

# REPORT

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**DATE:** February 9, 2011

**TO:** P&P TAC

**FROM:** Simon Choi/Frank Wen, SCAG Staff  
Deborah Diep, Director, Center for Demographic Research, CSU, Fullerton

**SUBJECT:** Options to Incorporate 2010 Census data into the 2012 RTP Forecast

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## **Recommendation Action:**

Request that the P&P TAC evaluate options of how to incorporate the 2010 census data into 2012 RTP to further facilitate an informed decision by SCAG.

## **Background**

Responding to the January 11, 2011 staff presentation to the P&P TAC on the 1.3 million population gap between the 2010 Census count of California population and the State DOF annual population estimates, the 2010 Census forthcoming data release, potential magnitude of discrepancy at the local levels, and likely impacts on 2012 RTP/SCS and RHNA development, the P&P TAC formed a working group led by Deborah Diep of CSU, Fullerton to look into the various issues regarding the 2010 Census data release timing and incorporation into the RTP process.

The report- Incorporation of Decennial 2010 Census data into the 2012 RTP/SCS Integrated Growth Forecast (See the Separate Attachment) - prepared by the working group was submitted and discussed at the February 1, 2011 Subregional Coordinators meeting. General consensus was reached that the driving concern on this topic is related to the timely completion of the 2012 RTP/SCS and upcoming RHNA. The committee asked staff to present 2 to 3 viable options.

The primary and immediate goal for SCAG is to follow a fully viable schedule and process to complete 2012 RTP on time relative to the Region's transportation conformity determination deadline and secure federal transportation dollars. A secondary goal is to produce the RHNA with no legal challenges.

Three Options (Work Plan and Timeline are attached):

### **Option 1:** Do nothing. Do not incorporate 2010 Census data into RTP/SCS or RHNA.

This is a defensible process and methodology which SCAG was already pursuing. The best and latest data were incorporated into the 2012 RTP/SCS growth forecasting process launched in May 2009. Following a 20-month bottom-up and local review process, the region collectively has reached a consensus regarding the projected growth of population, employment and household for 2020 and 2035. The 2010 Census data is being released at a time that arguably falls outside the practicable schedule to be incorporated into 2012 RTP/SCS development.

Pro:

- Staff can proceed with all of the many tasks already on-going, and move forward according to work plan and 2012 RTP/SCS technical approach.

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## Con:

- Negative public opinion by not using what would be perceived as the “latest and greatest” information.
- Vacancy rates are outdated.
- Increased likelihood of RHNA challenge through litigation.
- Difficulty in using other than the 2010 Census data to accurately depict current/base year conditions.

**Option 2:** Incorporate Redistricting data (P.L. 94-171) into RTP/SCS and RHNA processes and use growth increments (delta) submitted/approved by jurisdictions, over 20-month review and input process, to recalculate the 2020 and 2035 target years.

## Highlights:

- Jurisdictions within SCAG region have participated in the 20-month review and input process for developing the growth forecast dataset.
- Growth increments for 2008-2020 and 2020-2035, already approved by jurisdictions will not be changed.
- SCAG staff works from March to April to process census geographies and data, update 2010 data in growth forecast, “backcast” new 2010 numbers to 2008.
- 2020 and 2035 totals will be updated based on new 2010 data and the growth increments for 2008-20 and 2020-35 already reviewed/approved by jurisdictions.

## Pro:

- Incorporates the “latest and greatest” 2010 Census Redistricting data (P.L. 94-171).
- SCAG has already done preliminary model calibrations to address gap.
- RHNA allocations at the jurisdiction level will use 2010 Census population and housing data.
- Jurisdictions have already reviewed/approved data and growth increments.
- Staff has evaluated timeline and tasks and believes the 2012 RTP can be completed within the required timeframe for the federal agencies to approve conformity determination so as to not jeopardize transportation funding.

## Con:

- Does not allow for another full review and update process by jurisdictions.
- Schedules are very tight; leaves no room for any mistakes or errors in datasets development, model calibration, and model output production.

**Option 3:** Incorporate 2010 Census Redistricting data (P.L. 94-171) into RTP/SCS and RHNA processes with full revisions of growth projections, jurisdiction review to all years, and revised growth increments.

