



DATE: June 10, 2011  
TO: STA Board Workshop  
FROM: Robert Macaulay, Director of Planning  
RE: Implementation of Sustainable Communities Strategy – Development of Alternative Fuels Strategy and Infrastructure for Transit

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**Background:**

In response to state legislation related to climate change (Attachment A) and local concerns expressed about the potential of sea level rise, as well as more traditional air quality concerns related to transportation, STA has initiated programs designed to help reduce emission of Greenhouse Gasses (GHGs) such as carbon dioxide. Many of the steps that reduce transportation-related GHG emissions also help reduce the emission of other air pollutants, including fine particulates, nitrous oxide compounds, and ozone.

The four main activities that can be taken locally to address climate change and promote GHG emission reductions are the completion of a GHG emission inventory, the development of a local Climate Action Plan (CAP), the participation in the development and implementation of the Bay Area SCS, and conversion of vehicle fleets to alternative fuels with lower GHG and other air pollutant emissions.

**Discussion:**

**Local GHG Emission Inventories and CAPs.**

Benicia completed its GHG emission inventory in 2008, and adopted a CAP 2009.

Solano County completed a GHG inventory in 2009, and has adopted a CAP.

The City of Vallejo is developing a GHG emission inventory and CAP on its own, but is coordinating its work with the other cities and the County to make sure that the emission measures and action plan steps are compatible.

The cities of Dixon, Fairfield, Rio Vista, Suisun City and Vacaville, working with the STA, have just completed a GHG emission inventory. Steps are underway to seek a California Strategic Growth Council grant to fund the development of a single CAP that each of the cities and the STA can adopt.

**Regional Sustainable Community Strategy (SCS) Development**

One of the prime tools developed by the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) for the development of the Bay Area SCS is the Priority Development Area (PDA). PDAs are locally-identified locations with the potential for higher density mixed use development, served by frequent public transit. ABAG has estimated that as much as 70% of the Bay Area's future housing growth can be accommodated in PDAs. MTC and ABAG are proposing to focus regional transportation investments in and around the PDAs.

Since most of the PDAs are located in the core Bay Area, Solano County could see a reduction in transportation funds. In order to make sure Solano county transportation projects get a fair share of funding, STA has pursued a two-part SCS strategy:

Seek a *suburban PDA investment strategy* to compliment the urban focus proposed by MTC and ABAG. PDAs in suburban counties such as Solano, Napa, Marin and Sonoma counties will be different from those in dense urban areas such as San Francisco, but they can still contribute to a reduction in GHG emissions. A suburban PDA strategy will make sure that both urban and suburban communities' transportation investment needs are addressed.

Develop an *agricultural and open space incentive program*, consistent with SB 375. This will help make sure that transportation needs in non-developed areas are met, and will support the continued economic viability of agricultural areas such as the Suisun Valley.

#### Assistance to Local Government

One of the biggest challenges faced by local governments is the lack of resources to implement the policies in local CAPs. STA is actively looking for opportunities to help local governments implement the transportation-related measures in their CAPs. STA helps identify fund sources for local programs, including the Bay Area Air Quality Management District TFCA funds and the Yolo Solano Air Quality Management District's Clean Air funds. In addition, STA provided the primary funding and staff coordination for the development of the GHG inventory discussed above.

#### Alternative Fuels Strategy

STA staff is looking at options for developing a Solano County Alternative Fuels and Infrastructure Plan. Since development of a complete Alternative Fuels Plan will likely take until 2012 to complete, an initial Alternative Fuels Strategy, setting broad policy directions, is being developed at this time. STA will convene an ad hoc committee of transit staff, fleet managers, and public works staff to discuss alternative fuel issues for public fleets. The overall approach is the help public fleets convert to alternative fuels as a way to both identify effective technologies and to help supply the supporting infrastructure, such as fueling stations, that are so critical to broader private acceptance of alternative fuel vehicles. Since approximately 60 intercity transit buses will need to be replaced in the next 5 to 10 years, there will be an opportunity to make a wholesale change to alternative fuels for this vehicle fleet.

Both the Bay Area Air Quality Management District (BAAQMD) and Yolo Solano Air Quality Management District (YSAQMD) have shown an interest in helping fund alternative fuel vehicles and infrastructure. There may also be public-private partnership opportunities for development of fueling infrastructure along the I-80 corridor.

