SAN DIEGO AND SB 375:

Lessons from California's First Sustainable Communities Strategy

By Eliot Rose, Autumn Bernstein and Stuart Cohen

About the Authors

Eliot Rose is an independent consultant specializing in regional transportation and land use planning and local climate action plans. He also serves as Deputy Director of the UC Berkeley Center for Resource Efficient Communities, a research center dedicated to helping local and regional governments meet California's climate goals, and has previously worked at Metro, the regional planning agency for the Portland, OR metropolitan area.

Autumn Bernstein is the founding Director of ClimatePlan (www.climateplan.org), a diverse coalition of non-profit organizations working to advance sustainable communities throughout California. ClimatePlan's primary focus is helping to ensure SB 375 lives up to its potential, and under Autumn's leadership, the coalition has grown into a leading force for collaborative action to address California's transportation, land use and housing challenges. Autumn currently leads the coalition's statewide campaigns and coalition-building efforts.

Stuart Cohen is co-founder and Executive Director of TransForm (www.transformca.org). By combining high-quality policy analysis with coalition building and strategic media efforts, TransForm has become a powerful and effective voice for world class transit and walkable communities in the Bay Area and beyond. As a founder of ClimatePlan, Stuart has been engaged in efforts to create effective Sustainable Communities Strategies since the passage of SB 375. He has worked on regional transportation campaigns for 15 years, and was appointed by the California Air Resources Board to the SB 375 Regional Targets Advisory Committee.

TransForm and ClimatePlan gratefully acknowledge the foundations that make our statewide work possible: William and Flora Hewlett Foundation, James Irvine Foundation, Resources Legacy Fund, The California Endowment, Ford Foundation, Richard and Rhoda Goldman Fund and the Surdna Foundation.

Table of Contents

December 1, 2011

Photo Credits

Cover photos, clockwise from top left: Calthorpe Associates, Calthorpe Associates, Reconnecting America, Local Government Commission. Page 4: San Francisco Bicycle Coalition, via Flickr. Page 5: Calthorpe Associates. Page 6: Reconnecting America, via Flickr. Page 8: Reconnecting America, via Flickr. Page 9: Greenbelt Alliance, via Flickr. Page 12: National Transportation Enhancements Clearinghouse, www.enhancements.org. Page 13: Kaizer Rangwala, via Flickr. Page 14: Greenbelt Alliance, via Flickr. Page 16: Neighborhoods.org, via Flickr. Page 18: Richard Masoner/Cyclelicious, via Flickr. Page 20: Wendi Kallins

EXECUTIVE SUMMARY

On October 28th 2011, the San Diego Association of Governments (SANDAG) approved the first sustainable communities strategy (SCS) under Senate Bill 375, California's groundbreaking regional planning law. The plan was the subject of intense scrutiny by stakeholders, state agencies and others. Of major concern was the "backsliding" trend of greenhouse (GHG) reductions, whereby emissions decrease sharply through 2020 then begin to rise again.

Now that the dust has settled around California's first SCS, we're taking a deeper look at SANDAG's plan to go beyond the sound bites and evaluate the underlying reasons why it didn't produce the GHG results that many expected. We also examine the plan more broadly in order to pick out some of the best practices and important lessons that can help MPOs and stakeholders outside of the San Diego region learn from SANDAG's experience. After all, there are 17 more SCSs to come in this first round of plans, and many more to follow as MPOs update their plans every four years. This is a good thing, because reversing a decades-long trend of planning for sprawl is going to take a serious commitment to continually refining the SCS process. SANDAG's SCS sets some important precedents, but it's only the first step in a long journey.

Given the complexity of the task and the limited resources available, we commend SANDAG for the work that went into creating California's first SCS. The plan meets the 2020 and 2035 targets in part by calling for increased growth in regional centers, an emphasis on vanpooling and commute programs and a significant investment in public transportation. We were pleased to see that the Early Action Program contained in the RTP includes several transit projects, and SANDAG has committed to developing an early action plan for active transportation. SANDAG also committed to developing a Transit-Oriented Development strategy in response to comments that they are not doing enough to support growth in urban centers.

However, the plan's allocation of transportation funding doesn't match up with its lofty goals for transit-oriented development. In the first decade, the plan invests 28% more in new highway projects than on expanding the transit system. Reversing decades of sprawl will require taking immediate action to shift funding from highways toward the transit networks and complete streets that are necessary to support sustainable communities. SANDAG's plan did not do that at all. However, in response to this concern SANDAG made a last-minute commitment to evaluate more ambitious planning scenarios in future plans to address the backsliding. This could help set the next SCS (due in 2015) on a more sustainable path. This commitment will only be meaningful, however, if these new scenarios consider alternative transportation investments as well as land use plans.

Constraints imposed by a local transportation sales tax measure and by adopted local land use plans played a huge role in shaping SANDAG's plan, particularly in the early years. These constraints will continue to limit progress in San Diego and in regions across California unless MPOs take more proactive measures to change the trajectory established by these plans when it is found to be financially and environmentally unsustainable. MPOs, local jurisdictions and state agencies all have a role to ensure the potential benefits of the performance-based planning framework of SB 375 are fully realized.

The California Air Resources Board (ARB) can play an important role in SB 375 implementation by using its review of SCSs to highlight key issues and promote best practices. ARB's evaluation of the SANDAG plan was narrowly focused on technical issues and only touched upon larger underlying issues, such as backsliding of GHG emissions over time. Going forward, it is essential that ARB use its review to collect information and evaluate future SCSs based on the underlying factors upon which the success of these plans hinges.

Summary of Recommendations for MPOs

- Free up funds to invest in transit and active transportation by revisiting the definition of "committed" funds and projects.
- Evaluate large projects that have the potential to impact the region's progress toward meeting GHG targets and share this information with the public.
- Early in the RTP/SCS development process, create and evaluate multiple integrated transportation and land use scenarios. These should not be bound by constraints based on existing project lists (e.g. transportation sales tax expenditure plans) and land use projections (e.g. local general plans). Though these scenarios may not be feasible in the very short term, outlining alternatives and evaluating the benefits of each is key to building consensus over the longer term.
- Conduct thorough, transparent analyses that evaluate the impact of major projects, as well as various scenarios, on public health, social equity, the economy and environmental conservation.