## Pro:

- Incorporates the “latest and greatest” 2010 Census Redistricting data (P.L. 94-171).
- Allows for another full review by jurisdictions of incremental year data and growth.
- RHNA allocations at the jurisdiction level will use 2010 Census population and housing.
- SCAG has already done preliminary model calibrations to address gap.

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Con:

- Full revisions of growth projections and review by jurisdictions basically start the growth forecasting process all over again. In particular, review by local jurisdictions would necessitate packaging data, sending it out for review, fielding questions, collecting and incorporating comments, follow up with non-responders, updating full SED dataset and modeling variables again.
- These additional tasks would adversely impact the timely completion of 2012 RTP/SCS, EIR, and may postpone the approval of RTP and jeopardize funding and transportation projects. [*The delay in adoption of 2012 RTP is deemed not viable*].
- Still lack of key datasets (detail census data by age, gender and ethnicity - release in late Summer 2011, updated national employment projections by BLS - available in November 2011) for technically sound revisions of the regional, county and city projections of both population and employment.

Work Plan Options and Timelines																	
	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	
Release Draft RTP/SCS				Data needs to be completed by July													
RTP/SCS Adoption and Draft RHNA Release																	
Data Gathering Workshop																	
On-going Data Gathering & Revisions				3/25													
Incorporation Subregion SCS																	
Public Outreach RTP/SCS Workshops																	
Data Gathering and Revisions							7/10										
Needs Assessment																	
Development of Financial Plan																	
Alternative Development and Selection																	
Develop Draft RTP/SCS & PEIR																	
Workshops with Elected Officials																	
Build Correspondance Table of TAZs with 2010 Census Boundaries																	
EDD Benchmark of Employment data for 2010 and 2009				3/4													
Census redistricting data-PL 94-171 (Block level pop/housing)-estimated date				3/31													
<b>Option 2: Update the Base year While Holding Growth Unchanged</b>																	
Backcast to 2008 data set with PL94-171 data				4/30													
Update 2020 & 2035 data, Keep the same growth delta					5/15												
Quick turnaround for local jurisdiction confirmation (2 weeks)					5/31												
Public Outreach RTP/SCS Workshops																	
Data Gathering and Revisions							7/10										
Develop Draft RTP/SCS & PEIR																	
<b>Option 3: Revisit the regional/county/city and TAZ growth with Census Data</b>																	
Backcast to 2008 data set with PL94-171 data				4/30													
1. Reconvene Panel of Experts determine region/county growth: 2020/2035																	
2. Disaggregate to city/Taz: 2020 & 2035																	
3. Prepare & distribute city/Taz datasets to jurisdictions for review																	
4. Collect & revise Land use along with revised growth forecasts/distribution																	
5. Data Gathering Workshop/On-going Gathering & Revisions																	
6. Public Outreach RTP/SCS Workshops, Data Gathering & Revisions																	
7. Develop Draft RTP/SCS & PEIR																	

**ATTACHMENT TO THE P&P TAC REPORT: AGENDA ITEM 5.1**

**Topic: Incorporation of the Decennial 2010 Census data into the 2012 RTP/SCS integrated growth forecast.**

Data:

[http://www.census.gov/rdo/data/2010\\_census\\_redistricting\\_data\\_pl\\_94-171\\_summary\\_files.html](http://www.census.gov/rdo/data/2010_census_redistricting_data_pl_94-171_summary_files.html)

- The first detailed data that will be released from the 2010 Decennial Census is the P.L. 94-171 data file used for redistricting purposes.
- This file must be released by the US Census Bureau by April 1, 2011.
  - California’s data is expected to be released in March 2011.
- This file will contain block level Population and Housing Occupancy (vacant and occupied housing units)

Geographic assignment:

[http://www.census.gov/rdo/data/2010\\_census\\_redistricting\\_pl\\_94-171\\_tigerlinetm\\_shapefiles.html](http://www.census.gov/rdo/data/2010_census_redistricting_pl_94-171_tigerlinetm_shapefiles.html)

