin Valley, including Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare.

Housing demand profile of Compact Growth scenario based on Nelson, Arthur C., 2013. *A Home for Everyone: San Joaquin Valley Housing Preferences and Opportunities to 2050.* Council of Infill Builders. Available online at councilofinfillbuilders.org/resources/valley-housing.html.

SAN JOAQUIN VALLEY SCENARIO ASSUMPTIONS:

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