Summary of Recommendations for California Air Resources Board

- ARB's review of the SCS should not be limited to a technical exercise. Rather it should evaluate key underlying factors that determine whether or not the GHG targets will be met.
- Standardize reporting of GHGs and other performance measures across regions and time intervals.
- Ensure all of SB 375's legal mandates, such as the requirement that regional plans achieve a jobs-housing balance, are met, not just those related to GHG targets.

SB 375 and Regional Planning

Senate Bill 375 was passed in 2008 by a "coalition of the impossible" that included environmentalists, developers, local government and affordable housing advocates. The bill requires metropolitan planning organizations (MPOs) to create long-term regional land use and transportation plans called sustainable communities strategies (SCSs) that meet greenhouse gas reduction (GHG) targets. The key implementation measure behind the SCSs is that they are part of the regional transportation plan (RTP), which means that they potentially affect how billions of transportation dollars are spent.

The RTP, which MPOs update every four years, is a transportation plan that accounts for all of the projected transportation investments in a region over at least two decades. Federal laws require the plan to be fiscally constrained, which means that the total transportation revenues that the region expects to receive over the plan period must be able to cover the total costs of the projects in the plan. MPOs work with stakeholders to choose which projects should be included in the plan, as well as to create a future land use scenario that serves as the basis for evaluating these projects, and use computerized travel models to demonstrate that the plan will meet federal air quality goals.

The SCS expands upon this regional land use scenario by requiring that the RTP integrate transportation investments with long-term land use plans to meet GHG reduction targets issued by the California Air Resources Board (ARB). ARB is responsible for reviewing the SCS, and must verify that it will indeed meet the targets. Since projects must be in the RTP in order to receive certain federal and state funds, and the SCS is part of the RTP, these funds must support the land use pattern identified in the SCS.

SB 375 also aligns the SCS with the regional housing needs assessment (RHNA), through which regions develop targets for new housing, to facilitate better coordination between the location of new housing and transportation investment. SB 375 also offers streamlined environmental review to projects that are consistent with the SCS. The coordination of transportation funding with supportive housing plans and project streamlining are intended to incentivize development in regional centers and mixed-use neighborhoods in which residents have better access to jobs and services.

In practice, regional planning is a highly complex and speculative process. MPOs must make assumptions that extend over decades about the level of funding that will be available to implement the plan, the costs of constructing and operating transportation systems, and the location of future households and jobs. To demonstrate achievement of the GHG target, MPOs must use travel models to analyze how people, including many who are not even born yet, and others who will be much older than they are today, will use the transportation network decades into the future. However, these models were originally developed to assess new highway investments, not the alternative transportation projects and land use incentives that MPOs will likely use to meet their GHG reduction targets. The success of SB 375 rests in large part on whether MPOs take care in their assumptions and analyses to create effective and realistic SCSs, and whether ARB uses its review to thoroughly examine these assumptions.

First in the State: The San Diego Region

SANDAG, the MPO for the greater San Diego metropolitan area, is the first MPO to complete an RTP/SCS under SB 375. This was a precedent-setting effort, and SANDAG had to figure out how to integrate the broad aspirations of SB 375 into the nuts and bolts of a complex process. Furthermore, SANDAG was well into creating its RTP/SCS before ARB even issued GHG reduction targets for MPOs, which meant that it had already made many important land use and housing decisions without receiving any direction from the state. These decisions were among several factors that imposed large constraints on the potential impact of the SCS.

A key factor shaping San Diego's RTP/SCS is TransNet, a sales tax program that is a major source of funding for transportation. In 2004, over two-thirds of San Diego residents voted to extend TransNet's half percent sales tax through 2048 to fund a host of transportation projects -- many of which are highway expansions that will likely increase GHG emissions. TransNet also gives SANDAG revenues to pursue ambitious transit projects, though many of these are likely to be funded later in the plan. The program, which is administered by SANDAG, is a critical source of revenue, generating roughly $243 million per year.[i]

Over the lifetime of the RTP, the amount raised by TransNet revenues and bond proceeds is equivalent to 34% of the total cost of highway and transit capital projects,[ii] which means that TransNet plays a huge role in shaping the RTP projects. However, most TransNet projects also require matching funds from state and federal sources. These funds are allocated by SANDAG and might otherwise go toward projects that reduce GHG emissions. TransNet greatly limits SANDAG's flexibility to use its money to meet the goals of SB 375.

SANDAG's Regional Comprehensive Plan is another key planning document that informed the development of the RTP/SCS. The plan, which was created in 2004, identifies smart growth opportunity areas in which to house the region's growing population sustainably. It serves as the region's blueprint, providing a long-term planning framework for the region, and blueprint plans were an important precedent for the SCSs required by SB 375.[iii] Unlike the SCS, blueprint plans are purely aspirational and do not carry any legal weight, but since the RCP is developed in collaboration with the cities and counties that ultimately make land use decisions, it plays an important role in determining the scope of land use changes that can be included in the RTP/SCS. SANDAG used the RCP as the basis for alternative land use scenarios in both the 2007 and 2011 RTPs, and it plans to update the RCP before completing its next RTP/SCS.

ANALYSIS OF 2011 RTP/SCS

Our analysis of SANDAG's RTP/SCS, and of ARB's review of the plan, focuses on four key issues:

1. **Transportation funding**
2. **Land use scenarios**
3. **Internal consistency**
4. **Clarity and communication**

The following four sections examine each of these issues in turn. Each section begins with an overview of how the issue relates to the broader goals of SB 375, describes how SANDAG's plan and ARB's review dealt with the issue, and discusses lessons learned.

Glossary of Terms & Acronyms

APS: Alternative Planning Strategy
If a region cannot meet its GHG emissions reduction target through the SCS, an Alternative Planning Strategy must be developed that identifies the impediments to achieving the targets in the SCS. It also must include alternative measures such as development patterns, infrastructure, or transportation policies that would achieve the regional GHG reduction target.

ARB: California Air Resources Board
State Agency responsible for attaining and maintaining healthy air quality and climate change goals. ARB has statutory authority to implement SB 375 by establishing regional GHG targets and reviewing/approving sustainable communities strategies (SCSs).

GHG: Greenhouse Gas Emission
Any of the gases – including carbon dioxide, methane and ozone – whose absorption of solar radiation is responsible for the greenhouse gas effect, in which the atmosphere allows incoming sunlight to pass through but absorbs heat radiated back from the earth's surface. Greenhouse gases act like a heat-trapping blanket in the atmosphere, causing climate change.