- The geographic shapefiles (2010 TIGER/Line® Shapefiles) for the smallest census geography, the census block, for California have been released. These do not contain the city/CDP identifiers. <http://www.census.gov/cgi-bin/geo/shapefiles2010/main>
- The geographic files with Incorporated Places and Census Defined Places (CDP) [aka FIPS codes] will be released beginning in mid-February 2011.  
[http://www.census.gov/rdo/data/2010\\_census\\_block\\_assignment\\_files.html](http://www.census.gov/rdo/data/2010_census_block_assignment_files.html)

Initial review:

- Census geographies have changed. There are new tract numbers and new tracts. A bridging table would need to be created.
- OC has +10,000 Census blocks (+40%); 4 new census tracts
- Riv has +26% census blocks; 110 new census tracts

Current estimated timeline:

Date	Item
December 2010	Release of Census geographic block boundary files (no data or place ID)
January 6, 2011	SCAG forms RHNA subcommittee (2 electeds from each county)
January 31, 2011	Deadline for delegated subregions to submit socio-economic (SED) dataset to SCAG for RTP/SCS
January- Feb 2011	SCAG data workshops in un-delegated subregions
February 2011	Determine a draft RHNA schedule and seek HCD approval of the use of the RTP/SCS growth forecast for RHNA purposes – 32 months from the Housing Element (HE) due date
February 2011	Deadline for delegated subregions to submit draft SCS outline to SCAG for RTP/SCS
Mid-February 2011	Release of Census geographic block boundary files with place ID (no data)
Mid-March 2011 (by April 1, 2011)	Expected release of California redistricting data: population and housing occupancy at the census block level
April 2011	Notify Caltrans and HCD of the final RTP/SCS adoption date for an April 2012 adoption – 30 months from the projected HE due date

April 2011	Local survey of 2158 factors done 6 months before the draft RHNA methodology or 30 months from HE due date
April 2011	Deadline for delegated subregions to submit draft SCS to SCAG
April-May 2011	SCAG incorporate delegated SCSs into regional SCS.
May 2011	State DOF releases 4/1/2010 benchmark & 1/1/2011 population & housing estimates
May 2011	SCAG holds mandated policy committee and/or regional workshops, presentations will include transportation alternatives
May 2011	SCAG conduct required RTP/SCS workshops (minimum 3 per county), presentations will include “preliminary” scenario with local input
May-June 2011	SCAG collect input from local jurisdictions on disaggregation of data; schedule meetings with jurisdictions unable to attend workshops, update “preliminary” scenario to reflect input, and update regional model
June 2011 (not specific in MOU, SCAG prefers beginning June)	Deadline for delegated subregions to submit final SCS to SCAG
June 2011	Voluntary: Subregional entity formed for RHNA delegation - 28 months from HE due date (prior to HCD consultation on RHNA target)
June- Sept. 2011	SCAG determine format of RTP/SCS; gather & review all input from workshops, meetings, conversations, and public interest for incorporation into Draft RTP/SCS
June- Sept. 2011	SCAG develop Draft RTP/SCS
June- Sept. 2011	SCAG develop Draft PEIR
August 2011	SCAG/HCD Consultation on Regional Housing Target – at least 26 months from HE due date
August 2011	SCAG conduct required informational workshops (minimum 2 per county) for local elected officials regarding RTP/SCS development process & region’s status on meeting GHG targets
August 2011-January 2012	SCAG conduct minimum 3 public hearings on 2012 RTP/SCS & prepare for comment period
October 2011	Draft RHNA Methodology done at least 24 months from HE due date
Items that need to be completed between January and October 2011	<ul style="list-style-type: none"> <li>• Decision incorporate Census data</li> <li>• Finalize socio-economic data (SED) for all years 2008, 2010, 2015, 2020, 2025, 2030, 2035</li> <li>• Finalize modeling variables for all years</li> <li>• Calibrate model for 2008 (additional years?)</li> <li>• Develop 4 alternatives (data, assumptions, BMP, financing, projects...)</li> <li>• Run models for alternatives</li> </ul>
November 2011	Release of Draft RTP/PEIR
April 2012	Adoption of 2012 RTP (RTP/SCS must be done 18 months from HE due date October 2013)

## Background:

The original methodological plan for the 2012 RTP, adhering to Federal and State timelines, was to proceed with the development of the 2012 RTP and growth forecast (associated socio-economic data) without waiting until April 1, 2011 for the redistricting data to be released. Based on the timeline for development of the data and related RTP processes [developing the extended modeling dataset, calibrating the model, running the models, preparing the documentation, developing the different growth scenarios, jurisdictional review and input, public outreach, preparing the PEIR, incorporating the new SCS process] it was agreed that there was not sufficient time to wait until the census data was released to develop the SED.

