August 1, 2011

VIA EMAIL AND HAND DELIVERY

Rob Rundle, Principal Regional Planner
SANDAG
401 B Street, Suite 800
San Diego, CA 92101
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Re: Move San Diego Comments on the 2050 Regional Transportation Plan Draft Environmental Impact Report

Dear Mr. Rundle:

We appreciate the opportunity to respond to the 2050 Regional Transportation Plan Draft Environmental Impact Report (DEIR) dated June 2011.

Move San Diego is a non-profit organization devoted to advocating sustainable transportation systems and land use policies. As such, we support SANDAG’s efforts to integrate land uses, transportation systems, infrastructure needs, and public investment strategies within a regional smart growth framework. We submit this letter with the aim of providing SANDAG with useful comments to ensure that preparation of the DEIR reflects SANDAG’s goal to plan for a smart growth transportation network and that it fully complies with CEQA. Thank you for this opportunity to provide valuable feedback on this essential component of the 2050 Regional Transportation Plan.

Move San Diego demonstrated support in December 2010 for the 2050 RTP Preferred Scenario, or the Hybrid scenario. However, after having reviewed the DEIR, we are concerned that that draft 2050 RTP does not go far enough to mitigate overall impacts from single passenger automobile travel.

We appreciate the alternatives evaluated by SANDAG in the EIR, and think they offer valuable lessons learned about density, urban infill, and strategies on how growing smarter will benefit the region from reduced emissions and acres conserved.

Move San Diego requests SANDAG review the newly revised FAST Plan, prepared independently by Move San Diego’s team of expert consultants. (See Attached, FAST plan dated June 30, 2011). It contains ideas and strategies on how to think differently about the future of regional and local rapid transit options that will save money, reduce operating costs and help SANDAG meet long term sustainability goals by increasing transit ridership in urban corridors. The revised 2011 FAST plan summary is attached for your convenience and for the public record. The tight timeline
SANDAG is working with for RTP adoption may in fact preclude a full evaluation of the revised FAST plan for this iteration of the RTP. However, as the RTP is an ever changing document, and in accordance with this recommendation in the DEIR, “SANDAG shall and implementing agencies should coordinate with cities and San Diego County early in the planning process for [transportation] facilities to identify potentially significant land use impacts and address them through the facility planning and design process” we request SANDAG and its partner cities review the transit projects and tools presented in the FAST plan in order to meet the region’s mobility goals in a cost effective manner.

A. Greenhouse Gas Emission Reductions

The reduction of greenhouse gas (GHG) emissions over the next 40 years serves as the backbone of the 2050 Regional Transportation Plan’s Sustainable Communities Strategy (SCS) in order to comply with Senate Bill 375 (SB 375). The Plan implies that the San Diego region will either meet or exceed the GHG reduction targets in both 2020 and 2035 with the understanding that a 2050 target is not yet available. However, a concerning discrepancy exists in reviewing Section 4.08 of the DEIR as it states that increased GHG emissions are actually expected to occur in horizon years 2035 and 2050 (a significant and unavoidable impact). DEIR at 4.8-23 and 4.8-26. This is unacceptable given the fact that specific targets have been set by the California Air Resources Board not only to ensure compliance with state law, but also to improve the quality of life for all San Diego County residents.

All mitigation measures that have been identified to reduce impacts related to increased GHG emissions over 2010 levels in 2035 and 2050 fail to provide a mechanism to actually guarantee emission reductions long term. It is well understood that the region will experience significant growth in population, housing and employment. However, both new and existing communities can be advanced to better promote infill, smart growth, transit-oriented developments, and a more efficient and extensive transit and active transportation network – factors that will significantly reduce GHG emissions in the region.

In addition, on-road transportation emissions account for approximately 49.65% of San Diego County’s total emissions in comparison to the state of California’s average rate of 37%. DEIR at 4.8-4 to 4.8-5. Unless more effective methods of reducing emissions are implemented, this regional value will only increase thereby increasing the risk for future air quality violations. In addition, only a 2005 per capita transportation emissions value is provided in this report. Therefore, a more current per capita estimate, in addition to projected values, is needed for adequate comparison.

B. Vehicle Miles Traveled

Both the 2050 RTP/SCS and DEIR lack the transparency necessary to show whether all planned transportation projects are fully compliant with SB 375. It is also worrisome to see that in the 2050 RTP, investments in transit only exceed that of highways by three percent. Given that the region is required to plan for a more sustainable future, the fact that any capital investments in transit only slightly exceed that of highways is contrary to what is at the heart of SB 375: a significant reduction in GHG emissions over time that is a direct result of smarter land use and transportation planning and implementation. Greater efforts must be made on the part of
SANDAG and local jurisdictions to foster a transit-first strategy in order to ensure proper compliance with this landmark measure.