MPO: Metropolitan Planning Organization
A federally required planning body responsible for the transportation planning and project selection in its region; the governor designates an MPO in every urbanized area with a population of over 50,000.

RCP: Regional Comprehensive Plan
Developed in 2004, the RCP provides a blueprint for managing San Diego region's growth. The plan was the land use foundation of the 2011 RTP/SCS. An update of the RCP is scheduled for 2012.

RTP: Regional Transportation Plan
A federally-required master plan to guide the region's transportation investments, generally for a 25-year period. Updated every 4-5 years, it is based on projections of population growth, jobs and ensuing travel demand. Required by federal law, it includes programs to better maintain, operate, and expand the transportation system.

SANDAG: San Diego Association of Governments
As the Metropolitan Planning Organization for San Diego County, SANDAG is responsible for developing regional transportation plans and sustainable communities strategies for San Diego County.

SB 375
Senate Bill 375 (Steinberg, 2008): SB 375 is a law passed in 2008 that requires California MPOs to incorporate planning for GHG reductions into regional transportation plans.

SCS: Sustainable Communities Strategy
The sustainable community strategy is an integrated land use and transportation plan that all metropolitian regions in California must complete under SB 375.

TransNet
A one-half cent sales tax that funds highway, transit, and local road projects throughout San Diego County. SANDAG administers the funds generated by TransNet.

TRANSPORTATION FUNDING

One of the primary strategies for meeting GHG targets of SB 375 is to increase the share of funding that MPOs allocate toward sustainable, healthy transportation modes such as transit, bicycling, and walking. The speculative, long-term nature of the RTP process means that not all transportation dollars are equally valuable—projects that are included in the early years of the plan are much more likely to receive funding than those in the later years. An ineffective RTP/SCS will rely solely on vague long-term shifts away from highway expansions and toward sustainable transportation to meet GHG reduction targets on paper, whereas an effective plan will make concrete commitments to ensure that this shift begins more immediately. The latter approach is challenging because MPOs begin the RTP process with a large backlog of projects that were included in previous plans, and are in various stages of planning, design and environmental review. As priorities change and MPOs strive to meet GHG reduction targets, re-evaluating these "committed" projects has the potential to eliminate projects that hinder progress toward meeting regional goals and free up more money for projects that reduce GHG emissions and achieve other regional goals.

SANDAG's plan

On paper, SANDAG's RTP made significant progress toward increasing the overall amount of funding toward transit and active transportation. Together, these two modes account for almost half of the total spending in the plan, and the numbers reported in the RTP suggest a significant reallocation of funding away from highways and toward roads between 2007 and 2011.

	2007	2011	2011 (without HSR)*
Table 1: *Share of RTP funding by mode and purpose, 2007 and 2011, based on constant 2006 and 2010 dollars (Source: SANDAG 2007 RTP, Table 4.3, page 4-11; and SANDAG 2011 RTP, Table 5.3, p. 5-14).*			
HIGHWAYS	**41.1%**	**26.4%**	**28.0%**
Capital	34.4%	17.8%	18.9%
Operations and maintenance	6.8%	8.6%	9.1%
LOCAL STREETS AND ROADS	**22.5%**	**16.2%**	**17.2%**
Capital	12.5%	3.3%	3.5%
Operations and maintenance	10.0%	12.9%	13.7%
TRANSIT	**31.1%**	**46.7%**	**43.4%**
Capital	19.8%	28.6%	24.2%
Operations and maintenance	11.3%	18.1%	19.2%
ACTIVE TRANSPORTATION	**0.7%**	**2.1%**	**2.2%**
OTHER**	**4.5%**	**8.6%**	**9.2%**

**SANDAG's 2011 RTP includes state investments in high-speed rail (HSR), which was not included in the 2007 RTP, so we also show a breakdown of the 2011 plan with spending on HSR omitted in order to facilitate comparison between the two plans. See discussion below for more information. **Includes debt service, transportation demand management, transportation system management, goods movement, and the Smart Growth Incentive Program.*

However, it can be difficult to compare the 2007 and 2011 RTP because the two plans have different time periods: the 2007 RTP covered a 24 year time period from 2006 to 2030, while the 2011 RTP covers a 40 year period from 2010 to 2050. This is an important distinction, because the shift to funding transit in the 2011 RTP occurs primarily in later years of the plan, when it is much less certain that funding will be available for projects, while funding for highways and roads is weighted toward the early years of the plan, as shown in Table 2.

	2010-2020	2021-2030	2031-2040	2041-2050	Total
Table 2: *Share of RTP funding by mode and phase of the 2011 RTP (Source: SANDAG 2011 RTP Table 5.2, p. 5-12)*					
HIGHWAY	**34%**	**25%**	**21%**	**21%**	**23%**
Capital	27%	16%	12%	14%	15%
O+M	8%	8%	8%	7%	7%
LOCAL STREETS & ROADS	**21%**	**21%**	**20%**	**14%**	**17%**
Capital	4%	4%	4%	3%	4%
O+M	17%	16%	16%	11%	14%
TRANSIT	**36%**	**44%**	**47%**	**57%**	**49%**
Capital	21%	23%	20%	36%	28%
O+M	15%	21%	27%	22%	22%
ACTIVE	**2%**	**2%**	**2%**	**2%**	**2%**
OTHER	**6%**	**9%**	**10%**	**6%**	**9%**

**Totals do not match those shown for the 2011 RTP in Table 1 because Table 1 uses constant 2011 dollars, while Table 2 uses year of expenditure dollars. **Includes debt service, transportation demand management, transportation system management, goods movement, and the Smart Growth Incentive Program.*

On one hand, many of the highway investments contained in the early years of SANDAG's plan are managed lanes designed to accommodate bus rapid transit service to outlying areas, which SANDAG views as a key strategy for serving its current land use pattern. However, there is still concern that shifting transit funding to the later years of the plan will hamper SANDAG's actual progress toward reducing GHG emissions, not only because it creates uncertainty for these projects, but also because projects that are built earlier are more likely they are to have an influence on land use patterns in the region—towards more compact, walkable growth if they are transit projects serving regional centers, and for more dispersed, auto-oriented patterns if highway expansions make areas far from urban and suburban core towns accessible. These auto-oriented patterns could lock in high GHG emissions as well as high consumer costs for driving over the next century.