## Issue:

Release of the 2010 Decennial Census federal and state level 4/1/2010 population totals in December 2010 revealed a California state gap of 1,306,101 (3.4%, DOF over Census) with the State Department of Finance January 1, 2010 population estimates.

- 2010 Census: 37,341,989
- 1/1/2010 DOF: 38,648,090 (E-5, May 2010) +3.4% over Decennial Census
- 7/1/2010 DOF: 38,826,898 (E-2, December 2010) +3.8% over Decennial Census
- If SCAG is ½ the state, generally, the gap in the SCAG region is about 650,000.

2010 Census data at the County, city, and block levels will be released by April 1, 2011. Estimated 3.6% difference (census being lower) if adjusting for the April 1 date.

Since the census data is generally accepted as the best data available and virtually all agencies and individuals benchmark data to the Census, the magnitude of the gap has instigated a discussion on adjusting the RTP's SED data. Had the gap not been so large, SCAG would have proceeded with the original methodology and plan and not incorporated the new Census data.

It is not until mid-March 2011 that county, jurisdiction, and small area data will be available for consumption. Though the geographic boundary files with the city IDs will be released beginning in mid-February, detailed disaggregation of the data to the SCAG TAZs cannot occur until the data is released. This means that data aggregation/disaggregation to SCAG geographies cannot happen until late-April at the earliest.

## State Activities- DOF & HCD:

- DOF has reported they will release their E-5 January 1 estimates in May 2011 which will include the 4/1/2010 Census benchmark and January 1, 2011 population and housing estimates by jurisdiction.
  - It is likely that the DOF housing unit estimates will be much closer to the Census numbers and the same magnitude of gap will not occur as with the population numbers.
  - Housing unit by type totals at the city level will likely be controlled to the Census housing unit totals and supplemented with ACS data and DOFs own housing survey data/building permit data.
  - DOF would update the vacancy rates and persons per household. SCAG and HCD will need to come to agreement on the persons/household number. Currently HCD uses a much lower number than SCAG.
- DOF told SCAG staff they intend to re-release the 2001-2009 estimates using the 2010 Census as a benchmark at a later time (this would be after October 2011).
- DOF acknowledges their population projections need to be updated but they are short on staff and time and are not mandated to update the projections any earlier than they have scheduled. It is just SCAG's misfortune that the timing is such that SCAG's will have a RHNA calculated with outdated projections. This issue predated the Census gap issue which has only further exacerbated concerns over the RHNA.

- There will be less of an impact on other California MPOs and the unrevised 2007 population projections because their deadlines for their RTPs are not due until 2013 and later. Those MPO's can wait until the census data is released. SANDAG has already finished.
- DOF told SCAG staff they will do an interim update to the 2007 population projections series in the Summer 2011.
- However, DOF can't begin until the detailed data is released (by April 1, 2011) and after the E-5 report is completed. Will this timeline be acceptable to the current SCAG's planning process?
- DOF told SCAG staff they will do a full update of their 2007 population projections series in 2012, too late for SCAG to use this in their RTP. Hopefully, the interim update will be ready in time for HCD to use in their discussions with SCAG on the growth forecast and calculations of SCAG's RHNA assignment.
- HCD is going to use the DOF projections to calculate the RHNA need independent from what SCAG does to its own data. Is this up for discussion/negotiation?