Reduction in total vehicle miles traveled (VMT) is one of the crucial means by which GHG emissions can be significantly reduced, as expressed in SANDAG’s Climate Action Strategy (CAS). The DEIR states, “implementation of the 2050 RTP/SCS would not impede the CAS and would constitute a less than significant impact.” DEIR at 4.8-30. However, a 1% decrease in VMT between 2010 and 2050 as stated in the RTP should in no way be considered a less than significant impact by the Plan’s DEIR. In addition, the congested vehicle miles traveled will experience a 4% net increase between 2010 and 2050. This is counterintuitive, considering that VMT reduction is repeatedly stated throughout the 2050 RTP/SCS as a means by which to reduce GHG emissions. Are there any other methods that can have a larger impact on reducing GHG emissions over the next 40 years?

Transit is a proven means of reducing Vehicle Miles Traveled. The 2050 RTP EIR should evaluate strategies that within the range of expected capital resources, and further explore innovative ideas on how to design dedicated transit infrastructure better matched to market demand.

C. Air Quality

A review of Section 6.0 of the DEIR reveals that all plan alternatives except the No Build Scenario each display air quality impacts that are either significant but less than the 2050 RTP/SCS or less than significant but less than the 2050 RTP/SCS. Is there any way to incorporate measures taken in one or more of these alternatives into the 2050 RTP in order to lessen the negative impact the region’s growth over the next 40 years will have on overall air quality? Areas of particular concern include: obstruction to the implementation of the applicable Air Quality Attainment Plans (AQ-1), violations of air quality standards or substantial contributions to existing or projected air quality violations (AQ-2), cumulatively considerable net increases of emissions of any criteria pollutant for which the project region is in nonattainment under applicable NAAQS or CAAQS (AQ-3), and exposure of substantial pollutant concentrations to sensitive receptors (AQ-4). The RTP falls short with regards to the air quality criteria in comparison to most alternatives. Can the 2050 RTP incorporate measures from these other plan alternatives which further reduce the negative impacts on air quality?

D. Transportation

It is disappointing to see that only one mitigation measure is proposed for all significant impacts associated with transportation travel times and trip accessibility. This measure, TRANS-A, merely calls for a reevaluation of regional travel times prior to 2035 and 2050. We feel that more frequent evaluation is needed in order to better assess how the network can be improved in order to coincide with each occasion a new RTP is adopted. Additionally, we request that more innovative mitigation measures be proposed and included in future RTP updates in order to convert all impacts associated with the transportation network to less than significant. Transit should not merely support future land use development in the region (i.e., “Smart Growth”), but it also support existing urban form, particularly in dense nodes and other areas of high demand.
We have learned from UC Berkeley professor Robert Cervero\(^1\) that for many American cities, the ability of transit to shape the future of that city depends in great measure on the extent to which transit adapts to and serves the city as it already exists. Rather than locate transit away from where market demand is concentrated (due to the availability of easier, cheaper alignments), we propose SANDAG targeting these very areas, and converting transit into the *preferred* transportation mode.

The significant impacts caused by the 2050 RTP demonstrate that we need to further create the kind of transit system that San Diegans will *want* to use because it provides a *competitive alternative to driving—and parking—a car*, not because people are forced out of their cars.

The 2050 RTP would result in increased work travel time (T-1) and a decrease in the percentage of non-related trips accessible within 15 minutes (T-3). These are important factors in the RTP with the goal of creating more efficient transportation for the region. Alternative 3a would create a less than significant impact on work travel time in 2035, and a significant impact but less than the RTP in 2050. Alternative 3b would create a less than significant impact on work travel trip times in 2035 and have the same significant impact in 2050 as the RTP. Both alternatives 3a and 3b would increase the percentage of non-related trips accessible within 15 minutes. For each option, there would be a less than significant impact in 2035 and a significant impact less than the RTP in 2050. The transit emphasis alternatives would provide a more efficient transportation system than the 2050 RTP does in terms of these impacts. Is it possible for the 2050 RTP to include the improvements on impacts T-1 and T-3 as presented in RTP Alternatives 3a and 3b?

There is an error within the DEIR that needs to be corrected. The list of differences in transportation impacts states that “The 2050 RTP would substantially decrease the percent of non work-related trips accessible in 15 minutes (by any mode), a significant impact, whereas Alternatives 2a, 2b, 3a, and 3b would not. (Impact T-2).” DEIR at 6-187. This is incorrect as this refers to the impact T-3 rather than T-2. There is no point made about the differences in impacts for T-2.