Furthermore, a substantial share of transit spending during the last phase of the plan is due to inclusion of state high-speed rail funding. High-speed rail is potentially a very important project for decreasing GHG emissions, but is very different from the regional transit accounted for in previous RTPs. If this funding were omitted, transit would account for only 40 percent of the expenditures in the 2011 RTP, while highways and roads account for 48 percent, as shown in Table 1. It's also worth noting that RTPs account for the entire cost of operating and maintaining the transit, while much of the O&M costs on the road system are picked up by residents and are not accounted for in the tables above. Finally, regardless of whether SANDAG's RTP represents an increase in overall transit funding, it's clear that transit is not keeping pace with needs, which are greater for transit than for automobiles since the San Diego area is already relatively car-friendly. According to SANDAG's unconstrained needs analysis, planned investments in new transit facilities only cover 47% of total needs, while the highway projects cover 86% of needs.[iv]

One reason that it was difficult for SANDAG to include more transit and active transportation projects in the early years of the RTP is that such a large share of funding in the plan was considered committed—so much that SANDAG determined that only 3% of the total transportation funding in the RTP was "flexible."[v] As noted in the introduction, TransNet plays a huge role in shaping the region's transportation priorities, and the RTP further assumed that 50 percent of flexible funds would go toward TransNet projects. Though SANDAG considered multiple transportation funding scenarios when creating its plan, these scenarios all included the TransNet projects and only differed in how they allocated that small share of flexible funding, and as a result the scenarios did not differ much in their performance. Furthermore, even if SANDAG were able to shift more funding toward building new transit, the money to operate this transit may not be available until later in the plan in the absence of new revenue sources, since state and federal funding for transit operations is limited and the costs of operating the current system are large.

SANDAG's board has the authority to change the TransNet expenditure plan by a 2/3 vote, which could shift funding more dramatically from highways to transit, but doing so is politically difficult. SANDAG anticipates considering a revision of TransNet in 2017, though the statute does technically allow the board to modify TransNet sooner. SANDAG is not the only MPO dealing with this constraint; 20 other California counties have sales tax measures in place, and collectively they account for 28% of all transportation dollars in the metro areas that are governed by SB 375.[vii] It's crucial to the bill's success that the projects in these plans reduce GHG emissions—or that MPOs are willing to shift discretionary funding away from tax-funded projects that don't meet regional goals instead of considering these projects committed.

Following ARB's review of its SCS, SANDAG did take some additional steps to guarantee funding or create incentives for projects that reduce GHG emissions in both this and future plans. These included developing an early action program for projects in the Regional Bicycle Plan, developing a Transit Oriented Development policy to "promote and incentivize sustainable development,"[viii] and developing a regional complete streets policy. Though SANDAG has not attempted to amend the TransNet expenditure plan, it did recently increase funding for transit in the TransNet Early Action Program (EAP), which prioritizes funding for certain projects, so that transit receives almost half of EAP dollars.[ix] These are important actions, but they do not address the fundamental transportation funding issue behind this RTP—the strong early commitments to highway expansion projects that could encourage further sprawl for decades to come.

LESSONS LEARNED: Transportation Funding

1. Revisit policies governing committed funds and projects: It will be very difficult for SCSs to reduce GHGs if MPOs continue to take large amounts of discretionary dollars off the table by considering them committed. MPOs should consider passing policies that redefine "committed" funds and projects in order to free up funding to meet their adopted goals. For example, MTC recently passed policies that change the definition of a committed project from one that has been included in a previous plan to one that has completed an environmental impact report, and "decommits" many funding sources that the agency previously considered committed.[x] Together, these policies halve the number of projects that the region considers committed, and double the amount of discretionary funding for the upcoming RTP.

2. Prioritize committed projects that help achieve sustainability goals: Changing committed funds policies also offers MPOs a way to strategically implement selected projects within transportation sales tax measures without altering the expenditure plan. Most sales taxes are oversubscribed, particularly in the current economy; revenues often do not meet projections, while the cost of projects exceeds anticipations. If an MPO allocates discretionary dollars strategically toward committed projects that help achieve sustainability goals, sales tax measures may expire with those projects that do not reduce GHG emissions or meet other regional goals left unfunded.

3. Create scenarios that revisit constraints: Priorities are difficult to alter in the absence of a clear alternative plan, and MPOs should lay the groundwork for these changes by creating and evaluating a wide range of alternative transportation funding scenarios, including some that modify key constraints such as sales tax expenditure plans. On the day their SCS was adopted, SANDAG committed to developing at least one regional land use scenario and corresponding transportation network that results in GHG reductions continuing and improving through 2050.

4. Develop new funding measures that are sustainable: As California's population grows, its infrastructure ages, and state and federal funding sources dwindle, MPOs and county transportation agencies will likely need to renew existing sales taxes and explore innovative funding mechanisms that both cover revenue gaps and manage transportation demand, such as congestion pricing, fuel fees and VMT-based fees. As the example of TransNet shows, expenditure plans are hard to change and can constrain the entire regional transportation plan for decades to come. Using thorough performance evaluation and scenario analysis when creating expenditure plans is crucial to ensuring that new revenue sources put regions on a path toward sustainability.

5. ARB review should go beyond technical issues: ARB's review of SANDAG's RTP/SCS focused primarily on technical issues and took many of the plan's assumptions at face value. However plans change, RTPs get amended, and regions routinely commit to more projects than they can reasonably fund, in spite of federal requirements to the contrary. SB 375 charges ARB with determining whether, if implemented, an SCS would meet GHG reduction targets, but in order to ensure that SCSs actually meet GHG reduction targets, ARB will need to evaluate whether an SCS is likely to be implemented in the first place. This means examining the critical issues that we've raised here, including:

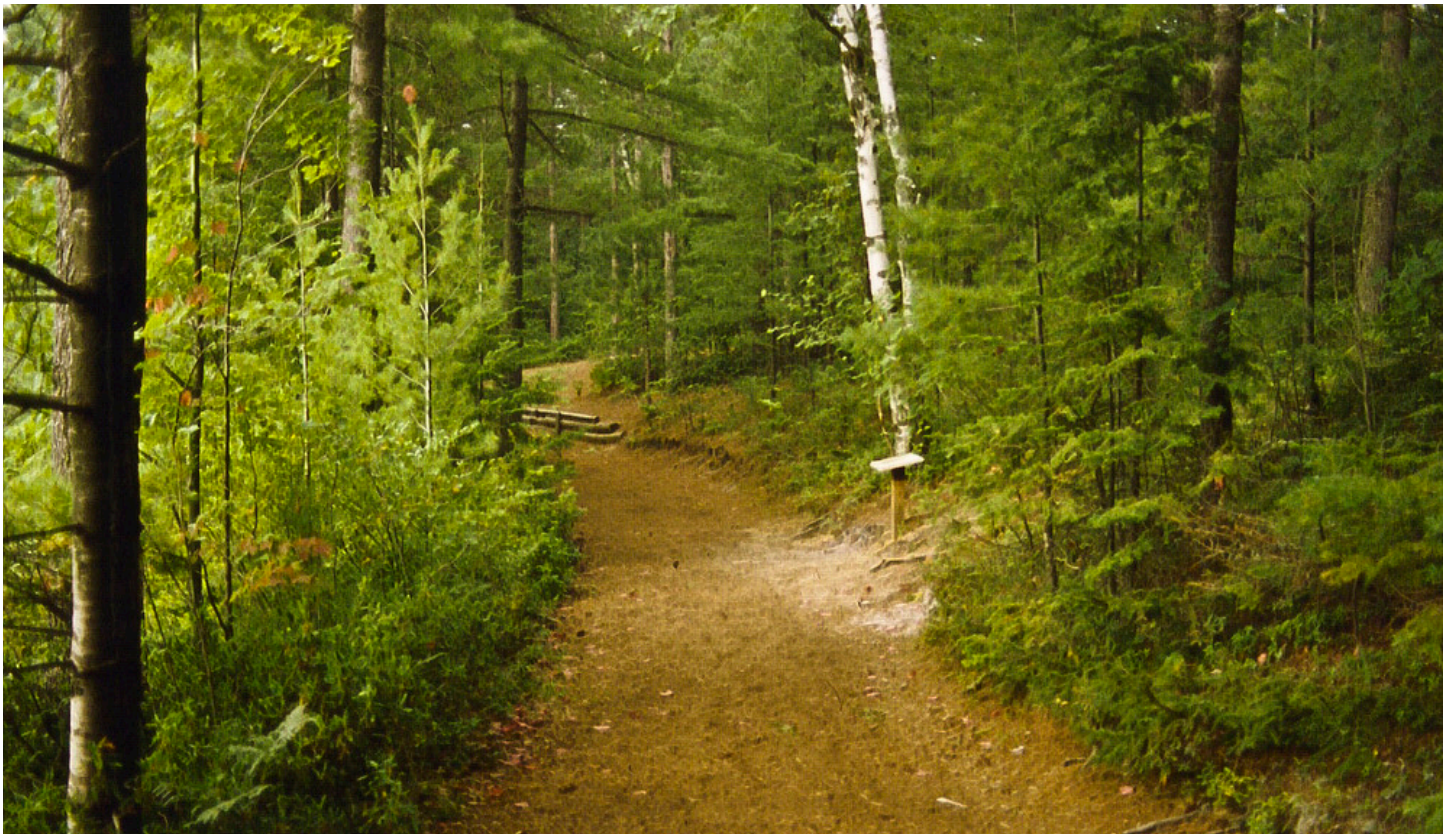
- the portion of funding an MPO considers committed[x] and discretionary and the basis for that assumption,
- how an MPO allocates its discretionary dollars,
- the timing of funding and the likelihood that GHG-reducing projects scheduled for the later years of the RTP will be implemented,
- how major projects contained within the plan impact GHG emissions and other performance measures.
- the range of alternative funding scenarios considered during the RTP process, the assumptions that informed those scenarios, and how they compare to the adopted plan.

Examining these issues is critical to understanding whether SCSs simply look good on paper or are backed by firm commitments to fund projects that reduce GHGs.

LAND USE SCENARIOS

SB 375 requires MPOs to create a land use plan that works alongside the transportation strategy in the RTP to meet greenhouse gas targets. In the past, most MPOs created land use scenarios for their RTP by simply aggregating local general plans. In order to effectively reduce GHG emissions, MPOs will need to adopt proactive land use plans that look at how growth might be redistributed within and between cities and counties in order to effectively focus new growth in mixed-use neighborhoods, employment centers and along transit corridors where people have a greater range of transportation choices.

A realistic SCS will be responsive to local land use plans, since local governments are ultimately responsible for making land use decisions. However, local plans determine where growth *can or cannot* go, but they don't necessarily determine where it *will* go. A proactive SCS will account for the full range of factors that can shape regional growth, including market trends, demographic shifts, availability of infrastructure, housing costs, and traffic. Many of these factors are best examined at the regional level. As local governments struggle to find resources, almost half of general plans have a land use element that is a decade or more old.[xi] Given the seismic shifts in housing, economic growth and demographics in recent years, even plans that are five years old may be outdated. MPOs should work with local governments that have out-of-date plans to identify additional growth opportunities, particularly in potential transit priority areas where projects may be eligible for the CEQA streamlining benefits offered by SB 375.