Options and issues:

1. Do not incorporate 2010 Decennial Census data into the 2012 RTP growth forecast and make note in action and documentation as to why.
2. Incorporate 2010 Decennial Census data into the 2012 RTP growth forecast. Steps:
  - a. SCAG geographies (small area levels for modeling, CEQA streamlining, and ability to capture GHG reductions)
    - i. County
    - ii. Subregion
    - iii. City
    - iv. Census tract (new or old?)
    - v. Partial census tract (new or old?)
    - vi. SCAG TAZ
    - vii. Partial SCAG TAZ (TAZ split by jurisdictional boundaries)
    - viii. Tier 1/Tier 2 TAZ (modeling)
    - ix. Partial Census Block (Minimum Planning Unit)
  - b. SCAG uses a minimum planning unit of the partial 2000 Census block (split jurisdiction) which is assigned and then aggregated to all the various geographies SCAG uses.
  - c. Will the data be converted to the 2010 Census tracts? SCAG converts the 2010 Census block into the partial 2000 Census block split by 2008 jurisdictional boundary.
  - d. Earliest work can begin on data is mid-March. 2010 block geographies need to be assigned to the partial 2000 block geographies, SCAG Tier 1 and Tier 2 TAZs. Based on this, SCAG would need to associate the 2010 blocks with the partial 2000 blocks and then allocate data to the Tier 1 and Tier 2 TAZs.
    - i. Assume census geographies accurately reflect 2010 place boundaries.
    - ii. Will SCAG change the effective jurisdictional boundary date for the RTP from Jan 2009 to April 2010? SCAG currently uses the 2008 jurisdictional boundaries for five counties and the 2009 jurisdictional boundary for Orange County. SCAG intends to develop the correspondence table to convert between these jurisdictional boundaries with the 2010 Census based boundaries.
    - iii. Assignment & disaggregation of partial census block data to SCAG Tier 1 and 2 TAZs and SCAG Tier 1 partial TAZ involves splitting and allocating of census data to TAZs. Process can be manual or split & assigned by area allocation. Manual process using 2010 aerials for validation has better accuracy than area allocations by formula. Data will be verified by using partial block, this allows for census totals at census block, census tract, city, and county to be maintained.

- iv. This data would then have to be extrapolated to create a July 1, 2010 number (date used in the RTP) at the County, city, census tract, partial census tract, census block, partial census block, SCAG TAZ, SCAG partial TAZ, and Tier1/Tier 2 TAZ.
  - v. The Census number would have to be extrapolated back to a July 2008 number. There is no estimate benchmarked to census to control to at any level; DOF's smoothing for 2001-2009 may be available later this year. Suggestion: Use the growth increment already existing in the SCAG dataset for 2008 (reviewed by jurisdictions) and 2010 (not yet reviewed by jurisdictions but controlled to DOF estimates or provided by subregions) and subtract the small area growth from the extrapolated July 2010 number to create July 1, 2008. This would be done at the small area level and then aggregated up to the larger geographies.
  - vi. Currently, jurisdictions have reviewed growth increments of 2008-2020 and 2020-2035. Growth from 2008-2010 would need to be removed, then growth from each five-year increment would be added to the new 2010 Census numbers at the smallest geographic levels- split SCAG Tier 1 and Tier 2 TAZs.
  - vii. What about the 5.5 acre grid cell data?
  - viii. What about the Sustainability tool data?
  - ix. How will the census undercount effect the population number?
  - x. Will SCAG need to do a 2005 SED for the SB 375 target calculations?
  - xi. How will the revised numbers impact the earlier decision to reduce the employment numbers by 200k? Will that number increase?
- SCAG data for years 2008, 2020 and 2035 have been reviewed by jurisdictions.
    1. Riverside jurisdictions have reviewed the growth forecast submitted to SCAG for all years except for employment which was only reviewed for years 2008, 2020, & 2035.
    2. Orange County jurisdictions have reviewed and submitted data to SCAG for all years.
    3. Have any other counties or subregions reviewed the 2010, 2015, 2025, 2030 data? They reviewed and provided input for 2008, 2020, and 2035 only.

