DRAFT AGENDA

Meeting of the Senate Bill 375
Regional Targets Advisory Committee

Tuesday, April 7, 2009
9:00 am – 1:00 pm, Pacific Time

Sacramento Area Council of Governments
1415 L Street, Suite 300
Sacramento, CA 95814

Webcast Information: http://www.arb.ca.gov/cc/sb375/rtac/meetings/meetings.htm

1. Roll Call and Housekeeping Items
Announcements, discuss updated meeting schedule, review meeting notes from past meetings, and review comments received via the Committee website.

2. Staff Work Product Update
ARB staff will give an update on work efforts initiated on behalf of the RTAC.

3. Economic Factors Influencing the Magnitude of Change in the Land Use and Transportation Sectors
Part of an ongoing series of presentations focusing on economic considerations such as projected market supply and demand for residential and non-residential building products, as well as cost, cost savings, and funding outlooks for developers and local government. Public comment and Committee discussion to follow the presentations.

The market for climate friendly communities and the economics of providing them
Presentation by Randall Lewis, Lewis Group of Companies

The economics of providing transit oriented development and alternative transportation infrastructure
Presentation by Professor Elizabeth Deakin, UC Berkeley *(Invited)*

4. ARB Staff Presentation
The ARB staff presentation will cover two main topic areas in response to RTAC requests: 1) description of modeling process for air quality and transportation planning, and 2) some potential approaches for setting regional targets under SB 375. Public comment and Committee discussion to follow the presentation.

5. General Public Comment Period

6. Next Steps

7. Adjourn

Meeting Summary of the Senate Bill 375

Regional Targets Advisory Committee (RTAC)

Wednesday, March 04, 2009
Hearing Room A
California Energy Commission Building
1516 9th Street
Sacramento, CA 95814

Discussion Highlights

Suggested Additions to Key Questions
RTAC discussed and edited ARB staff's suggested key questions. Revisions will be posted separately.

Speaker Suggestions
Staff discussed a suggested work plan for the next several months and introduced the discussion on factors influencing the magnitude of change in the land use and transportation sectors. RTAC members recommended five presentation topics to assist in the RTAC discussions. Suggested speakers would consist of an economist to discuss the broad market conditions and economy, a developer to discuss urban infill and master-planned communities, an alternative transportation expert, someone to discuss the co-benefits of air quality and economic growth, and a local government representative to discuss infrastructure and financing challenges.

RTAC members suggested the following individuals:

- Jeff Tumlin, Nelson Nygaard Consulting of San Francisco
- Robert D. Yaro, Project: America 2050
- Steve Winkelman, Center for Clean Air Policy
- Emil Frankel, Bipartisan Policy Center
- Stephen Levy, Center for the Continuing Study of the CA Economy (Palo Alto)
- Speaker from UCLA Anderson School of Management
- Chris Thornberg, Beacon Economics

Data and Modeling Assessment:
Staff presented an update on efforts by the MPOs to describe current modeling capabilities. RTAC suggested continued efforts by MPOs to improve the MPO modeling assessment survey, and requested additional discussion at the April meeting relating to the relationship between SB375 and existing air quality modeling. RTAC also requested that ARB staff outline any preliminary thoughts on target setting approaches, and convene a panel of experts to explore empirical data relating to land use and transportation strategies to reduce greenhouse gases.

RTAC members discussed four objectives related to modeling improvement efforts and provided comments on each.

- Accuracy – incorporate review by State, universities, or contractors.
- Consistency – develop consistency between: SB375 implementation and regional transportation plans; largely populated areas and rural counties; modeling approaches and budget settings; and across regions.
- Transparency – address statewide modeling capabilities; agree on the methodologies, inventories, and input assumptions used for modeling purposes; consider public comprehension of models; confirm establishment of mechanism to achieve targets prior to setting targets.
- Sensitivity – provide fair representation of all regions regardless of demographics; establish appropriate way to account for wide variation of model sophistication; review model capability to integrate newly established policies.

RTAC discussed and edited the guiding principles from the February 23, 2009 meeting. Revisions will be posted online separately.

Public Comment Highlights

There were four individuals who offered public comment. Their comments included the following observations and suggestions:

- The Bay Area Open Space vegetation mapping project could assist modeling efforts by monitoring greenhouse gas levels and carbon sequestration; the survival of key species has been proven to indicate climate change.
- RTAC meetings should be held on a day other than Tuesday, and possibly in Southern California, as there are scheduling conflicts.
- Public health is one of the major co-benefits of SB375.
- There is a statewide transportation and land development model under development at UC Davis. VMT modeling requires annual odometer readings, and retail fuel sales tax data should also be gathered (to calibrate models).
- One commenter suggested a target-setting methodology for RTAC. Staff has requested the commenter provide additional detail.

RTAC Requests to Staff

RTAC members made some administrative suggestions for ARB staff, including:

- Explicitly invite MPOs to the RTAC working group meetings.
- Prior to meetings, send background materials and public comments to members.
- Re-poll RTAC panel members on schedules and availability.
- Structure the agenda to allow public comments both before an item is acted on, and at meeting end.

- Provide meeting summaries from past RTAC meetings in advance of the next RTAC meeting.

Members present:

Cohen, S.	Dickinson, R.	Doyle, S.
Eaken, A.	Gallegos, G.	Heminger, S.
Katz, R.	Leahy, A.	Libicki, S.
Parkinson, P.	Parks, L.	Rawson, M.
Wallerstein, B.	Walters, J.	Wunderman, J.

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Comments Received for RTAC
2-25-09 thru 3-26-09*

***Original Packet included comments up to 3-25-09. This packet has been amended to include Comment 5 submitted on 3-26-09.**

Comment 1 for Comments on the RTAC (sb375-rtac-ws) - 1st Workshop.

First Name: Michael
Last Name: Rawson
Email Address: mrawson@pilpca.org
Phone Number:
Affiliation: The Public Interest Law Project

Subject: Key Economic Questions
Comment:

After the 2/19 working group meeting, I had some other thoughts on ways to frame the key economic questions needed to derive relevant economic factors.

1) Regarding Housing Affordability and Jobs/Housing Balance:

a. How does housing affordability affect the jobs/housing balance (and the related effectiveness of smart growth housing reducing VMTs)?

b. Do current jobs/housing balance modeling methods account for housing affordability?

c. Is it possible to adjust these models to consider housing affordability relative to job type and job wage levels?

d. Do/can VMT projections relative to jobs/housing balance take into account unemployment rates projections (adjusted to account for those not seeking work)?

2) Regarding Land Use and Redevelopment:

a. Can projected changes in land use patterns resulting from Sustainable Community's Strategies be modeled or assessed in some way?

b. How does the extent and likelihood of redevelopment of existing uses attributable to Sustainable Community's Strategies affect VMT reduction projections and how can this be measured?

c. How would the displacement caused by smart growth housing produced through redevelopment affect the VMT reduction projections?

d. How would the affordability level of redeveloped smart growth housing affect the degree of displacement?

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2009-02-25 13:44:49

No Duplicates.

Comment 2 for Comments on the RTAC (sb375-rtac-ws) - 1st Workshop.

First Name: Dan
Last Name: Wayne
Email Address: dwayne@co.shasta.ca.us
Phone Number:
Affiliation:

Subject: Shasta Modeling Capabilities for RTAC
Comment:

See attached

Attachment: www.arb.ca.gov/lists/sb375-rtac-ws/2-scrtpa_sb_375_related_modeling_capacities.pdf

Original File Name: SCRTPA SB 375 related modeling capacities.pdf

Date and Time Comment Was Submitted: 2009-02-25 14:20:04

No Duplicates.

Comment 3 for Comments on the RTAC (sb375-rtac-ws) - 1st Workshop.

First Name: ALAN
Last Name: PISARSKI
Email Address: alanpisarski@alanpisarski.com
Phone Number:
Affiliation:

Subject: my recent study in the ITE Journal
Comment:

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Mr. Ito:

I have received several suggestions that your group would benefit
from my recent policy article in the ITE Journal  January edition
called:
 "The Nexus of Energy, Environment and the Economy: A Win, Win,
Win Opportunity"

If you do not have it already I can send along a copy.  Regards to
Dan Sperling. we often testify together on the hill.

Alan E. Pisarski.
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Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2009-03-02 08:31:12

No Duplicates.

Comment 4 for Comments on the RTAC (sb375-rtac-ws) - 1st Workshop.

First Name: Curt
Last Name: Johansen
Email Address: lkimura@arb.ca.gov
Phone Number:
Affiliation: Triad Communities

Subject: General Comments for RTAC
Comment:

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See attachment, transmitted via email to ARB on 03-10-09.
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Attachment: www.arb.ca.gov/lists/sb375-rtac-ws/9-rtac_letter_with_attachments_3_10_09.pdf

Original File Name: RTAC Letter with attachments 3 10 09.pdf

Date and Time Comment Was Submitted: 2009-03-11 13:15:46

No Duplicates.

There are no comments posted to Comments on the RTAC (sb375-rtac-ws) that were presented during the Workshop at this time.

Shasta County
Regional Transportation Planning Agency

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Daniel S. Little, Executive Director

DATE: February 23, 2009

TO: SB 375 RTAC Workgroup

FROM: Daniel S. Little, AICP, Executive Director
By Daniel Wayne, Senior Planner

SUBJECT: **Shasta County RTPA – Travel Modeling Capabilities**

This memo is to inform the Senate Bill 375 Regional Targets Advisory Committee (RTAC) of the Shasta County Regional Transportation Planning Agency's (SCRTPA) current and anticipated modeling capabilities pertaining to SB 375. The following information is intended to assist the RTAC in determining methodologies for setting regional greenhouse gas targets, measuring progress toward these targets, and placing a number on much needed funding support.

Below is a brief outline of SCRTPA's regional traffic model and related GIS capabilities:

Regional transportation model:

- Traditional 4 step model (trip generation, trip distribution, mode choice, trip assignment);
- Calibrated to a base year of 2004 and contains forecast in five year bands to 2030;
- Contains 880 traffic analysis zones (TAZ), and 16 gateways;
- Contains 30 land use categories and 48 special generators;
- Utilizes Citilabs' Cube Voyager software;
- Contains seven trip purposes (home-work, home-school, home-shop, home-other, other-work, other-other, commercial vehicle);
- Produces the following measures of effectiveness (vehicles miles traveled, vehicle hours of travel, vehicle hours of delay, and average speed);
- Produces level of service estimates based on per-lane capacity;
- Contains a road network with 5,000 active nodes and 12,000 links;
- Validated – both static and dynamic;
- Provides number of trips generated for AM and PM, peak hour, daily average, and transit volume (daily bus).

Regional Blueprint and other related GIS capabilities/data layers:

- UPlan modeling software is employed for Shasta County's Regional Blueprint;
- UPlan modeling outputs have been linked to the Shasta County Travel Model for VMT and other standard travel model outputs;
- UPlan and travel model outputs have been linked to the Emission FACtors (EMFAC) model for the calculation of automobile and light truck emissions;
- Methodology for allocating vertical mixed-use (based on what Fresno COG developed) is being utilized until the next version of UPlan arrives (ETA spring-summer 2009);
- County-wide current land use layer exists, but is out of date in large portions of the region);

It should be noted that the SCRTPA has no in-house modeling or GIS staff; updates and model runs require consultant support. Compliance with AB 32 and SB 375 will necessitate additional resources for consultant support and/or development of in-house modeling and GIS expertise.

TRIAD

March 10, 2009

Senate Bill 375
Regional Targets Advisory Committee
c/o Lezlie Kimura
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Dear Committee Members:

As a practitioner of sustainable development, I have been asked to contribute my thoughts on the important work you are undertaking with respect to S.B. 375. Professionally I have been in pursuit of models for defining sustainable communities for many years. I hope the following suggestions will be of use to you in making your recommendations.

