

AGENDA: October 15, 2009

TO: Transportation Policy Workshop
FROM: George Dondero, Executive Director
RE: Sustainable Transportation Access Rating System (STARS)

RECOMMENDATIONS

Staff recommends that the Regional Transportation Commission (RTC):

1. Accept a presentation on the Sustainable Transportation Access Rating System (STARS)
 2. Direct staff to develop a scope of work to engage the North American Sustainable Transportation Council (NASTC) in applying STARS to the Highway 1 High Occupancy Vehicle (HOV) Lanes project, and -
 3. Return at a future meeting with a scope of work and contract for approval by the RTC.
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BACKGROUND

Recent developments in climate science continue to underscore the need to address the sources of potential climate change. Some scientists say that the increasing output of carbon dioxide (CO₂) into the atmosphere must be stabilized, if not reversed soon to avoid catastrophic changes in the environment. It is well known that transportation is a major contributor of GHG emissions, and is the one sector that is growing faster than any others.

Regulatory agencies at the state and federal levels are evolving to address the challenge of global climate change, and it is likely that many new measures will be enacted to address the need to reduce emissions. California has been at the forefront of this activity. The passage of AB 32 in 2006 and SB 375 in 2008 put transportation planners and decision makers on notice that climate change was becoming embedded in the process of planning, prioritizing and building transportation projects.

Since 2003 the RTC has been developing preliminary designs and the environmental studies for improvements on the State Route (SR) 1 corridor, known as the Highway 1 HOV Lanes Project. The project helps to address CO₂ and other emissions by encouraging bus and carpool use, walking and bicycling, all of which reduce CO₂ emissions and imported oil use. In 2007 the RTC added an element to the consultant's contract, to develop a sustainability assessment of the project. Engineers at Nolte Associates, the lead consultant on the project, have begun that work. As this work was getting underway, staff embarked on a search for tools that might improve the decision making process as it pertains to sustainability within the planning, environmental and early design phases. Initially the search turned up little, but in the spring of 2009 that changed.

DISCUSSION

Introducing STARS

In late July of 2009 staff met with a team of professionals in Portland, Oregon who are developing the Sustainable Transportation Access Rating System (STARS). The STARS program is being developed in a way similar to that of the Leadership in Energy and Environmental Design (LEED) Green Building Rating System, developed by the U.S. Green Building Council (USGBC). LEED provides a suite of standards for economically and environmentally sustainable building and neighborhood construction and operation. Since its inception in 1998, LEED has grown to encompass more than 14,000 projects in the United States and 30 countries. The hallmark of LEED is that it is an open and transparent process where the technical criteria proposed by the LEED committees are publicly reviewed for approval by the more than 10,000 membership organizations that currently constitute the USGBC.

STARS is being developed explicitly for transportation plans, employer programs, and projects by a dozen transportation professionals in the public and private sectors in the Pacific Northwest. The system is not yet fully developed and the development team wants to further refine the system by engaging with a “live” project before it has completed the environmental process. After extensive discussions with RTC staff, the STARS team expressed interest in the Highway 1 HOV Lanes Project. STARS would be used to analyze the mobility and sustainability elements of the Highway 1 HOV Lanes Project to provide options for increased mobility and sustainability. Peter Hurley and Tim Burkhardt of the North American Sustainable Transportation Council will present the development, application and potential benefits of STARS. Laura Bonich with Nolte Associates will also present some of the work the Nolte team has developed regarding a sustainability assessment of the HOV Lanes project.

Timing –

It is not clear how extensive new CARB regulations will be, but they are coming soon. What is clear is that transportation planning agencies will at a minimum, be putting emphasis on:

- Reduction of CO₂ emissions, and therefore
- Reduction of Vehicle Miles Travelled (VMT)
- Better connections between land use and transportation planning
- More compact development patterns

On September 29, 2009 the Regional Targets Advisory Committee (pursuant to Senate Bill 375) submitted its recommendations to the California Air Resources Board (CARB) (<http://www.arb.ca.gov/cc/sb375/rtac/report/report.htm>). By the time the draft environmental documents for the HOV Lanes project are ready for release (fall 2010), CARB will have set regional targets for reduction of Greenhouse Gas (GHG) emissions. Targets are mandated by statute to be adopted in September 2010.

Recently the US Environmental Protection Agency (EPA) made news when it announced that it would likely be regulating CO₂ emissions from both stationary and mobile sources. It is not clear how much the EPA will copy new California regulations which are likely to become law before the federal agency has time to act. Concurrently, Congress will be working on a new federal

transportation funding bill to define programs, parameters and funding levels for the next six years. Two federal commissions issued recommendations in 2008 for a major overhaul in the federal transportation funding structure which now supports 108 funding programs.

Finally, the STARS team expects to have a fully loaded program ready to roll out nationally in late 2010 to early 2011. It will be administered by the North American Sustainable Transportation Council, a newly formed non-profit organization based in Portland, Oregon.

The convergence in the 2010 – 2011 timeframe of new emissions regulations, potential new funding structures, completion of the environmental documents on the HOV Lanes project and the development of STARS suggest potential opportunities for the RTC. These will be discussed during the presentation and discussion at the October 15 meeting.

Benefits of STARS

STARS is a rational approach to push a project to perform better using mobility and sustainability planning and evaluation criteria. It will provide a mobility and sustainability scorecard and help to align the project with community values. As one of the first participants in the program, RTC could gain national recognition as a leader in sustainable transportation. STARS can help position the HOV Lanes project to meet future GHG emissions standards, and could help position it for future funding. The HOV Lane project already incorporates many elements and features that support sustainable transportation. STARS can provide a framework to evaluate and strengthen those aspects which can provide the greatest benefit at the least cost. STARS recognizes and rewards positive benefit/cost scores.

Staff recommends that the Regional Transportation Commission direct staff to work with the North American Sustainable Transportation Council to develop a scope of work and budget to apply STARS to the Highway 1 HOV Lanes project, and return to the RTC at a future meeting for consideration of a contract.

SUMMARY

The Highway 1 HOV Lanes Project incorporates a number of elements that will help to reduce CO₂ and other emissions. The Sustainable Transportation Access Rating System (STARS) being developed by the North American Sustainability Council will help to analyze the mobility and sustainability elements of the project and identify greater mobility sustainability options. Staff recommends that the RTC accept a presentation on STARS and direct staff to develop a scope of work to apply STARS to the Highway 1 HOV Lanes Project.