Finally, in February of 2010, STA adopted a Climate Change Strategy covering both on-going and planned activities to reduce GHG emissions. The Strategy was updated in 2011, and the updated Strategy is shown in Attachment B. The strategy include steps that STA and local agencies were already taking while a more comprehensive approach was articulated.

#### Workshop Discussion:

1. How can STA best support the cities and county as they develop Climate Action Plans?
2. Are there additional ideas that should be incorporated into the development of a suburban PDA strategy and financial incentives for preservation of farmland and resource areas?
3. Should STA continue to pursue a public-fleet-first alternative fuels strategy?

Attachments:

- A. Climate Change Legislative Background
- B. STA's 2011 Adopted Climate Change Strategy

### **Climate Change Legislative Background**

California's climate change legislation is based on the premise that 1) the atmosphere and seas are warming, 2) that the warming is primarily or substantially caused by human activities that release carbon dioxide and other Greenhouse Gases (GHG) into the air that trap heat generated by sunlight, 3) that this warming will have negative impacts on California, the nation and the world, and 4) by reducing GHG emissions in California, we can stop or reverse the heating process and reduce or avoid the negative impacts.

The foundation documents for California's efforts to reduce GHG emissions are:

- Governor's Executive Order S-3-05 set initial, non-binding targets for overall GHG reductions.
- AB 32, the California Global Warming Solutions Act of 2006 which aims to substantially reduce the emission of Greenhouse Gases (GHG), primarily carbon dioxide, in all aspects of California life.
- SB 375, approved in 2008, which implements a portion of AB 32 by integrating regional decisions on land use planning and transportation investment by way of the development of regional Sustainable Communities Strategies (SCS).

## STA's 2011 Adopted Climate Change Strategy

### Current Activities:

1. Solano Napa Commuter Information (SNCI) Programs. STA, in partnership with the Napa County Transportation and Planning Agency (NCTPA), provides rideshare and vanpool support services and markets the Solano Express Intercity Transit bus service through the Solano-Napa Commuter Information Program. SNCI has developed a partnership with nearly 500 employers in the two counties, and works with them on rideshare coordination and marketing. Twenty-six new vanpools traveling to, through, or from Solano, Napa, Yolo or Sacramento counties were formed in 2008, with 8 vanpools coming to employers in Solano County. SNCI administers two vanpool incentives including a vanpool seat subsidy for new vans and back-up driver incentives. STA is the local sponsor for Bike to Work Day. Solano County residents and employees are offered an incentive to cover 60% of the cost of a new bicycle, up to \$100, for commuting to work. SNCI programs are funded in partnership with the BAAQMD and the YSAQMD.

STA conducts a yearly employer-based Commute Challenge to encourage employer-based commute alternatives. For 2010, a total of 46 employers participated; 620 employees participated, and 350 met the challenge of using a commute alternative for at least 30 days over a three-month period.

**STATUS – Completed its fourth Commute Challenge with 45 employers and 620 employee participants. 121 vanpool supported on a daily basis.**

2. Safe Routes to School Program. STA has developed a comprehensive Safe Routes to School Plan, involving every school district in Solano County. The SR2S Plan addresses the 4Es of Engineering, Encouragement, Education and Enforcement. STA is now working with each district, and 26 individual schools, to implement Phase 1 SR2S programs such as Bike Rodeos and Walk-and-Roll events, as well as projects such as radar feedback signs and street crossing safety improvements.

**STATUS – The expanded SR2S Program has been rolled out, but more schools remain to be covered. An updated SR2S Plan will be completed in 2012. STA has \$1.5 million in grant funding for SR2S Program through 2012.**

3. Alternative Fuel Fleets. There are several Alternative Fuel programs in Solano County. The City of Vacaville has developed a national reputation for alternative fuels because of its electric and Compressed Natural Gas (CNG) vehicle incentive programs; this program is also open to residents of Dixon, Rio Vista and eastern Solano County. In addition, Vacaville has purchased and runs a fleet of CNG buses for local transit, and operates electric vehicles for many daily City tasks. STA has secured a Congressional earmark for purchase of additional clean fuel buses for Solano Express intercity transit routes.