1. **Provide meaningful CEQA incentives for 'smart growth' urban infill.** Attachment A (submitted to CARB on July 7, 2008) sets forth a defined process to strengthen CEQA against suburban sprawl, while employing CEQA to encourage the development of high quality, mixed use transit-oriented infill projects. To engender public support, it will be important to acknowledge that 'smart' infill is not a proxy for 'quality' infill. My suggestion for an expert on urban infill market demand and best practice would be Chris Leinberger.

2. **Reward cities and counties for adopting Sustainable Development General Plans.** Attachment A also provides a conversion framework for those jurisdictions most ready to adopt. Several jurisdictions have voluntarily done so previously, in recognition that truly sustainable commitment is, indeed, its own reward. OPR's own guidelines [Chapter Two] provide California cities and counties with an excellent primer for embracing Sustainable General Plans.

3. **Endorse a place-based, project-specific metric that substantially reduces GHG emissions.** This means *all* subdivisions statewide. Attachment B includes performance thresholds for renewable resource

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energy, water conservation and wastewater re-use, public/private funding of transit options, walkable and bicycle friendly mixed use neighborhoods, integration of affordable workforce housing with market rate, green building standards, conservation of environmentally important areas, and the preservation of prime farm land and farm land of statewide importance.

4. **Stress the importance of supporting local economies.** Urban *and* suburban communities that support locally owned agriculture, energy, education, housing, and transportation purveyors can dramatically reduce GHG emissions. Not only through overcoming auto-centric behavior, but with reducing the excessive transportation emissions associated with importing food and electricity. We must also get away from sprawling schools, the multiple-county commute, and waiting for the state to properly fund transit. A.B. 32 provides the vehicle for greening not just our cities but our suburbs as well.

California's citizens are looking to us for meaningful reform in land use development. This recessionary economy is an opportune time to address public disaffection with the negative consequences of Euclidian zoning, economic externalities resulting from subsidized sprawl, and erosion in communal quality of life. It will take courage and patience to unravel the tragically common knots we have tied ourselves in. I ask this esteemed committee to reach beyond the narrow, specialized purview set for you. Please think systemically about what sustainable communities will need to look like in our quest to deliver a 22nd century to our children for which we need not apologize.

Thanks for your consideration.

Sincerely,

Curt Johansen
Executive Vice President

Attachment A

Recommendations for Assembly Bill 32: A Proposal for Sustainable Land Use in California

By: Curt Johansen
July 7, 2008

Land use in California for decades has followed the path of least resistance, which has resulted in sprawling single-use development that causes longer commutes, congestion, air pollution, shrinking farmland inventories and exacerbates the overwhelming demands on local government budgets. Sprawling land use is currently recognized as being the most challenging dimension of transportation-related greenhouse gas emissions which, when including oil refining and drilling emissions, represent almost 50% of all greenhouse gas emissions in California. With the ambitious goals set under AB32 and Executive Order S-3-05 to reduce greenhouse gases, a concerted effort must be made to organize the various interest groups and find solutions that will result in better land use and dramatically lower vehicle miles travelled (VMT).

This proposal attempts to suggest two complementary solutions to California's current land use dilemma. The first involves tailoring the California Environmental Quality Act to better suit our collective land use vision and a second that aims to implement sustainable development statewide as specified in the Governor's Office of Planning and Research Guidelines for the General Plan process. It is this author's hope that these proposals will be considered and acted on seriously by a non-partisan commission consisting of local government representatives, regional planning body representatives, real estate developers, environmentalists and other land use experts. Ultimately, important land use legislation that levels the playing field for sustainable development while leaving land use decisions in the hands of local elected officials must be enacted to fully deliver upon the promise and logical necessity of AB 32.

Proposal Solution No. 1: New "Urban" and "Suburban/Rural" CEQA Categories

California needs to streamline its land use decision-making process so as to 'greenlight' sustainable development projects that result in lower VMT and 'redlight' sprawling suburban development projects that exacerbate congestion, air pollution, and municipal fiscal challenges. By tightening up CEQA requirements for sustainable development, expensive land entitlement challenges to Environmental Impact Report certifications by special interest groups can better be avoided, thus facilitating visionary, forward-looking, transit-oriented infill projects which, under the current system, are often the ones that experience the costliest delays.

The proposed CEQA amendment will divide future sustainable development entitlements into two distinct categories for cities and counties that employ sustainable principles in their General Plans. The first category would be an "Urban Environmental Impact Report" which would be required for *"all land use development meeting minimum mixed use density requirements that occur within existing city limits (not requiring annexation), and land not comprised of any State-mapped prime farmland and land that is not currently zoned for agriculture."* Minimum density requirements can vary from city to city, but a minimum State standard of 15 residential dwelling units per acre should be used as a qualifier for the "Urban" category when housing is included in the project. The second category would be a "Suburban/Rural Environmental Impact Report," which would be required for all other land use projects not meeting the above Urban standard. Specific implementation policies can and should be defined by each city and county as they must retain broad discretion where land use entitlements are concerned.

A sub-category of an "Urban Environmental Impact Report" would then be created within CEQA for an Urban "Fully Qualifying Project" (FQP). This will facilitate streamlined environmental review and increased protection from referendum challenge for high-quality sustainable projects. An FQP will be one that fully mitigates all of its environmental impacts to insignificance. This can be accomplished through public/private partnering including green infrastructure technologies and design expertise. As CEQA time, money, and litigation risk represent a prime and insurmountable cost obstacle for high quality, transit-oriented projects, offering an FQP option for developers and cities will shift more opportunities for investment to infill projects. The following guidelines are suggested for an Urban FQP:

i. *Mixing Uses Efficiently* - The FQP uses a Specific Plan approach to mixing differing land uses (residential, office, retail, hospitality, etc. – vertically or horizontally) within a project and parameters should be set for ratios that prevent token uses added to a project.

ii. *Integrating Mixed Incomes* - The FQP integrates a locally reasonable percentage of affordable housing with market rate units for qualified "moderate income" residents (80% - 120% of MHI). In-lieu fees should not be permitted for such inclusionary units.

iii. *Public Transit Component and Parking* - The FQP is within a 10 minute convenient walk of public transit or provides its own shuttle/circulator bus service to connect to public transit in an efficient, cost-effective, and safe manner, irrevocably funded by the private end-users of the project. Parking limits are maximums (not, as currently, minimums), and include shared, timed on-street parking for all street level use (with angled parking, street

narrowing, traffic calming, etc.) and structured above or below ground parking for all other uses. No surface parking lots are allowed. [1]

iv. *Community Outreach* - The FQP is only eligible for entitlement following an extensive community outreach process, including monthly public forums.

v. *Green Building* - The FQP attains LEED (Leadership in Energy and Environmental Design) Silver certification or higher measurement on all constructed facilities.

For cities and counties choosing to amend their General Plans to promote sustainable development under this program, more stringent suburban/rural development standards will apply. A "Suburban/Rural" designated EIR land use application shall not be eligible for a CEQA streamlining process or greater protection from referendum. "Suburban/Rural" projects will be subject to all of the above FQP requirements plus the following additional CEQA requirement:

> *Community Supported Agriculture on Prime Farmland* - Sustainable development includes localizing food production through Community Supported Agriculture (CSA) when prime or unique farmland or farmland of statewide importance is involved (as mapped by the California Department of Conservation). This would occur at a ratio not-to-exceed 25 new project households per new project agricultural acre preserved, permanently supported by a working CSA tied to project landowners and potentially by surrounding bioregional consumers. At least 50% of any "Suburban/Rural" classification project would result in open space, agriculture, or park uses. In all prime, statewide importance, and unique farmland projects, a minimum of 20% of the land set aside for open space, parks, and agriculture must be reserved through covenants in perpetuity and operated for local agricultural purposes. By way of example for prime farmland projects, on a project of 100 acres in size a minimum of 10 acres would be set aside for farming purposes, 40 acres for parks and open spaces, and 250 households would be permitted if the city imposed a density of 7 units per acre (e.g., 36 acres of residential and 14 acres of commercial/civic uses for jobs balance). CSA's would then be required to perform ecosystem services that would result in lowered infrastructure costs for community residents.

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[1] This should have the dual benefit of increasing attractive alternatives to the automobile (and reducing parking needs) while supplementing transit ridership because the private sector is paying for the connecting private transit. The cost to the end-user is not necessarily higher because savings in reduced parking structures can be passed along. As our energy costs now become adjusted for the reality of increased demand, the scarcity of supply and escalating costs of production, public transit costs must continue to look more appealing to commuters. All projects should also include an electric car-share program for its residents and commercial workers and prioritize pedestrian and bicycle means of travel.

Proposal Solution No. 2: City and County Sustainable Development General Plans

The equally important complementary action to be taken in conjunction with the above mentioned CEQA amendment is support from the State of California to cities and counties that update their General Plans and ancillary planning policies to encourage sustainable development. This will be necessary to proceed with sustainable public infrastructure development, as well as to prepare cities and counties for the CEQA incentives that will be offered for all FQP projects.

California City and County General Plans follow Office of Planning and Research (OPR) Guidelines provided to municipalities. The 2004 Guidelines currently include an entire chapter on sustainable development and environmental justice (Chapter Two). If Sustainable Development were to become an "Incentivized Goals and Objectives" option for cities and counties as an amendment to their current General Plans, through direct financial or other material support from the State, any developer seeking to pursue an unsustainable conventional project would be resigned to seek out fewer and fewer jurisdictions during the coming decade, specifically those that take longer to amend their General Plans. In time, hopefully, options for unsustainable development would be few.

The cost of State reimbursements to cities and counties that choose to pursue sustainable development might be capped at $1.0 million per city and county or the equivalent in other material incentives. Commencing in 2010, for example, only 50 cities/counties will be allowed to convert to a Sustainable General Plan annually, creating a sense of urgency for those cities ready to make application. Forward-thinking cities and counties understand that businesses bringing well-paying jobs already look for areas that have a diversity of housing, place-based communities, and higher quality of life indicators for their workers. In other words, areas that embrace sustainable development will benefit from the heightened interest levels of 21st century business leaders and the companies they manage. Other forms of non-cash incentives can also be proposed by State budget officials to provide equally helpful incentives to cities and counties.

By creating General Plan goals and policies that support sustainable development, the net savings benefit to California taxpayers over a 10-year span (to require all cities and counties to apply) will be exponentially greater in the form of reduced costs for everything from pollution clean-up to reductions in roadway and levee repairs to healthier adults and children and less highway congestion, air pollution and greenhouse gas emissions. A cost-benefit analysis will confirm these assumptions. These solutions, or even a close variation thereof, will result in the gradual conversion of highway commercial developers into traditional Main Street developers and tract production home builders and office park developers into sustainable, mixed use,

transit-oriented developers. We can still have 50% of our housing needs met with suburban growth, but it must become sustainable.

The Governor's Non-Partisan Commission on Sustainable Land Use

Currently, land use decision-making in California is in the hands of real estate developers and local governments, with input from regional governments and special interests via CEQA-mandated EIRs. Any of the proposed modifications outlined above to CEQA or to OPR guidelines would require the upfront support of a broad coalition of real estate developers, local government officials, regional government representatives, environmental groups, academics in the area of land use and transportation planning, and other land use experts. While such a coalition may be precedent-setting, already coalitions involving many of these groups have been created. Environmentalists are seeing the need for revisions to CEQA; economic developers see the need for more sustainable development; and an overwhelming majority of academic experts believe that our current exacerbation of VMT through Euclidian land use practice has the potential to become catastrophic. Reducing VMT includes another quality-of-life benefit: it provides more time for family members and friends to spend together, something California needs to reinforce the social contract with its citizens.