## Questions

- Is the issue truly the gap or is it the effect it can have on any RHNA allocation?
  - Methodology of SCAG's process is sound & defensible. Had the gap not been so large, would this even be a discussion?
  - If the gap were reversed and the Census came in with 1.3 million more people, would DOF be scrambling to update their data & projections?
  - Would HCD be pushing DOF to update their projections?
  - Would SCAG jurisdictions/agencies push to incorporate higher numbers?
  - Will SCAG pursue legislative effort to extend the deadlines for RTP/SCS and RHNA in an effort to account for the census and reduce the need for HCD to review a large percentage of housing elements from the SCAG region in four years instead of eight?
- Only way is to have HCD accept SCAG's population and household projections, and if they also agree to use the even lower growth forecast if the census data is incorporated.
  - What is the likelihood of this?
  - If HCD uses DOF's interim update of the projections series, there might still be an inflated projection with no major adjustment of migration assumptions.

## Ramifications/Repercussions:

### Yes incorporate the data

#### Pro:

- General pop will say latest census data is used and things are A-OK
- Using the “latest & greatest”
- Data will reflect 2010 vacancy rates (DOF holds Census vacancy rates constant for 10 years)
- Higher vacancy rates show that housing already exists and RHNA numbers can be reduced by occupancy of vacant units.

#### Con:

- Tremendous amount of work to associate with SCAG geographies, then extrapolate to July 2010, then extrapolate to 2008 number. Update all modeling variables for all years.
- Lengthy process, ideally would validate data, allow for jurisdictional review, recalibrate the model, redo the modeling variables
- What happens if census errors are found? Ignore, incorporate?
- The magnitude of undertaking is large and time-consuming. Other tasks will have to fall to the side and sacrifices made. Accuracy? Validation of the data? What non-mandated tasks can be skipped? Jurisdiction review & input? Jurisdiction approval? Consideration of census errors? Additional public outreach? What are the optional tasks that can be eliminated?
- Housing market tanked & high unemployment, occupancy of lower-cost housing has increased. If low-cost housing does not have “healthy” vacancy rate then additional units may be assigned to move towards “healthy” levels.

### No, don't incorporate data

#### Pro:

- Can proceed with ALL of the many tasks already on-going
- Technical data folks and anyone who reviews the methodology and a summary explanation would understand the methodology is defensible and using DOFs estimates, though off the mark, were justifiably used at the time these items needed to be prepared.

#### Con if we don't incorporate the Census data:

- Public and private institutions, elected officials, and the business community will look at the RTP dataset, compare it to the Census number and say the RTP data is invalid because it doesn't match the census numbers regardless of how defensible the methodology is/was.
- Vacancy rates are outdated.
- With two sets of numbers groups will use the set that works best for them at that given time. Jurisdictions could be continually defending one set numbers over another.
- What will be the potential impact on the CEQA streamlining and consistency work if the numbers are significantly different from one set to the other? When would these have to be updated? Is it the growth that matters or do the base year and end year numbers matter more than growth?
- Jurisdictions will receive a higher RHNA number with the current set of numbers than if they were adjusted downward to the census numbers. Would this happen regardless because DOF hasn't updated their projections? No, the housing need would be lower. Unless DOF updates their projections, this won't matter because HCD will use the higher numbers and we don't know that any updates to DOF's projections will be done in time to update the SED data, modeling variables, model runs... I believe HCD will have to update their numbers because you can not have Southern California providing housing for higher numbers when the rest of the state will be lower. San Diego would or should see a reduction in the housing need and probably look to make that adjust now not later.

- Concern: that the SCAG population projections are too high because they are using a too high 2008 and 2010 number because these were generated using DOF data which has been shown by the 12/2010 release of 2010 Census state numbers and resulting gap of 1.3 million people. This could have negative impact on public perception of accuracy of SCAG's data and methodology & therefore jeopardize the RTP as well as perception of increasing RHNA allocation for region.

**Need an explanation on consultations with HCD- what it entails, where flexibility is. How do the RTP growth forecast and the state projections affect discussions?**

RHNA must be consistent with the RTP/SCS growth forecast. Need to know what flexibility we all have in the growth forecast data vs. what numbers the jurisdictions use for their housing elements. SB 375 does not say that the numbers are identical or that the base and projection numbers have to be the same. Taking the growth increment of the SED for housing and applying it to any number should not change the growth number, therefore, using the growth increment for the RHNA's Housing Element planning period (the time period for which the RHNA allocations are made and the "number" that all jurisdictions must plan for) would be using data consistent with the RTP and for each jurisdiction since they will receive a number for which they provided the information.

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