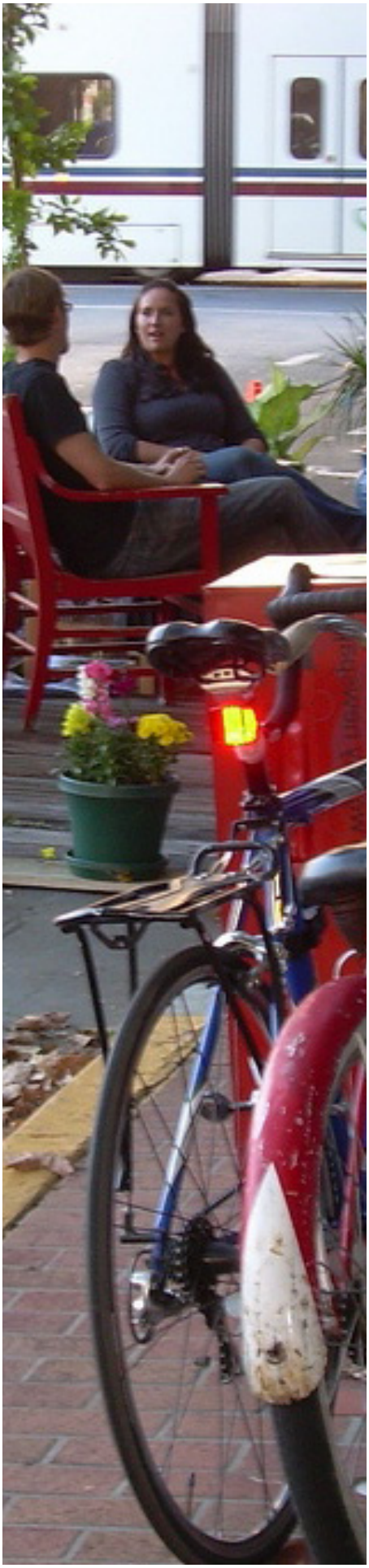
SANDAG's plan

Though SANDAG's SCS does not include a detailed description of how the agency created its regional land use plan, the text of the plan suggests that SANDAG's approach to land use planning is more orthodox than proactive. According to the SCS, SANDAG simply took local plans as given, and did not analyze how regional trends might influence growth beyond the horizon of local plans. The SCS suggests that this contributes to the "backsliding" GHG emissions that ARB staff and others have found troubling:

So what happens beyond 2035? While growth will continue in the region, after the urbanized areas have been developed according to current local general plans, development could gradually move toward more remote areas where fewer transportation options are available if local plans are not changed. The growth forecast shows this happening simply because most local general plans have a horizon year prior to 2050.[xii]

SANDAG has agreed to create alternative scenarios that "attempt to address" the "backsliding" in GHG emissions under the current SCS in the upcoming update to its Regional Comprehensive Plan. It is important that these scenarios look at a more meaningful range of land use options and are created through additional outreach to cities to go beyond current general plans.

SANDAG has agreed to create alternative scenarios that "attempt to address" the "backsliding" in GHG emissions under the current SCS in the upcoming update to its Regional Comprehensive Plan.



LESSONS LEARNED: Land Use Scenarios

1. Regional land use plans should reduce GHGs steadily over time. In contrast to the diminishing GHG reductions over time forecast by SANDAG's SCS, a good regional land use plan should yield GHG reductions that compound over time, because a growing proportion of the region's residents will be living in areas with good access to transit and nearby amenities.

2. Work with local governments to re-evaluate local plans. To facilitate long-term, lasting changes in land use patterns, MPOs need to work with local governments to evaluate existing plans and identify sustainable land use changes that go beyond current general plans. In Southern California, SCAG has identified a preferred land use scenario for its 2012 SCS that reflects input from cities about where current local plans could be updated to accommodate more growth in transit priority areas and walkable neighborhoods, adjusts growth based on whether sufficient infrastructure is in place, and accounts for anticipated completion of Compass Blueprint projects.[xlv]

3. Ensure SCS/RTP clarifies eligibility for CEQA incentives: As part of the SCS/RTP, MPOs should provide clear guidance on which projects will be eligible for SB 375's various levels of CEQA streamlining benefits. Sacramento's draft plan is setting a strong example in this regard.

4. ARB should devote more attention to land use plans: In order to help implement these recommendations, ARB needs to devote more attention to land use plans as it reviews future SCSs. In particular, ARB should request information from MPOs on the following issues:

- The assumptions about land use changes that occur beyond the horizons of local general plans and the basis for those assumptions.
- The proportion of growth that the land use scenario forecasts in the half-mile areas around transit stations and in priority growth areas identified in a regional blueprint.

CONSISTENCY

SB 375 requires the RTP and the SCS to be internally consistent, which means that the transportation investments identified in the RTP must support the land use changes called for in the SCS. This is more than just a legal requirement; it's good planning. Transportation plans like the RTP play a huge role in shaping the market for growth by investing in transportation projects that make it easier to reach places. This phenomenon - under which households and jobs relocate in order to take advantage of increased access offered by new transportation projects - is widely studied and is commonly referred to as "induced growth."

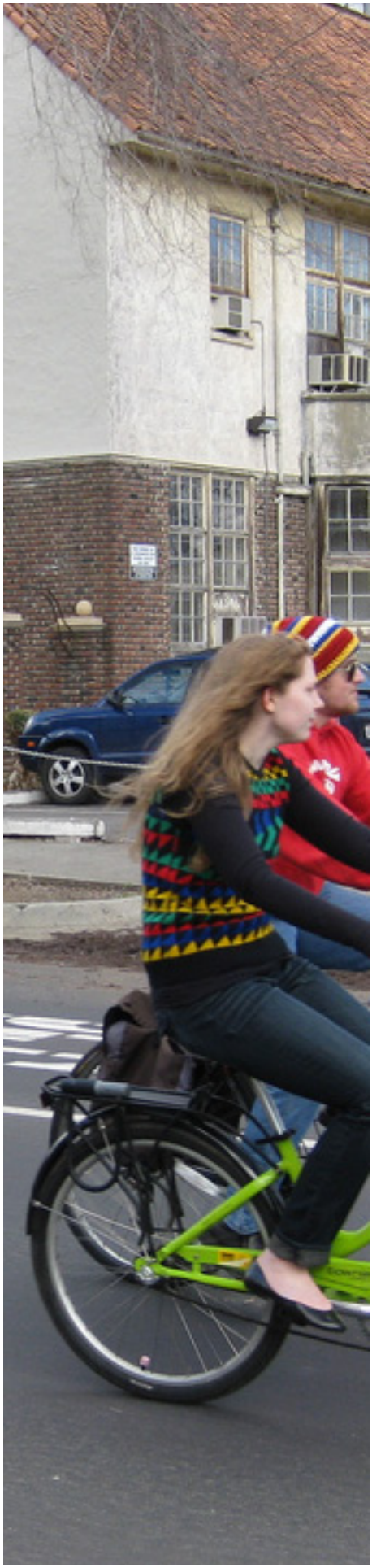
Historically, transportation agencies have focused on expanding highway facilities, which has led to induced sprawl. One of the underlying concepts of SB 375 is that the opposite can also be true: induced growth can reduce GHG emissions rather than increasing them. As discussed above, MPOs can work with local governments to plan for increased growth around transit stations and they can bring this growth to fruition by investing in transit. This in turn should boost ridership, resulting in both more cost-effective service and reduced GHG emissions.