The one area where the California Air Resources Board has yet to fully realize the potential for significant greenhouse gas reductions is land use. With the aggressive goals set by Governor Schwarzenegger's Executive Order S-3-05 to reduce greenhouse gas emissions to 1990 levels by 2020 and then, in 2050, to reduce them to 80% below 1990s levels, land use and, thus, transportation patterns will have to change to realize these ambitious goals. Given that these goals have been set by the Governor's order, it seems appropriate that a non-partisan Commission on Sustainable Land Use be under the auspices of the Governor's office.

Attachment B

Place-based, project-specific thresholds for CEQA acceptance of GHG emissions reductions:

The project meets all of the below minimum performance standards, or includes equivalent mitigation measures, thus achieving a presumption of less than significant impacts related to climate change:

Construction

- Meets a GHG performance standard for construction and demolition waste achieving a minimum of 75% diversion of all C&D waste from the landfill.

Operations

- Meets an energy use performance standard defined as CEC's Tier II Energy Efficiency goal.

- Meets a water use performance standard defined as project design systems that achieve at least 30% greater potable water conservation than EPA standards, including provision for wastewater reclamation for all irrigation.

- Meets a waste performance standard defined as requiring separate composting and recycling bins in every detached residential unit and on every floor in all multi-family residential, mixed use, and all commercial structures and it includes community composting and recycling waste pick-up facilities.

- Meets a land use performance standard defined as: 1) mixing residential and commercial uses; 2) integrating of affordable workforce housing (80%-120% of MHI) within market rate units; 3) prioritizing walkable and bicycle friendly neighborhoods; 4) providing for a locally regulated range of transit options (e.g., shuttle/circulator bus and car sharing services, multi-modal transport centers with resource coordinators, bicycle sharing programs, universal transit passes, guaranteed ride-home and ride-matching services); and 5) preserving a minimum of 50% of

the developable acreage in open space, farmland and recreational use.

- All construction to achieve at least LEED Silver or equivalent building certification.

- Meets an agricultural performance standard that limits a project on prime and statewide importance, farmland [as mapped by the California Department of Conservation] to not greater than 75% of its net development acreage [i.e., a minimum of 25% of its development acreage must be conserved and set aside within covenants in perpetuity for Community Supported Agriculture and incorporate principles for sustainable agriculture].

COMMENT LOG DISPLAY

BELOW IS THE COMMENT YOU SELECTED TO DISPLAY.
COMMENT 5 FOR COMMENTS ON THE RTAC (SB375-RTAC-WS) - 1ST WORKSHOP.

First Name: Bob
Last Name: Johnston
Email Address: rajohnston@ucdavis.edu
Phone Number:
Affiliation:

Subject: Revised Version of Suggestions for Targets
Comment:

Please see attached powerpoint presentation.

Attachment: www.arb.ca.gov/lists/sb375-rtac-ws/20-johnston.rtac_talk.09.3.ppt

Original File Name: Johnston.RTAC talk.09.3.ppt

Date and Time Comment Was Submitted: 2009-03-26 13:56:15

If you have any questions or comments please contact Office of the Ombudsman at (916) 327-1266.

Board Comments Home

The Board is one of six boards, departments, and offices under
the umbrella of the California Environmental Protection Agency.
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Setting GHG-Reduction Targets, 2010-2012

Robert A. Johnston
Emeritus Professor
Dept. of Environmental Science & Policy
University of California, Davis

PROPOSED
Presentation to California Air Resources Board
Regional Targets Advisory Committee

Version 3 (3/26/09)

Suggested Key Question 1 (RTAC 1/29/09)

- Key factors influencing VMT.
  - Land use density
  - Transit coverage and frequency
  - Parking costs and availability
  - Fuel costs
  - Land use mix
  - Walkability
  - Bikeability
  - [Holding HH income and size constant]
- All controlled by local goverments, except fuel taxes
- Ignoring through trips by heavy trucks and cars

RTAC Q. 2: Factors Local Gov't Can't Control

- Staff lists "Consumer housing preferences" as beyond local control. This is not correct.
  - Housing preferences are strongly affected by availability and cost of various housing types
  - Availability and cost are strongly affected by local government planning and zoning and fee structures
  - Charging sprawl its full societal cost would raise fees a lot
  - HHs and firms both locate farther from the CBD than is efficient (lowest-cost) for a region
  - Edge commercial parks are subsidized by the public and by other firms
  - Edge and rural residential units are subsidized re. roads, private services, floods, fires, habitats, etc.
  - Compact growth is more efficient, so improves economic growth

RTAC Q. 3: Modeling Tools, Now & Soon

- Four large MPOs developing economic/land use models
  - SACOG and SANDAG may be ready in 2010
  - SCAG and ABAG may be ready in 2012
  - Caltrans Statewide model will be ready in 2010 (PECAS)
  - These models will give costs for, & economic impacts of, GHG policies
- Four lg. MPOs doing household activity-based travel models
  - more accurate re. time of travel, mode choice, and effects of land use density and mix on mode choice and trip length
  - can evaluate pricing of cars by time of day and area
- CTC Guidelines for Modeling Climate Change Policies
  - OK for now. MPOs are making improvements
  - Small MPOs need funding

Modeling Tools (2)

- Medium-sized MPOs all doing simple GIS-based land use models (UPlan)
  - All will be running in late 2009
  - UPlan can be run with a county or multi-county travel model
  - No economics, but gives land use projections, based on policy rules
- These MPOs are adding mode choice steps to their travel models
  - Most are doing this. Done by 2010?
  - Also, need to make travel models sensitive to land use variables
  - Can use the 4D's models to factor VMT, to account for missing variables (walkability/bikeability, TODs, transit corridors)
- Travel models give GHGs in emissions model (EMFAC2007)

RTAC Q. 4: Inter-County Trips

- Should include car/van/light truck trips across MPO borders
- Good data on commuting trips, but not others
  - The Statewide land use and travel model will project goods movements across county lines (van, light truck, heavy truck)
- Exclude through (X-X) trips
  - Mostly not influenced by MPOs and local governments
  - State Travel Model will be fixed up in late 2010
  - Should be addressed with Statewide policies re. freight
- Interregional (I-X and X-I) trips
  - Need to count them
  - Each MPO should count them at 50%, so share responsibility

RTAC Q. 5: Metric for Regional Goals

- Should be per capita, to not penalize fast-growth counties
- VMT/[pop. + (0.3 x empl.)]
  - This also accounts for employment in the jurisdiction
  - Worktrips are about 30% of household VMT
- The VMT baseline issue
  - Percent reduction from Year 2012, when targets take effect
  - Can compare across all counties and MPOs, over time
  - Impossible to model the Future Year Trend, due to so many external policies (Pavley, AB32 cap-and-trade and/or carbon tax)
  - Need two years of odometer data and fuel sales data

RTAC Q. 6: How Evaluate Policies?

- ARB wants "most-ambitious targets"
  - We need to view compliance over time, as a Policy Pathway
  - Targets should evolve, as data and models improve
- First, need better data
  - RTAC and ARB need to ask for legislation requiring odometer readings at annual registration for all vehicles (including heavy trucks)
  - RTAC and ARB also need to ask Franchise Tax Bd. for retail fuel sales tax data, by street address of enterprise, by type of fuel
- Need the odometer and fuels sale data to help to calibrate MPO travel models to improve their VMT projections
  - Will take until 2012 to get data for 2 years and calibrate travel models

Evaluate Policies (2)

- Re. Policy Outputs, adopt VMT-reduction targets for regions
  - 2% reduction in Per Capita VMT, VMT/[pop. + (0.3 x empl.)], per year of modeling ("Reasonable Rate of Progress" approach)
    - i.e., 10% in five years, 20% in ten years. VMT per capita is slightly falling in California now, so these strong reduction goals are feasible
    - we want MPOs to have to adopt strong APS's, to get CEQA relief
  - This Rate of Progress objective can be made into GHG Reduction Targets for each MPO for 2020 and 2035, using assumed rates of growth of pop. and empl. in each MPO
  - The ARB should revise the VMT-reduction targets in 2015, when we have better data and models. All MPO VMT is modeled from MPO road link volumes. Inaccurate. Should be calibrated to odometer readings and gasoline fuel sales.
  - Require MPOs to report VMT/[pop. x (0.3 empl.)], so ARB can evaluate the accuracy of this modeling, over time.

Evaluate Policies (3)

- Urge a minimum of 10 points from this list of Policy Inputs
  - Spend 90% of all capital funds on transit, walk, and bike (5)
  - Spend 75% of all capital funds on transit, walk, and bike (3)
  - Urban growth boundaries (5)
  - ISR and other fees for sprawl (2)
  - Major infill incentives in TODs and transit corridors (2)
  - Upzone densities in TODs and transit corridors to >3X (5)
  - Upzone densities in TODs and transit corridors to >2X (2)
  - Strong plan to increase walkability and bikeability (2)
  - Cashout of all workplace parking (5)
  - PAYD insurance (2)
  - Higher county fuel taxes (2)
  - County sales or other tax for transit operation (2)

Evaluate Policies (4)

- Need transit first, then land use, and then pricing. So, pricing should be increased slowly and steadily, for 30-50 years.
  - Alternative modes, access to them, incentive to use alternatives

- Encourage the CTC to give incentives for more policy points
  - For 15 points, extra capital funding for transit, walk, and bike
  - For 20 points ditto, plus funding for transit operation
  - For 25 points ditto ditto, plus funds for redevelopment

- Will require substantial funding from
  - CTC funds
  - Caltrans new discretionary funds
  - USDOT funds
  - Cap-and-Trade fees/carbon tax

Summary

- We suggest a method for fairly determining GHG Reduction Targets for each MPO, based on growth in pop. and empl.
- The method relies on a standard Reasonable Rate of Progress for reductions, from a base year of 2012
- The RTAC should also recommend policies to the MPOs, based on past urban modeling in the U.S. and E.C.
- The Legislature will have to incentivize MPOs to adopt these policies, with transportation and redevelopment funding
- The RTAC should recommend to the ARB that they ask the Legislature to require odometer and fuel sales data
- The ARB should revise the targets in 2015

Speaker Bios

Randall Lewis is Executive Vice President and a Principal of Lewis Operating Corp., a member of the Lewis Group of Companies. Lewis Group is one of the nation's largest privately held real estate organizations focused on developing shopping centers, planned communities and multifamily projects throughout California and Nevada. The Lewis Group of Companies is currently involved in developing more than a dozen master planned communities that will include over 60,000 homes at build out.

Randall was named in the Los Angeles Times 2006 "West 100" list as one of the top 100 influential people in Southern California. He has also received the California Business Properties Association Champion of the Industry Award and has been inducted into the California Building Industry Association Hall of Fame. Randall is a trustee of the Urban Land Institute, as well as a Governor of the Urban Land Institute Foundation. He serves on several executive boards, including the USC School of Policy, Planning and Development, the UCLA School of Public Affairs, the Loma Linda University Medical Center Orthopedic and Rehabilitation Institute Advisor Council and also serves as the Co-Chair for the San Bernardino County Alliance for Education and is a member of the Southern California Leadership Council. Randall and the company devote considerable resources to enhancing the quality of life in communities where they do business. They are pioneers in programs promoting healthy communities, learning communities, and sustainable communities.