**E. Land Use**

Ultimately, we have are disappointed at the lack of information in the Sustainable Communities Strategy to outline how the dramatic shift in new development, 80% multi-family AND 89% in Transit Priority Area, will take place. The Smart Growth Concept Map should be the visionary document that proposed a guide for local jurisdictions to plan to. It does not follow logic to better coordinate land use and transportation without a lead agency guiding this effort. Our Smart Growth Concept Map is composed of uncoordinated efforts by local jurisdictions to plan their preferred land uses, without regard to how those land uses impact the overall regional transportation system. In a region with limited funding for transit compared to other large metropolitan regions (SCAG, MTC, Chicago, Portland, Seattle, Boston) we must plan land uses to maximize our current and planned transit investments.

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\(^1\) Cervero’s seminal study, *The Transit Metropolis*, describes the relationship between transit and urban form.
The EIR's land use assumptions regarding the amount of developed land in the San Diego region contradict those provided by the County of San Diego. In Section 4.11.1, the EIR states that "over half (approximately 1,873,133 acres) are currently developed or being used for some sort of man-made activity." The County of San Diego's General Plan Update states that 84% of the total land of San Diego County is in the unincorporated land (page 1-28) and in excess of 90% of the unincorporated land is either open space or undeveloped (page 3-3). Thus, the General Plan Update assumed that less than 25% of the land in the San Diego region is developed or used for man-made activity, a starkly different number than the EIR's. Please reconcile this with the description of the existing conditions in the County of San Diego's Draft General Plan Update. A flawed baseline could have ripple effects throughout the EIR, including skewed land use and transportation analysis.

In Section 4.11.4, the EIR's land use analysis describes the potential negative effects of increased density on community cohesion and character but does not mention the potential benefits. Increasing densities in existing areas can have benefits on community cohesion and character, such as sufficient population to support better public transit, which in turn helps to connect communities and strengthen community character. TOD in its true form creates community cohesion, and creates TOC- transit oriented communities. Smart, world class underground stations with appropriate services can bring communities together, by create walkable and transit oriented opportunities that give communities depth and economic vitalization. In addition, focusing density in the existing urbanized areas helps alleviate growth in rural areas, thus preserving the rustic character of those communities. Please also cite the potential positive impacts of increased density to community cohesion and character in this section.

The EIR's land use analysis uses a population projection that is 2.7% lower than what is projected by the Department of Finance in 2050, totaling 123,861 people less. While this is within the 3% deviation allowed by SB 375, it nonetheless could result in flawed conclusions. The EIR has analyzed land use and transportation impacts without considering that an additional 123,861 people may be living in the County and using its transportation networks. Please ensure that the EIR's analysis uses conservative population projections.

F. Improving Transit Ridership Modeling

It is one thing to conceive of an effective transit system; it is another to ensure that its impacts can be properly and fairly modeled. Indeed, for any transit project to make it into the Regional Transportation Plan, it must be backed-up by modeling results that show that the investment required to build the project can generate enough ridership to justify the investment. Transit ridership modeling is an arcane field that approaches rocket science in many aspects. At its root, though, is a simple premise: the more competitive a transit trip is relative to a person’s other options, the more likely a person is to use transit. If 100 people need to make a trip from Zone X to Zone Y and transit is significantly slower and more inconvenient than driving, then the probability of someone making that trip by transit is very low; say, 2%. So out of that 100 people, we would expect 2 people to choose transit. As transit becomes faster, more direct, better located, easier to use, and even just “feels better,” we would expect more people to use it.
The experience of transit projects across the US and in other highly-developed countries reflects this pattern. For example, Los Angeles has developed an express bus network Metro Rapid, that differs little from their bus system except that it uses specially-painted buses, stops only about once every mile, and that buses communicate with traffic signals to ensure that the bus doesn’t fall behind schedule. The improvement in travel speeds—about 15-25%, depending on corridor—have been matched by a similar increase in corridor ridership.

In the case of San Diego, Move San Diego contracted with a highly-regarded modeling specialist to review published documentation on SANDAG’s Regional Travel Model in order to assess the effectiveness of the model at projecting ridership on new transit modes or other significant improvements to the regional travel network. To be sure, the model is constantly evolving, and SANDAG has worked hard to improve the model over the years.

The Regional Travel Model is composed of many sub-models, as well as base data. Among its many fine features, the model stands out for its granularity; namely, SANDAG breaks the region down into many Transportation Analysis Zones (TAZs), more than one would normally find, and these allow for more accurate assessment of traffic and transit ridership.