SANDAG's plan

SANDAG's SCS attributes the dramatic reductions in GHG emissions during the early years of the plan in part to compact development and investments in transit.[xvi] However, as we discuss above, the plan delays transit investments until the later years of the RTP even though the SCS projects growth in communities served by transit in the earlier years of the plan. Granted, there are some transit projects in the early years of the RTP, but without clear maps that illustrate where planned growth will go relative to planned transit improvements during each phase of the plan, it's difficult to know whether the land use and transportation elements of the RTP/SCS work in a coordinated fashion.

Meanwhile, the highway expansions that are slated for the early years of the plan have the potential to encourage growth in more auto-dependent areas of San Diego County, further undermining the land use goals of the SCS. It's worth noting that many of these expansions do involve adding managed lanes, which are dynamically priced in order to reduce congestion. As SANDAG notes, such lanes do have the potential to encourage carpooling and facilitate express bus service. However, if the addition of these lanes reduces traffic congestion and travel times in these corridors, it may also create an incentive for new jobs and housing to locate in areas that take advantage of this new highway capacity.

SANDAG has agreed to develop a transit-oriented development policy for their SCS, a good first step. Other MPOs have used such policies to set minimum density thresholds along planned transit lines, and outlining such criteria would go a long way toward defining in more detail the link between new growth and transit service in the San Diego region.



Recommendations for Consistency

1. Develop integrated scenarios and analyze consistency over time: During the RTP process, MPOs often consider a range of land use and transportation scenarios separately. RTPs will be more consistent if MPOs create integrated land use and transportation scenarios that acknowledge that achieving different land use goals will require different allocations of transportation funding. Scenarios developed this way should more thoroughly examine the effects of induced growth. SACOG is employing this integrated approach in the development of the Sacramento region's 2012 SCS/RTP. Another way to emphasize consistency is to include maps of proposed scenarios and, ultimately, the draft RTP/SCSs that compare the timing of transportation investments with projected land uses at five- or ten-year intervals over the life of the plan. MPOs should also ensure that analytical tools used to evaluate the plan are able to fully account for the effects of induced growth.

2. Strengthen TOD requirements for new transit investments and direct funds accordingly: MPOs can create or strengthen transit-oriented development policies that specify land use requirements for transit investments. For example, MTC's TOD policy in the Bay Area requires that local governments plan and zone for a minimum amount of housing near future transit stations before the agency funds transit extensions along those corridors. Recognizing the challenges associated with implementation of TOD plans, MPOs should also do more to fund the needs of transit priority areas that are key to meeting GHG reduction targets. Several MPOs, including SANDAG, offer grants to local government to support TOD plans or capital improvements to transit access in these areas. MTC has elected to allow local governments more flexibility in how they spend these funds by combining several separate such grant programs, each with its own rules and eligibility, into a single funding source, the One Bay Area grants.[xix]

3. State agencies should provide better guidance and oversight: Though consistency is required by SB 375 and is a relatively intuitive concept, there is no official guidance from the state on what constitutes a consistent plan, and many regional travel models do not fully capture induced growth. ARB should work with other state agencies including the California Transportation Commission to develop guidance on internal consistency in the future. In order to facilitate this process, ARB should request information from MPOs on the following issues during its review of SCSs:

- The respective timing of transportation projects and land use changes at five- to ten-year intervals.
- The extent to which MPOs have evaluated the potential for transportation investments to influence the location of households and jobs.
- How assumptions about transportation funding vary under the different land use and transportation scenarios that the MPO considered when creating the RTP/SCS.

COMMUNICATING WHAT'S AT STAKE

One of the positive impacts of SB 375 is that its integrated approach to transportation, land use, affordable housing and climate goals has broadened awareness among local decision makers and the public about the huge implications of regional transportation decisions. Public participation in regional planning has increased dramatically and a wider range of stakeholders are involved than ever before. The new modeling and GHG accounting requirements also provide decision makers with more information to inform decisions.

In order for this new, integrated approach to be meaningful, MPOs need to expand the range of performance measures for the RTP beyond traditional metrics such as VMT and congestion. MPOs should develop clear performance measures that evaluate how plans affect the range of issues that matter most to decision makers and stakeholders, including public health, the economy, social equity, and natural resource conservation. Agencies should report information on performance measures in a manner that is clear and consistent, and use transparent and analytically sound tools and models to conduct performance evaluations. ARB and state agencies should work to standardize and oversee evaluation of performance measures, and ensure that SB 375's other key provisions – such as the requirement that regions plan for a jobs-housing balance – are met.

Public participation in regional planning has increased dramatically and a wider range of stakeholders are involved than ever before.

SANDAG's plan

One of the major achievements of SANDAG's RTP/SCS was that it demonstrated that the plan, if implemented, would meet the GHG reduction targets. By using analysis and modeling forecasts to demonstrate how its SCS would meet the targets, SANDAG set a very important precedent for other MPOs to follow.

However, the lack of clarity surrounding these forecasts was troubling, because it made it more difficult to identify and address the true challenges to achieving the projected reductions. For example, SANDAG states that the plan meets GHG reduction targets by "among other means, using land in ways that make developments more compact, conserving open space, and investing in a transportation network that gives residents transportation options."[xx] However, during ARB's review of the SCS, SANDAG staff explained that the current economic slump is the driving factor behind the steep initial decline in GHG emissions. The draft SCS/RTP also caused confusion by reporting vehicle miles travelled, which are a key indicator of transportation GHGs, using different base years and vehicle types than their reporting for GHGs.[xxi] SANDAG added language in its final RTP to clarify the difference, but did not alter the forecasts.

ARB's review of SANDAG's SCS raised concerns about the fact that travel models used to calculate VMT and other performance measures were proprietary, and SANDAG plans to switch to an open-source model for its next RTP/SCS.[xxii] The Office of Planning and Research echoed these concerns, and also called on SANDAG to quantify GHG reductions from individual SCS/RTP strategies.[xxiii]

The performance measures used by SANDAG to evaluate the SCS/RTP included many impacts related to the economy (e.g., number of jobs and regional economic productivity) as well as some related to equity (accessibility to jobs and distribution of RTP expenditures among low-income and minority communities), and public health (smog-forming pollutants and walk and bike trips). However, a letter from the Attorney General's office faulted SANDAG for not analyzing environmental justice; specifically the impact of increased air pollution on the low-income and minority communities that are disproportionately impacted by poor air quality.[xxiv] Other social equity performance measures were not always calculated with careful attention to the issues at hand. For example, SANDAG's performance measure on the distribution of RTP expenditures among low-income communities simply assumed that any investment within three miles of these communities benefitted their residents, regardless of whether the project in question actually served community members or simply passed through the neighborhood.