Elizabeth Deakin

Elizabeth Deakin is a Professor of City and Regional Planning at UC Berkeley, past Director of the University of California Transportation Research Center, and is also an affiliated faculty member of the Energy and Resources Group and the Master of Urban Design group. She is co-director of the UC Berkeley Global Metropolitan Studies Initiative, which involves nearly 100 faculty members from 12 departments. Deakin's research focuses on transportation and land use policy and the environmental impacts of transportation. She has published over 100 articles, book chapters, and reports on topics ranging from environmental justice to transportation pricing to development exactions and impact fees. She currently is conducting a study benchmarking transit-oriented development and developing TOD guidelines for the Federal Transit Administration. Among her recently completed projects are the development of transit investment policy in for the Bay Area Rapid Transit (BART) District Board, a system plan for express bus services for the San Francisco Bay Area, and the development of a plan for revitalization of San Pablo Avenue from Oakland through El Cerrito, CA. Other recent studies investigate the efficacy and acceptability of transportation pricing strategies and the emissions reduction potential of transportation demand management measures.

Professor Deakin served as chair of the Congressionally-mandated National Academy of Sciences' Advisory Board on Surface Transportation-Environmental Research, which recommended a new transportation-environmental research program that was recently enacted into law. She has been active in a number of government posts including city and county transportation commissions and state advisory boards.

Professor Deakin holds degrees in transportation systems analysis and political science from MIT as well as a law degree from Boston College.

Reading Material

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April 3, 2009

To: Lezlie M. Kimura
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California Air Resources Board
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tel: 916 322 1504
fax: 916 322 3646
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From: Mark Schniepp

RE: Economic state of the State and the Outlook

I have attached some commentary and charts on the recent evidence and the economic outlook for California and it's principal regions.

Our forecasts are derived from our econometric models of California and the various regions within the state.

We can provide a more comprehensive report detailing the recent evidence and forecasts of employment, income, housing, and sales by region in California at a later date.

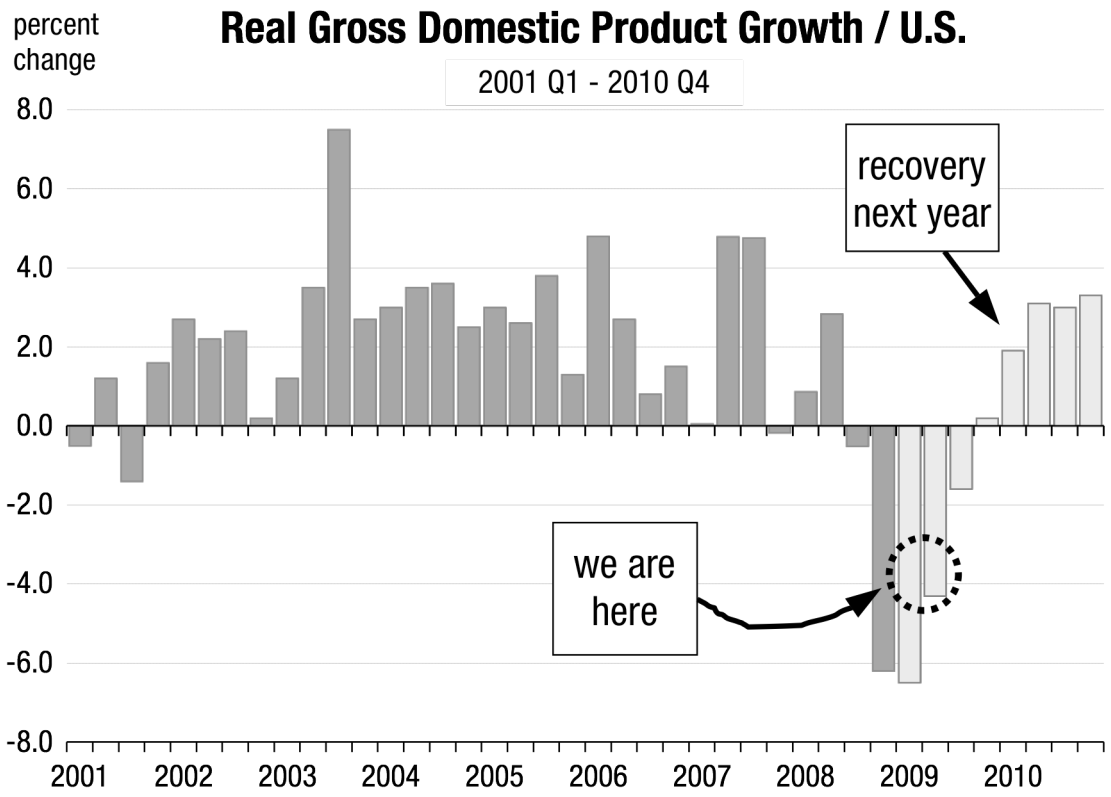
Our next Forecast Conference is in San Diego County with the UCLA Anderson Forecast on May 15, 2009. We also present forecast conferences in Orange County, the Santa Clarita Valley, the Antelope Valley, Santa Barbara County, Ventura County, and San Luis Obispo County.

The U.S. Economy

For the first 8 months of 2008, it was unclear just how much contraction in the economy was occurring because many sectors were still growing and GDP growth remained positive. The events of September and October of 2008 left the U.S. financial system in disarray.

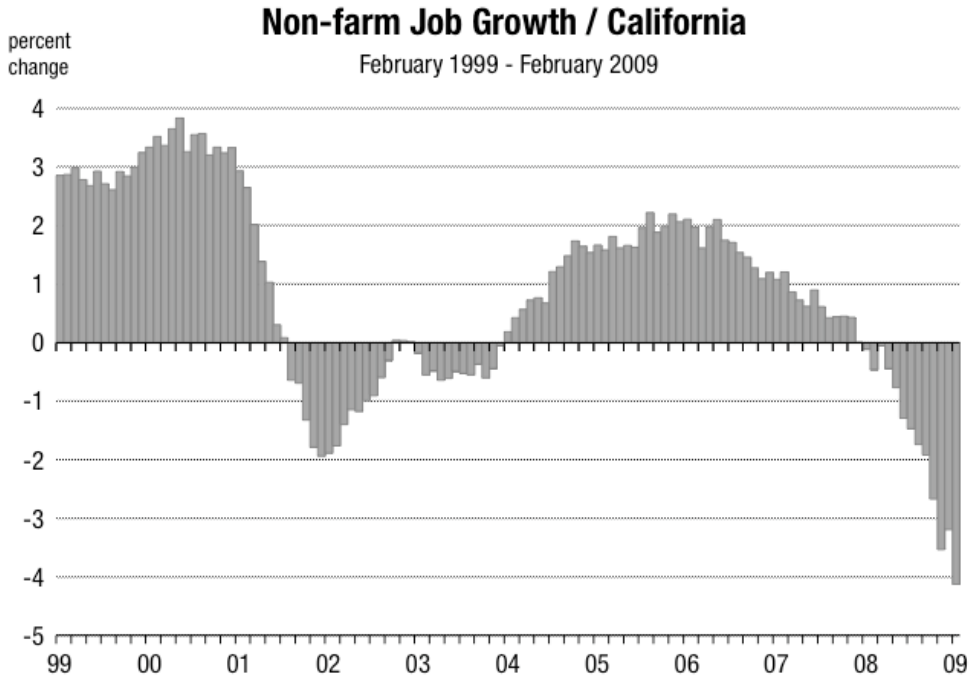
The massive government intervention to prevent a freeze up of the system changed the landscape dramatically. By November, Fannie Mae and Freddie Mac were in government receiverships, AIG was a ward, the Federal Reserve was the lender of last resort in the Commercial Paper market and the Treasury was an investor and part owner of banks across the nation. All of the major stock market indexes went into freefall. The Dow Jones Industrial Average ended calendar year 2008 with a net loss of 35 percent, the third largest one year decline on record.

GDP contracted at a 6.2 percent pace in the October-December 2008 quarter, validating the onset of a severe economic recession which was announced on December 1 to have started in January 2008. The first quarter 2009 report will be equally as grim. The consensus of economists believes the recession will last through the third quarter of 2009, with some positive growth in GDP by the fourth quarter. However, a more convincing recovery is predicted for mid-2010.



Forecast Summary for California

The downward momentum of the economy---in both the U.S. and California--as of March 2009 remains swift. Jobs losses are occurring at an unprecedented rate of decline. The unemployment rate has climbed to 10.9 percent in California.



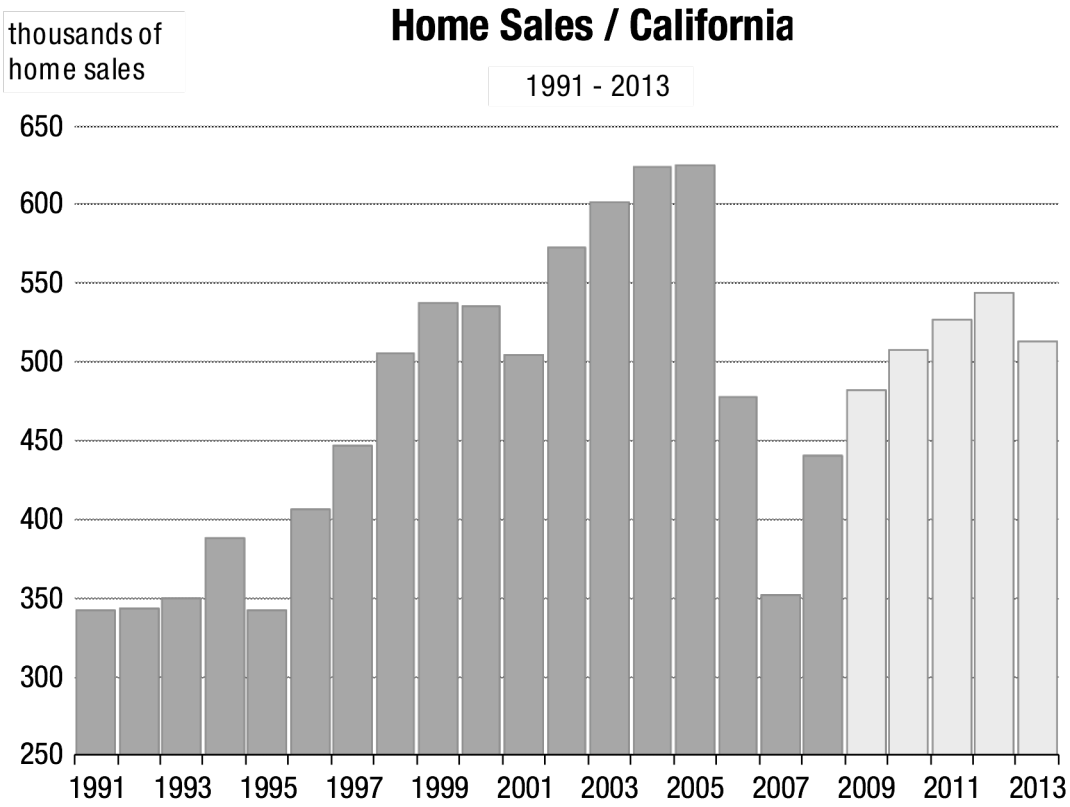
Federal government intervention that reduces the labor market collapse and creates new spending in the economy should help to break the current freefall. The Homeowner Affordability and Stability Act should positively affect the mortgage industry and lower mortgage rates would produce needed growth in conventional home sales and stability in selling values. We believe this will ultimately occur and lead to a general economic recovery–though tepid–sometime in the second half of the year.

The U.S. economy remains in recession through mid-summer of this year, and probably through September and into October. Growth returns in the 4th quarter of 2009 though you might not notice much progress at that time.