At the same time, our modeling specialist identified a set of improvements which could not merely “fine-tune” model results, but produce rather striking improvements in transit ridership for a significantly improved transit network. In other words, the model, as then documented, was not set up to accurately project ridership uptake of transit among the lower- and upper-middle income market. As a result, the model seemed to underproject ridership on exactly those kinds of transit improvements that could make serious inroads in these markets. The region, in effect, was leaving tens and perhaps hundreds of thousands of potential transit trips “on the table,” transit trips that would relieve serious pressure on our roadway network and that would provide stronger support for the many Smart Growth initiatives adopted by the region’s municipalities.

To be more specific, our modeling expert identified these specific issues:

- The “dollar value of time” for the upper income group (this group includes households with only modest incomes, as well as wealthier households) far exceeded expected values for this group, as well as Federal guidelines. The exceedingly high base value meant that the value placed on waiting time and access time (walking or driving to/from transit) exerted much too great an influence on model results. As an example of the impact of this, it was discovered that the model projected that ridership on the Coaster Commuter Rail would be drawn from lower income groups than was actually observed. To correct this, a Coaster adjustment factor was added, but this kind of correction is at best a patch; it doesn’t get at the underlying factors driving ridership, and it doesn’t allow you to project ridership on other transit projects that promise similar travel speeds and customer experience.

- The same “ratio of coefficients” was applied to each of the three income groups modeled, meaning that the relative importance of in-vehicle time, wait time, access time, etc., was
kept for all groups. Market research in San Diego and other cities has found that the relative importance of each of these attributes is not static across groups, but varies based on other behavioral or attitudinal factors.

- The model seemed biased in favor of light rail over other modes. It’s true that light rail is a relatively attractive transit mode, but the weight given to it was out of proportion to the other factors. Bus Rapid Transit (BRT) was assigned an attractiveness value at just half of LRT, regardless of the mode of BRT employed. There is a vast difference in the relative attractiveness of, say, LA’s Metro Rapid (what some describe as “BRT Lite”) versus LA’s Orange Line (which operates in a dedicated busway in the San Fernando Valley), to use a nearby example; this difference can make a big difference when evaluating projects.
- The model relied too heavily on “calibration” for its results. Normally, “calibration” implies fine-tuning, but in the case of the model, calibration factors could range from 0.5 to 2.0, meaning that the model would convert the projected ridership of two trips, each of which was initially projected to attract 100 riders each, to 50 riders and 200 riders. While this calibration might permit the model to produce reasonably accurate projections of ridership on the current system, it would tend to distort, often significantly, ridership projections for a very different transit network.
- The model appeared as well to under-project employment in several key sites where employment density has increased (such as Sorrento Mesa), leading to lower ridership projections for these zones.

To be fair, modeling is an extremely intricate and difficult task, and SANDAG is to be commended for its commitment to continuous model improvement. Nonetheless, it was apparent to us that, as was earlier noted, the current model, as documented, was likely to discount the potential of a highly improved transit system, particularly among middle income groups, leading to the selection of slower and less-well-integrated transit projects and placing that much more pressure on the road network. The model was, in effect, pushing the region’s decision-makers to spend more dollars dealing with auto congestion, when a more optimized transit plan could by itself reduce the need or timeline of many of those road projects.

Closing Thoughts

The 2050 RTP/SCS and DEIR represent a unique opportunity to substantially alter the land use and transportation landscape of this region in order to achieve a more sustainable future. Reducing greenhouse gas emissions through the development of smarter, more compact communities, in addition to expanded transit networks, serves as the primary method for realizing this goal. While there has been significant advancement toward the goal of building sustainable communities with world class public transit, land uses and transportation projects will need further refinement in order to accommodate the future projected population growth of the region in a way that maximizes our investment, and provides the least impact on the environment all while increases the standard of living for all.

Ideally, the RTP EIR would have present an alternative that has such a robust transit plan, that overall transit ridership would be increased to 10%, not just transit commute trips.
Robust, rapid transit improvements will likely encourage residents to switch from driving single occupant vehicles to riding transit, thereby contributing to the necessary ridership rates that will redefine transit as a primary mode of travel while also fulfilling one of the essential goals of the RTP: “to develop an ambitious and far-reaching transit network that significantly expands the role that transit plays in meeting the region’s mobility needs.” RTP at 6-6. Thank you for the opportunity to comment.

Sincerely,

ELYSE W. LOWE
Executive Director
Move San Diego