ARB's review of SANDAG's SCS did not address environmental justice, social equity, or jobs-housing balance. Instead, the board suggested that other state agencies, such as the Strategic Growth Council, were better suited to evaluate the plan's performance with regard to these performance measures.[xxv]

Recommendations for Communicating What's At Stake

1. Analyze and report major sources of GHG reductions: Modeling the long-term GHG impacts of a transportation plan is very complex, and attributing these impacts to individual factors is still more complex. Nonetheless it is important that, to the extent possible, MPOs analyze what proportion of the GHG reductions in an RTP/SCS are attributable to major strategies and investments in the plan versus exogenous factors such as the economy. Doing so is crucial to help the public and policymakers understand the effectiveness of SB 375, and to re-evaluate GHG targets and other related policies if need be. Modeling individual GHG reduction strategies may also be instructive for smaller MPOs that may not have expertise that large metropolitan regions have.

2. Standardize reporting of GHGs and other performance measures across regions: ARB should work with the MPOs to create standards for reporting GHG emissions and other performance indicators, including using consistent base years and vehicle classes, so that it is easier to understand and compare performance measures both within and between regions over time.

3. Adopt new performance measures and tools to evaluate them: In order to facilitate more informed decision making and better public engagement, it is important that MPOs and ARB use a wider variety of performance measures throughout the SCS development process. Scenario planning tools can be an important tool in this process. While not as accurate as the travel models that MPOs ultimately use to evaluate transportation investments, these tools are more transparent and can often account for a wider variety of performance measures.

4. ARB should lead review of performance measures: ARB needs to take an active role in working with other state agencies to evaluate SCS performance related to the economy, equity, and public health. Though the SGC has a broad perspective due to the diversity of its members, ARB has direct oversight of the SB 375 process and has more experience with the analytical tools used by MPOs. ARB should request information from MPOs not only about the SCS's performance in meeting GHG reduction targets and producing co-benefits, but also about the performance of scenarios examined during the process, and about how these scenarios were incorporated into the adopted SCS.

5. Ensure all of SB 375's legal requirements are met. SB 375 establishes a number of important requirements above and beyond meeting the GHG targets. It is particularly important that ARB work with state agency partners to implement SB 375's requirement that regions plan for a jobs-housing balance in their SCSs as soon as possible.

CONCLUSION

Overall, California's first SCS was a mix of good and bad, meeting GHG reduction targets and increasing overall funding commitments for sustainable transportation, but failing to set the San Diego region on a long-term course toward sustainability. Though the SCS highlighted the GHG reductions associated with the plan, the 2011 RTP did not differ markedly from previous plans in how it allocated near-term transportation funding or future growth. Constraints like TransNet and adopted local plans were a limiting factor and SANDAG did make some important commitments in response to widespread criticism from agencies and advocates. However SANDAG left far more "ambitious and achievable" actions off the table, failing to reconsider committed transportation policies or considering more ambitious land use alternatives. To achieve the promise of SB 375 and begin to trace a more sustainable trajectory for California's future, MPOs and ARB must take bolder action on future SCSs.

FOOTNOTES

[i] Rose, E. (2011), *Leveraging a New Law: Reducing Greenhouse Gas Emissions under Senate Bill 375*, UC Berkeley Center for Resource Efficient Communities: 21.

[ii] San Diego Association of Governments (SANDAG) (2011a), *2050 Regional Transportation Plan: Our Region, Our Future*, Table 5.1: Major Revenue Sources/Revenue Constrained Scenario, and Table 5.2: Major Expenditures/ Revenue Constrained Scenario: 5-11-5-12.

[iii] Steinberg, D. (2008), Senate Bill 375, §1(e).

[iv] SANDAG 2011a: Table 5.3, 5-14.

[v] SANDAG (2010), Board of Directors Agenda, September 24, 2010, Item 20: 2050 RTP: Initial Revenue Constrained Network/Sustainable Communities Strategy Scenarios: 2.

[vi] Arias, Elisa, Principal Regional Planner, SANDAG, telephone interview, November 15th 2011.

[vii] Rose 2011: 21.

[viii] SANDAG (2011b): Board of Directors Discussion and Actions, October 28, 2011: 5.

[ix] SANDAG (2011c), Board of Directors Agenda, November 18, 2011, Item 15: 2011 TransNet Plan of Finance Update, Attachment 4.

[x] Metropolitan Transportation Commission (2011a), Staff presenta¬tion to the Planning Committee, April 8, 2011.

[xi] Governor's Office of Planning and Research (2010), *The California Planners' Book of Lists 2010*.

[xii] SANDAG 2011a: 3-3.

[xiii] SANDAG 2011b: 5.

[xiv] Williford, D. (2011), Memorandum to Regional Council re: Proposed recommendations for the Draft 2012 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS): 5.

[xv] California Government Code §65080(b)(2).

[xvi] SANDAG 2011a: 3-3.

[xvii] SANDAG 2011a: 3-78.

[xviii] Metropolitan Transportation Commission (2005), MTC Resolu¬tion 3434 Transit-Oriented Development (TOD) Policy for Regional Transit Expansion Projects, July 27, 2005. The minimums are averaged along a corridor, to accommodate differences between stations and the inability to develop in certain locales. It includes both existing plus planned housing.

[xix] Metropolitan Transportation Commission (2011b), Memorandum to the Planning Committee re: OneBayArea Grant – Cycle 2 STP/CMAQ Funding, July 8, 2011.

[xx] SANDAG 2011a: 3-3.

[xxi] Ganson, C. (2011), Governor's Office of Planning and Research Memorandum to SANDAG, August 15, 2011.

[xxii] SANDAG 2011b: 5.

[xxiii] Ganson 2011.

[xxiv] Patterson, T., and S. Durbin (2011), Memorandum to SANDAG re: Draft Environmental Impact Report for 2050 Regional Transportation Plan and Sustainable Communities Strategy, September 16, 2011.

[xxv] California Air Resources Board, Board Meeting, September 22, 2011, transcript: 127.