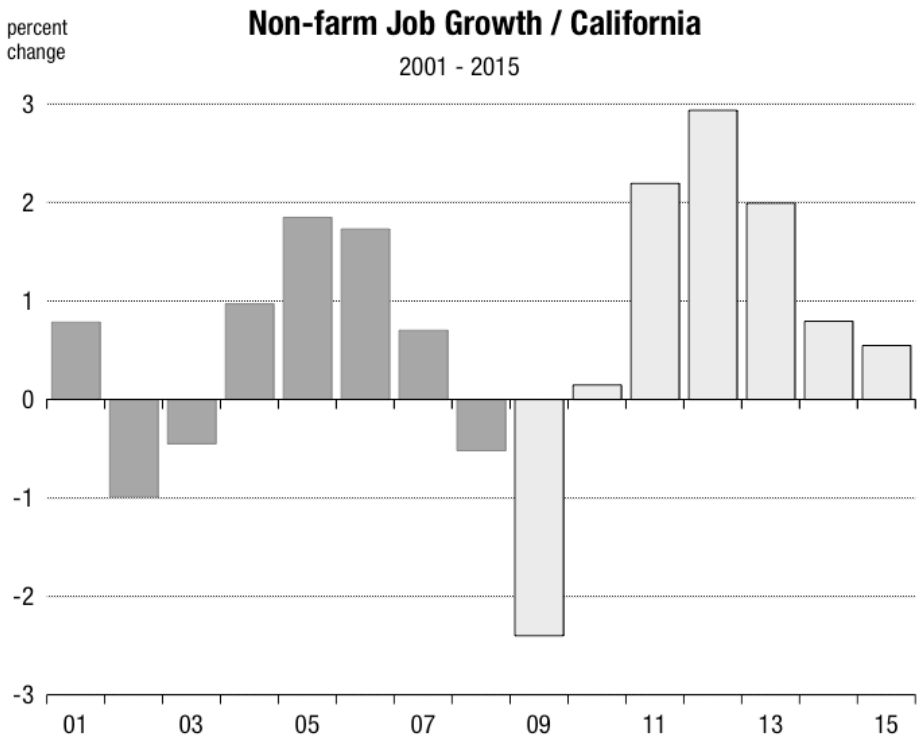
The economic environment in California will remain in recession for most of 2009. What will be noticeable is a rebound in conventional home sales, rather than distressed home sales that are occurring now. Furthermore, home prices will stabilize by summer and that may enable real estate related industries to begin to hire again.

The 2009 forecast does include a rebound in residential construction, with steadily improving demand for homes in 2010 and 2011. The recovery of new home production follows on the heels of a clear recovery in existing home sales, by mid-year. However, through at least the first

half of 2009, the economic recession will translate into a general idleness of workers, equipment, and industrial and office capacity.



Cost-cutting concerns will remain a key focus of firms, even as the economy begins to stabilize later this year. Consequently, labor markets will continue to contract, in the professional services, government, and the financial sector. This will slacken the demand for office space in both the north and south counties. Office building vacancies are forecast to increase through most of the year.



The general outlook for the California economy has job growth accelerating after 2010 and more housing construction after 2009. Home sales rebound sharply this year, on the strength of gradually improving real estate sentiment, principally during the 2nd half of 2009.

The bay area outperforms most areas of the state. The problem areas remain Orange County, the Inland Empire, the Central Valley and the Sacramento Valley.

The California budget crisis will impact public sector employment in the 2nd half of 2009. Financial sector employment will be stabilizing at that time. Professional services employment continues to decline through 2009 and into 2010. Construction employment rises in 2010 as more new housing is started.

The coastal economies of California will weather the current downturn better than inland California. This is due in large part to the diversity of these economies that include large health and education sectors, larger visitor-serving infrastructure, the presence of technology industries, and the absence of large construction or manufacturing sectors which currently are contracting the most.

Forecast Risks

The risks to the forecast of a housing market rebound in the 2nd or 3rd quarters of 2009, and a more general economic rebound starting in the 4th quarter and continuing into 2010 include:

• The credit market thaw is slow. Federal financial sector bailout programs, including the 2nd phase of TARP, fail to produce meaningful lending activity in the nation's banking system. Mortgage rates and other lending rates remain high. Business and consumer investment opportunities are adversely impacted due to the unavailability and unaffordability of loans to finance day-to-day operations, car loans, student loans, and the refinancing of commercial buildings.

• The slowness of the credit market thaw exacerbates an already fragile economic environment globally. The decline in demand for American goods abroad causes export businesses to contract, producing additional layoffs and excess capacity.

• The economy produces greater than expected job loss because both bailout and stimulus programs prove to be ineffective over the next few months. This would lead directly to additional homeowner distress due to the loss of income and the inability to make mortgage payments.

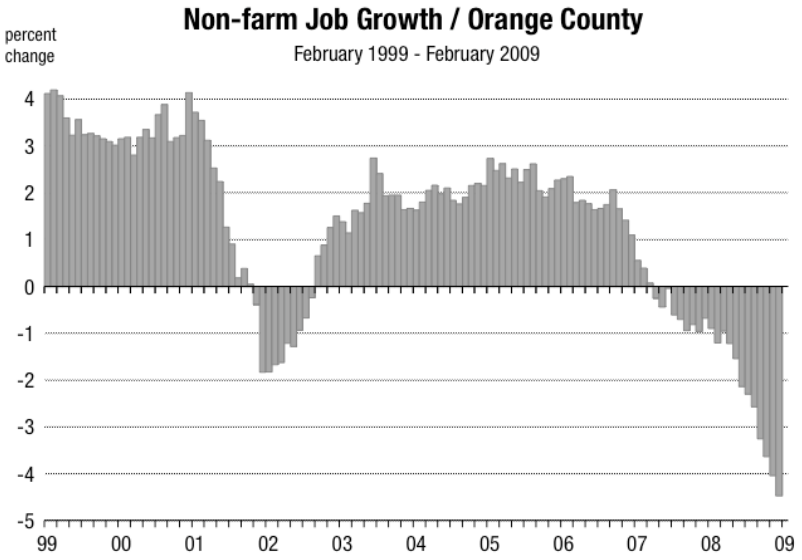
• More homeowner distress would spark a new round of defaults and ultimately foreclosures which would postpone the rebound in housing and the stabilization of selling values.

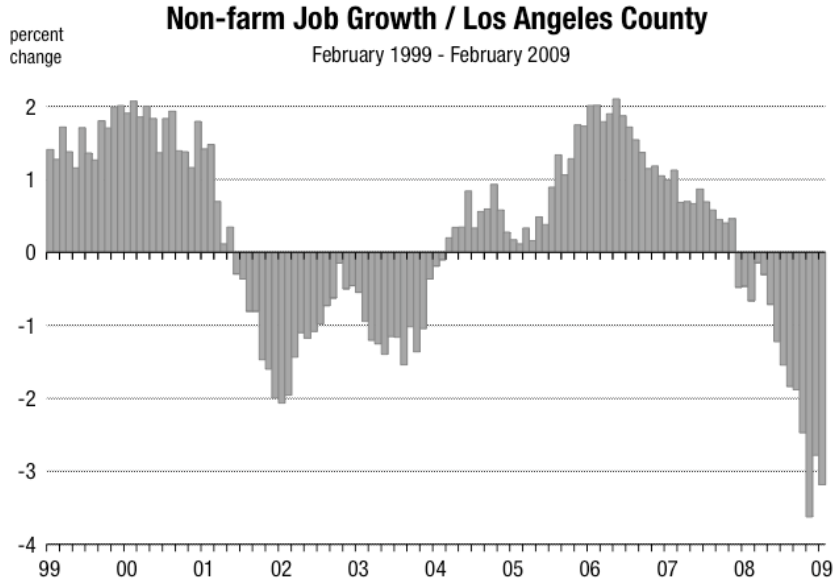
• The rebound in housing is delayed until labor markets stabilize, the credit crisis clearly shows signs of loosening up, and homeowner distress is clearly in decline again.

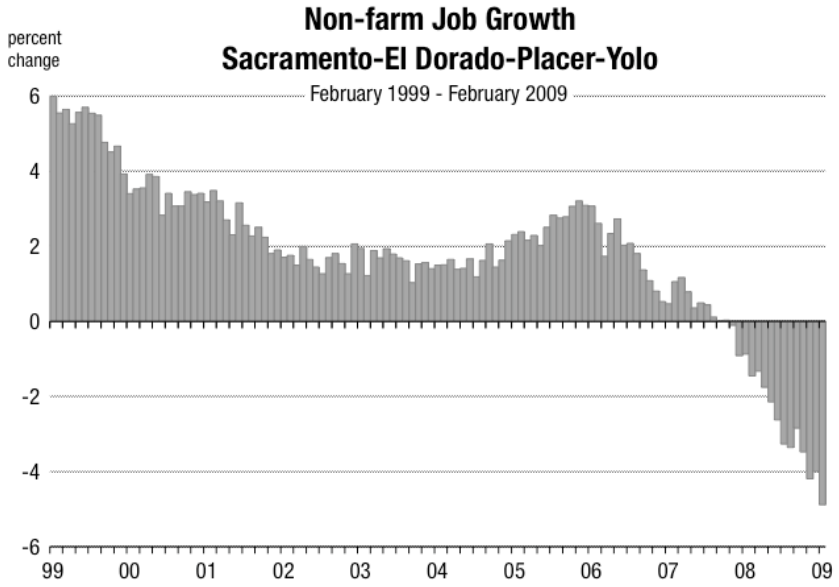
Recently, we have observed greater than expected contraction of the finance, construction, and manufacturing sectors. The retail sector is reeling from the sharp pullback of consumption by households. While the nation is currently in a recession with the rate of unemployment now at 8.1 percent and climbing, a serve contraction could extend beyond the third quarter of this year, especially if housing relapses. Otherwise, the consensus of forecasts has the economy growing in the 4th quarter.

The new Administration's economic stimulus plan to increase spending in the economy should do more to improve the psychology of the country than stimulus. And ultimately, the massive bailouts of the nation's banks will help to unclog the credit markets and promote more lending.

Recent Evidence for the Regions of California






Non-farm Job Growth
Sacramento-El Dorado-Placer-Yolo
percent change
February 1999 - February 2009
6
4
2
0
-2
-4
-6
99
00
01
02
03
04
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07
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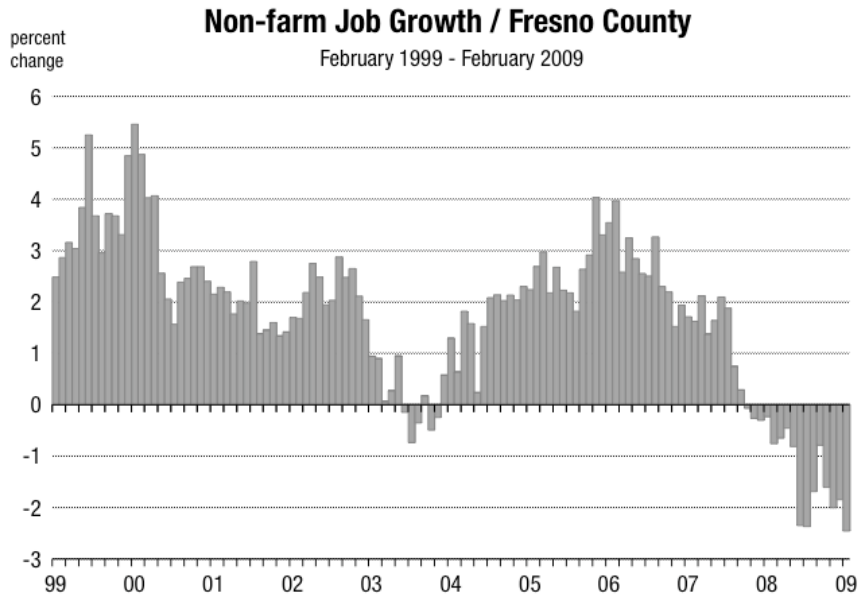
Non-farm Job Growth / Fresno County
percent change
February 1999 - February 2009
6
5
4
3
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1
0
-1
-2
-3
99
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01
02
03
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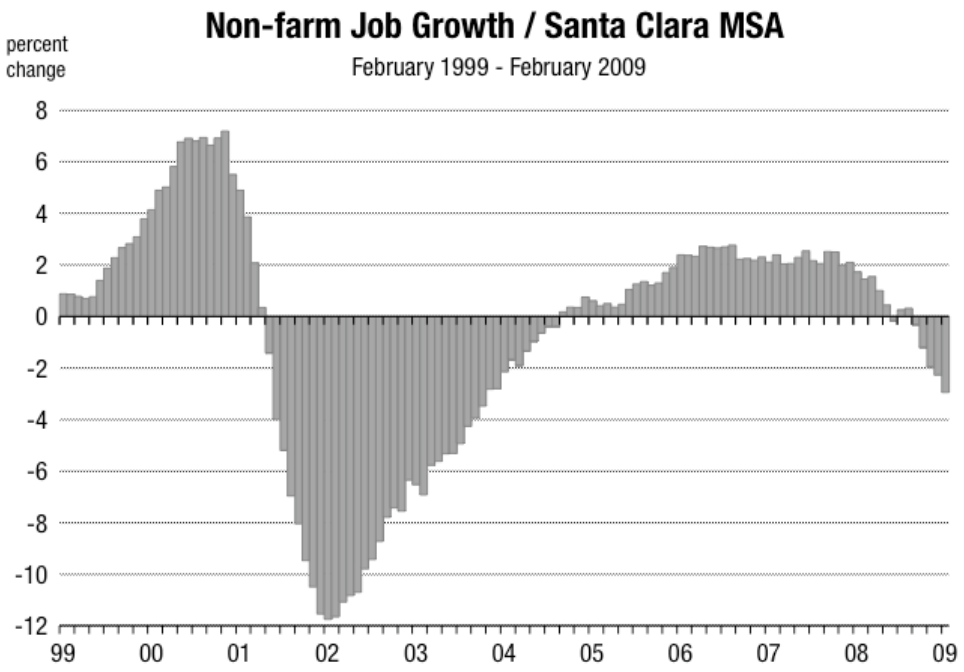
Non-farm Job Growth / Santa Clara MSA
February 1999 - February 2009
percent change
8
6
4
2
0
-2
-4
-6
-8
-10
-12
99
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02
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04
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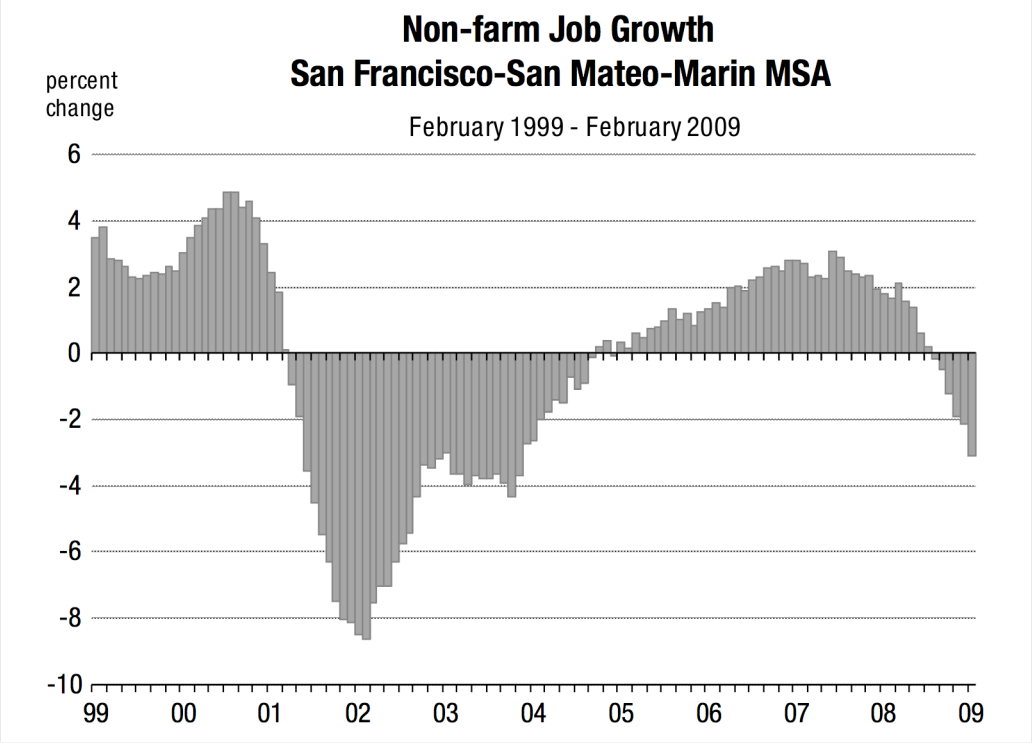
Non-farm Job Growth
San Francisco-San Mateo-Marin MSA
February 1999 - February 2009
percent change
6
4
2
0
-2
-4
-6
-8
-10
99
00
01
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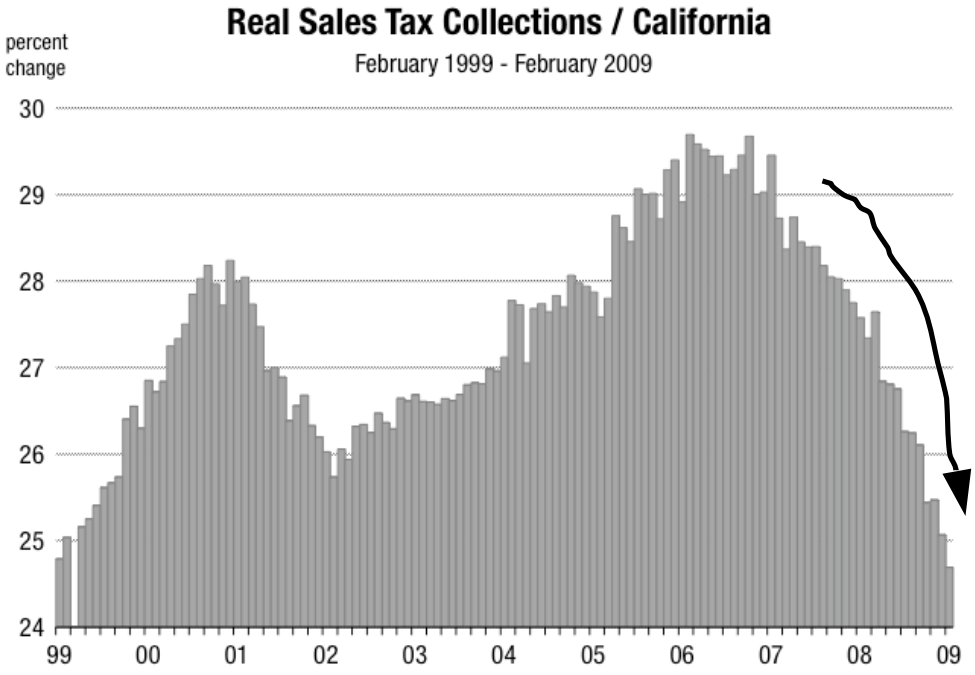
09

The epi-centers of job loss this year will be Orange County, LA County, the Inland Empire, and the Sacramento Valley. Regional economies where construction and manufacturing are a significant portion of the jobs base will suffer the most. In the case of Orange County, the principal job loss is associated with mortgage activity.

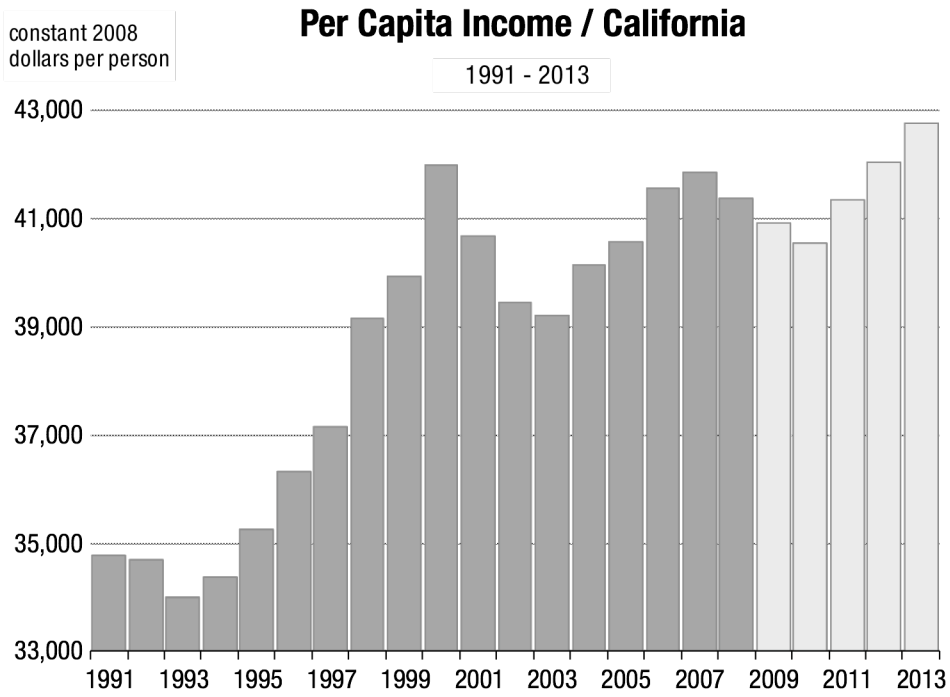
The declines in income and the financial panic that gripped the nation including California has resulted in a sharp pullback by consumers. The corresponding affect on retail goods and services spending was abrupt. Bankruptcies in the retail sector have been prolific. Retail store vacancy rates have soared. Sales tax receipts to the state are currently in a freefall, exacerbating the and this has brought a new level of attention to the budget problems in California.



The stock market is now stabilizing, having attained its low for the cycle on March 9, 2009. The heightened anxiety by consumers has already begun to moderate. Housing prices will begin to stabilize along the coast and inland areas of California between the summer of 2009 and early 2010. The horrific job reports will begin to fade this spring in the national economy. The credit market thaw will become more convincing as 2009 progresses and the panic that has gripped the national economy since last September will abate.

Less anxiety over the direction of the economy will enable consumers to spend again, albeit with less wealth and zeal this year and next.

Job growth will rebound sharply in the inland counties of California, beginning next year. Because the inventory overhang of unsold housing has been eliminated, as foreclosures decline and prices stabilize, building will begin again and the construction industry will be creating jobs in 2010.



Per capita income adjusted for inflation declines this year and next before rebounding in 2011 as more new jobs are created and the expansion gains strength.

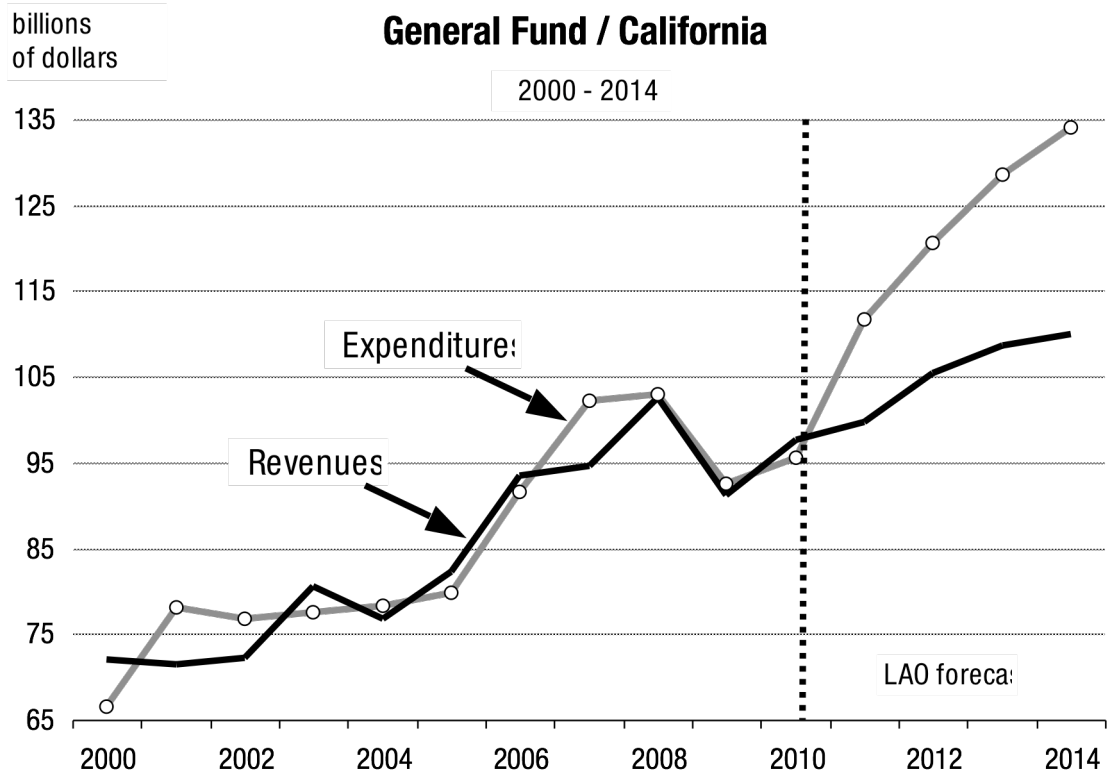
General Fund Forecast

The Legislative Analyst's Office forecasts continued trauma in the California budget over the next five years. Though revenues grow, expenditures will grow by a greater amount, potentially creating another $20 billion deficit by 2013-14.

Revenue growth lags expenditure growth due to a slowly recovery to personal income receipts and consumer spending, namely retail sales and the taxes they bring. The outlook for personal income and retail sales remains muted through 2009 and 2010, reversing in 2011. However, in 2011, the higher sales tax rate sunsets as do current spending constraints. This scenario without any further intervention (action) by the legislature, will produce growing deficits that will require new financing approaches.

As births in the state increase and job opportunities that bring accelerated levels of new migrants, more dollars for K-12 schools will be needed, along with healthcare and social services.

Unless a major overhaul of the budgetary process is performed in Sacramento, the outlook for state finances is grim, and California will face higher costs to borrow for the indefinite future.



There are annual operating shortfalls under the LAO March Forecast

Foreclosures

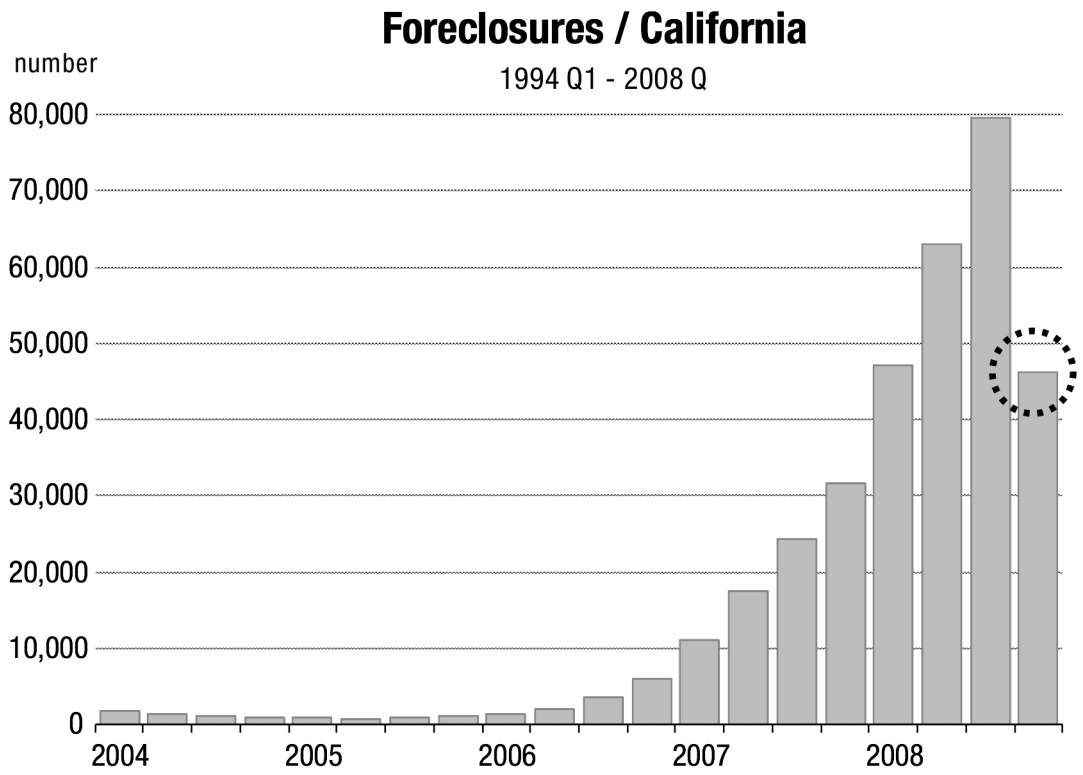
Foreclosures are beginning to abate throughout California, which is good news for the housing sector. Foreclosures peaked during the third quarter of 2008 and fell sharply in the fourth quarter.

While early evidence suggests that notices of default have rebounded in the first quarter of 2009, the extent of the upturn is limited.

The March rates of foreclosure by County have now sunk to the lowest levels since the early Summer of 2008. The turnaround will begin to have stability on home prices in the state, especially in the coastal markets and the Bay Area.

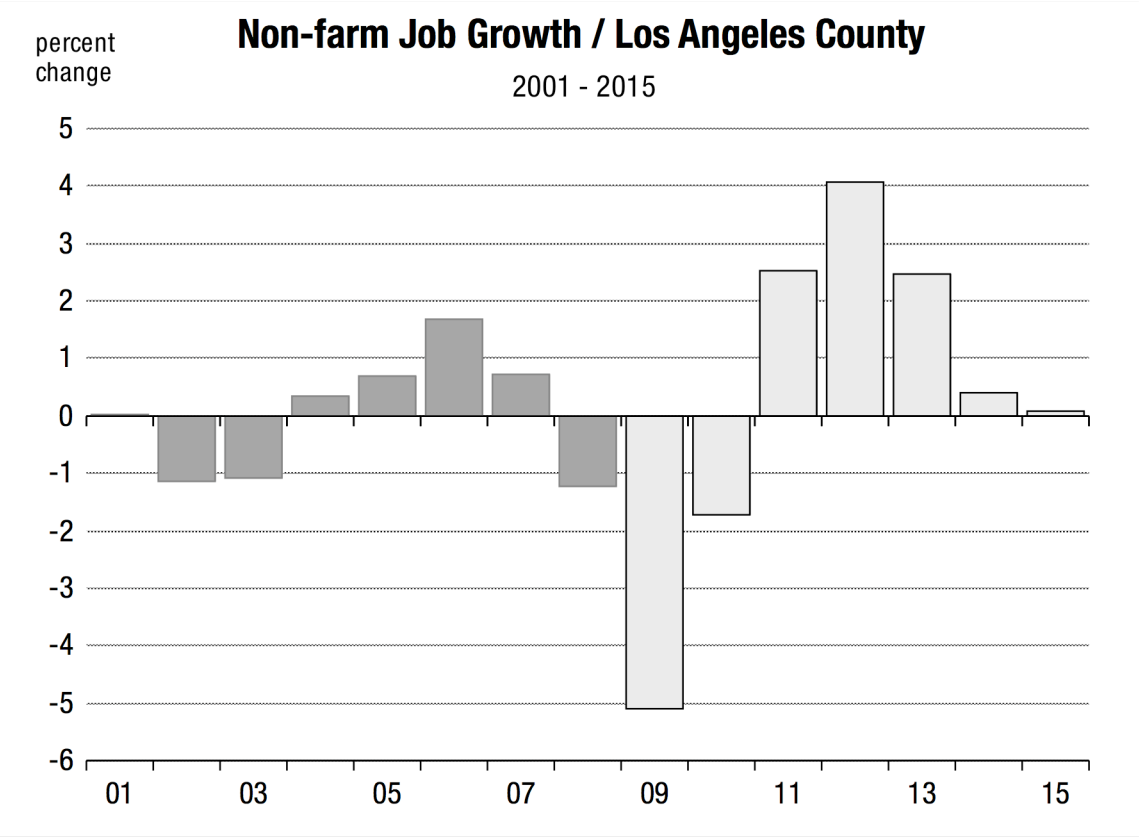
We believe that home prices will stabilize by late Spring and/or early Summer, and that a more conventional rebound in home sales will ensue.

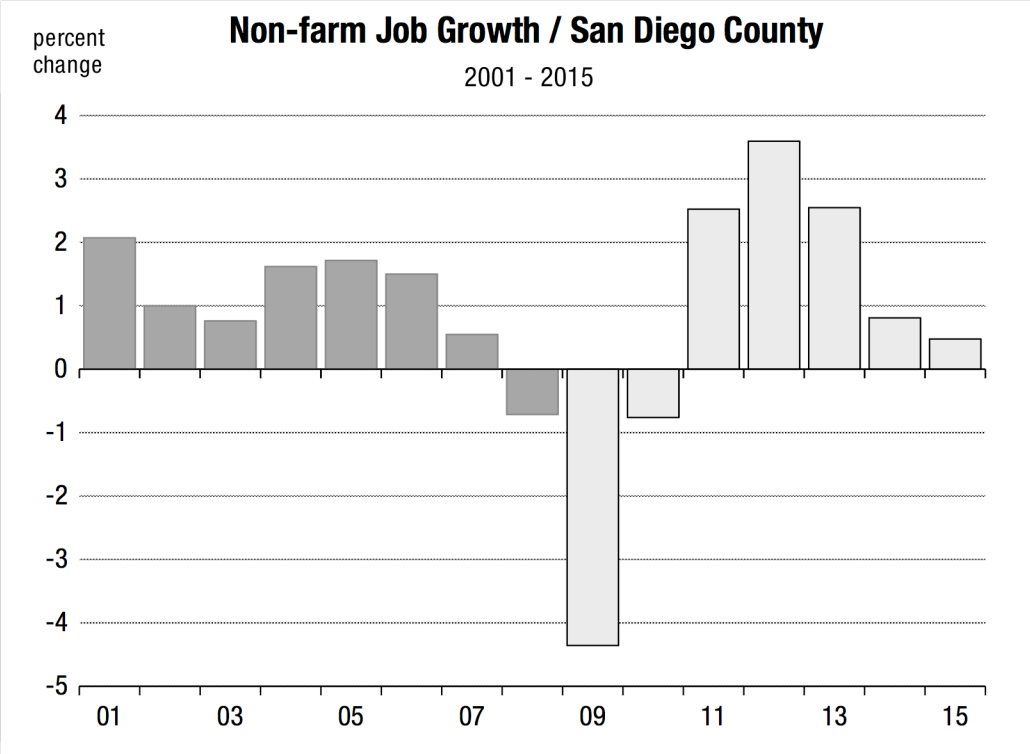
Home prices will begin rising in the coastal counties before the inland counties of California, though the increase in prices will not be pronounced.

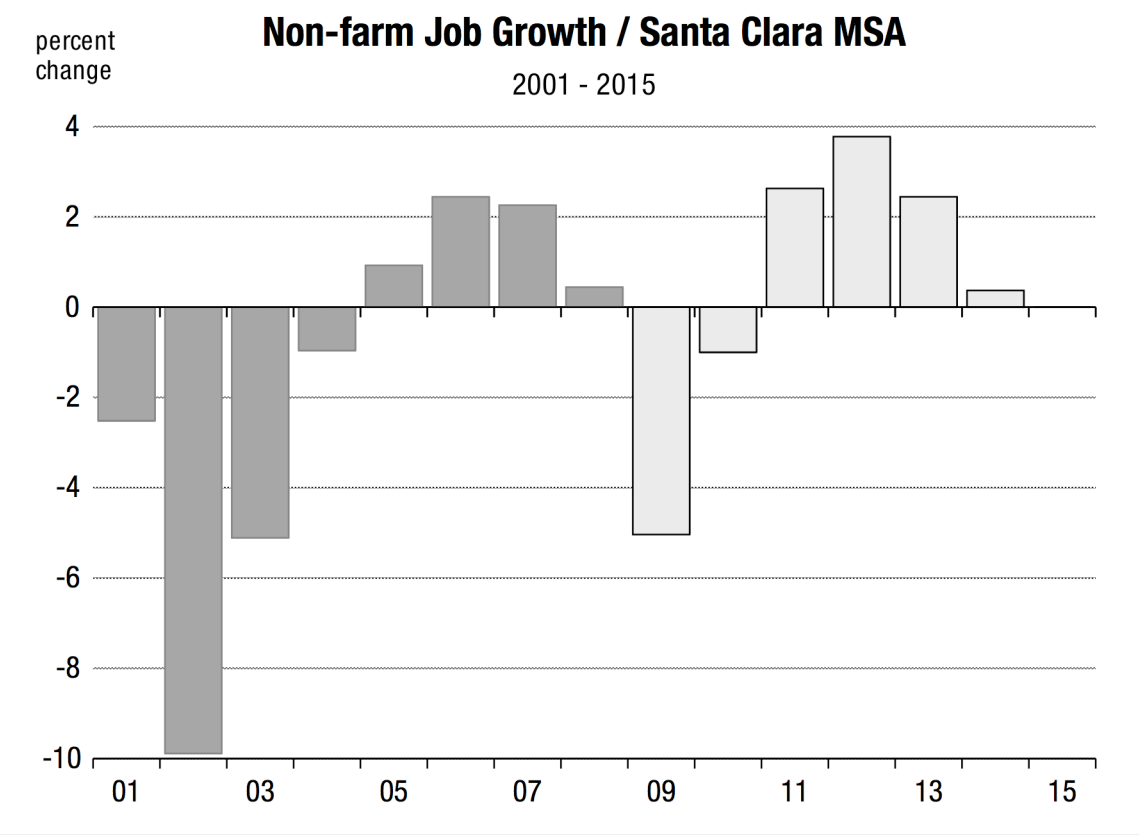


Rate of Foreclosures per 1,000 Homes					
Region	**August 2008**	**October 2008**	**December 2008**	**February 2009**	**March 2009**
Orange County	5.6	6.7	6.5	5.6	4.3
Los Angeles County	5.9	7.2	7.1	6.4	5.3
Sacramento County	15.5	18.3	17.4	16.4	13.1
Fresno County	9.1	11.2	11.2	10.7	8.8
Santa Clara County	4.6	6.1	6.4	6.2	5.3

The Forecast for Employment by principal region






Non-farm Job Growth / Santa Clara MSA
2001 - 2015
percent change
4
2
0
-2
-4
-6
-8
-10
01
03
05
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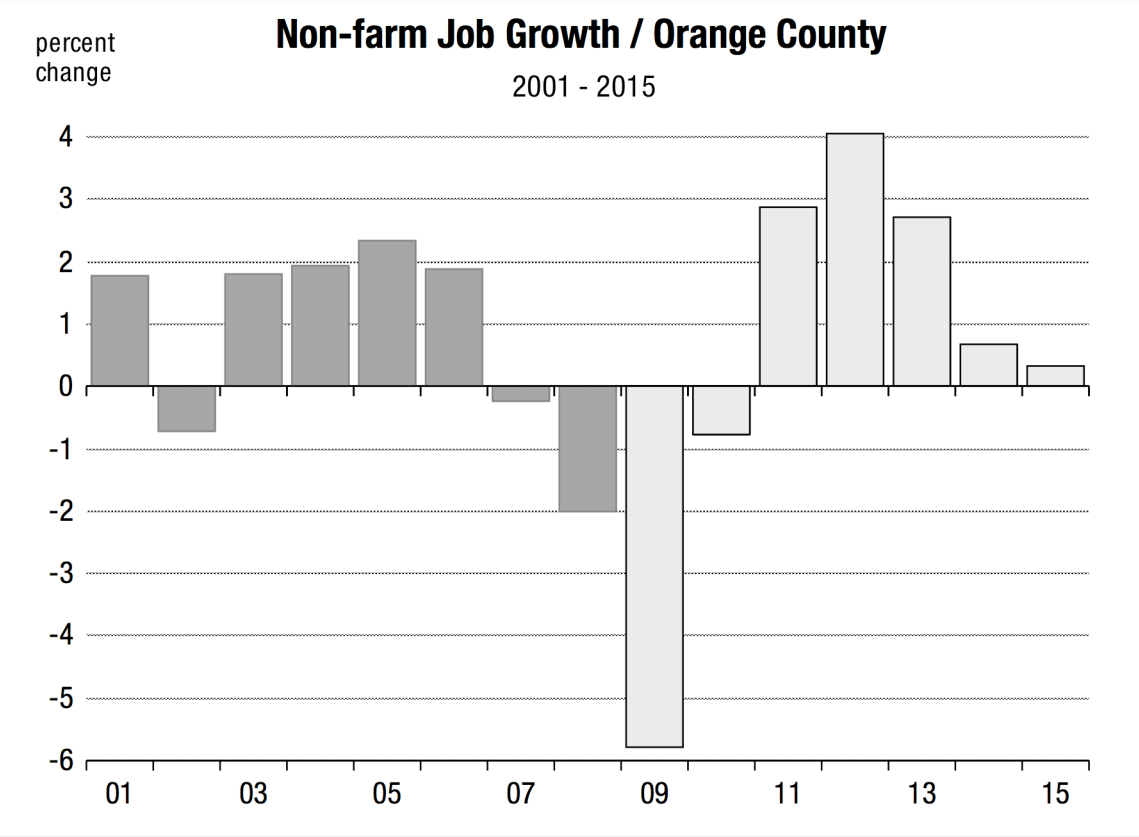
09
11
13
15


Non-farm Job Growth / Orange County
2001 - 2015
percent change
4
3
2
1
0
-1
-2
-3
-4
-5
-6
01
03
05
07
09
11
13
15

Preparers

The California Economic Forecast

www.californiaforecast.com

The California Economic Forecast is an economic consulting firm engaged in research and consulting support for business and public sector clients. The firm's experience includes economic analysis and forecasting for business, non-profits, cities, regional organizations, colleges and universities.

Dr. Mark Schniepp is the principal of the firm. Long associated with the UCSB Economic Forecast as the Director and Chief Economist, he is well known in California for his economic and forecasting analysis and commentary on regions of California.

Dr. Schniepp has served as the Senior Economic for the California State Controller's Office and is a consulting economist to the California Department of Transportation, and to the UCLA Anderson Forecast.

California Economic Forecast annually prepares a 58 county economic forecast for the California Department of Transportation and a 25 county economic forecast for Kaiser Permanente. The firm also develops real estate and economic forecasts for counties and sub-county regions that are regularly presented at public conferences throughout the year, including the Orange County Economic Outlook, produced with the UCLA Anderson Forecast, and the Ventura, and Northern Los Angeles Economic Outlook conferences sponsored by First American Title Company.

The firm has completed recent consulting projects for a variety of organizations, such as ExxonMobil, The Irvine Company, The California Association of Realtors, Shea Homes, Cal State Northridge, and The Southern California Association of Governments.

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Presentations

Potential Approaches to Target Setting

April 7, 2009

Air Resources Board

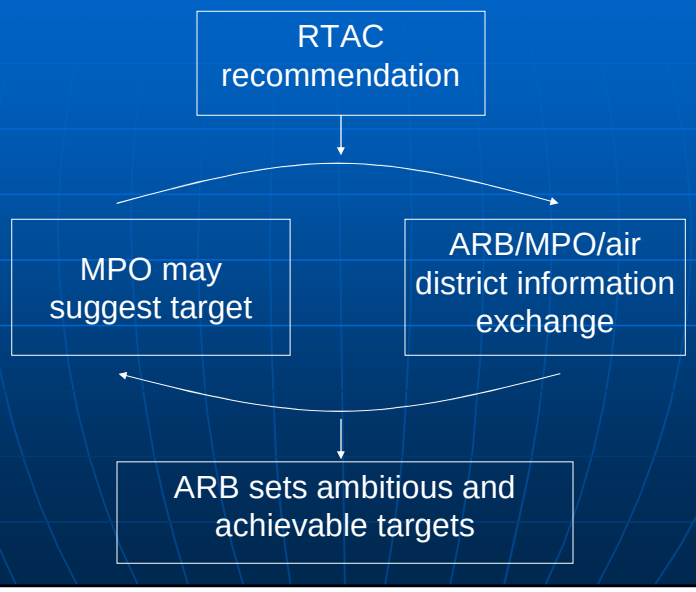
1

Statutory Requirements

- ARB will estimate the benefits of vehicle technology and low carbon fuels for both the setting and the meeting of targets
  Government Code § 65080(b)(2)(A)(v)
- Regional targets will be expressed in terms of greenhouse gas emission reductions…
  Government Code § 65080(b)(2)(A)(v)
- But targets must reflect underlying land use changes and improved transportation
  SB 375 § 1(c) & Government Code § 65080(b)(2)(B)

2

SB 375 Target-Setting Process



3

Potential Target-Setting Approach

- Build on existing regional Blueprint and RTP modeling process
- Factor in empirical data to ensure models adequately reflect full spectrum of possible strategies
- Compare to empirical studies to assess if both ambitious and achievable

4

Blueprint Process

- Provides multiple scenarios to compare the amount of change
- Greenhouse gases are one of multiple factors in the process
- Good cross-spectrum approach to regional planning and target-setting if goals are ambitious

5

Applying the Process

- Regions are at different points in the process
- Placeholder targets being used today
- Need to look at various blueprint scenarios and other data to identify ambitious and achievable targets
- Comparison to empirical studies needed to determine if scenarios provide maximum benefit

6

Target-Setting Metric

1. Should a target be expressed as a relative percent reduction or an absolute reduction?
2. Should a target be regional or per capita?
3. If emissions are unit based, than what type of unit? (per capita, per household, per driver)

7

Target-Setting Metric cont.

4. Should emission reductions be compared against current practice today or current practice projected into the future?

5. Should reduction targets focus on growth alone or on existing development plus growth?

8

Target-Setting Metric cont.

6. How should interregional trips be accounted for?
   - Assigned to trip origination
   - Assigned to trip destination
   - Split between trip origination and destination

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Agency Roles in Air Quality Emissions Modeling

- ARB (EMFAC)
  - Emissions estimates for SIPs and regulatory actions
- MPO/COG
  - Vehicle activity
  - Conformity analyses
- Caltrans
  - Statewide vehicle activity
  - Conformity analyses

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Air Quality Emissions Modeling --EMFAC--

- Vehicle fleet data from DMV records
- Emissions characteristics from laboratory and field testing
- VMT and speed estimates from transportation agencies
- Motor vehicle emissions "budget" links transportation plans with air quality plans

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