**STATUS – STA is developing a Countywide Alternative Fuels Strategy as a part of the Comprehensive Transportation Plan update. STA staff is meeting with local public works and transit fleet managers to discuss their needs and potential obstacles to converting to an all-alternative fuels fleet. The strategy will look at both vehicle and infrastructure needs, and the possibility of developing an alternative fuels infrastructure corridor along I-80. Funding partnerships with both the BAAQMD and YSAQMD, as well as public-private partnerships, will also be pursued. Development of the Alternative Fuels Strategy is being guided by the Alternative Fuels Committee, made up of STA Board Members and Alternates.**

4. STA Solano County T-PLUS Program. In partnership with MTC, STA’s T-PLUS program provides technical and financial assistance to STA member agencies to plan and implement transportation and land use strategies that promote smart growth concepts. To date, the STA has provided \$125,000 in planning grants and approximately \$4.4 million in capital grants under the STA’s Transportation for Livable Communities (TLC) Program. Projects include development of a TLC Toolkit and TLC workshops with each city, development of an expanded traffic model to include transit and alternative modes, partners in planning, Development of the award-winning Jepson Parkway TLC Corridor Plan and the North Connector TLC Corridor Concept Plan, and active involvement in creation of the Planning for the Northern California Megaregion - Coordinating Transportation and Land Use in the I-80/Capitol Corridor Plan (also known as the I-80 Smart Growth Corridor plan).

**STATUS – STA has awarded an additional \$150,000 in TPLUS Planning Grants to the City of Fairfield for the Fairfield Transportation Center TLC project, has begun to update the Jepson Parkway TLC Plan, and is updating the Solano TLC Plan as part of the Comprehensive Transportation Plan update. STA is also working with City staff to help fund projects in the 9 PDAs, and to support the identification of new PDAs.**

5. Benicia Climate Action Plan. The City of Benicia has conducted a Greenhouse Gas Emission Inventory, and adopted a comprehensive Climate Action Plan. While this is not an STA project, it is the first Climate Action Plan in the county, and does address several STA issues such as ridesharing. The STA will seek to assist Benicia in the implementation of their Climate Action Plan.

**STATUS – Benicia is beginning to implement its Climate Action Plan.**

#### **Planned Activities:**

1. Solano Air Emission Inventory and Action Plan. Building on the success of the Benicia Climate Action Plan, STA and the County of Solano, in coordination with Solano City-County Coordinating Council, funded an inventory of air emissions (primarily GHG) for the cities of Dixon, Fairfield, Rio Vista, Suisun City and Vacaville. Solano County and the City of Vallejo have completed their own inventories, and Solano County has adopted its own Climate Action Plan.

**STATUS – The GHG inventories for the cities of Dixon, Fairfield, Rio Vista, Suisun City and Vacaville have been completed, and provided to those cities for local adoption. STA is coordinating the submittal of a grant application to the state Strategic Growth Council for funds to develop a multi-agency Climate Action Plan based upon the GHG inventories.**

2. Safe Routes to Transit Plan. STA will develop a countywide Safe Routes to Transit (SR2T) Plan, focused on designated Transit Facilities of Regional Significance. The SR2T Plan will include an inventory of traffic accidents, crimes and other safety and access issues around the selected centers and development of an action plan to reduce hazards and increase the attractiveness of transit as a commute choice. This ties in with the Solano Rail Crossing Inventory and Improvement Plan, which was adopted in late 2010.

**STATUS – STA has hired Fehr & Peers as a consultant to assist with development of the Safe Routes to Transit Plan, with the SR2T Plan to be completed in 2011 as a part of the Comprehensive Transportation Plan update.**

3. Safe Routes to School Phase 2. STA has worked with the school districts to expand the number of schools that have complete walking audits and local maps. STA used SR2S funds for three high school interns in 2010 to develop computerized SR2S maps and data for all of Solano County. STA will work with the school districts and cities to implement additional safety programs and construct additional improvements, and will continue to contract for program coordinator position to assist school districts in project delivery. STA will work with MTC and other local agencies to expand SR2S programs and share effective techniques.

**STATUS – STA will hire an additional intern for SR2S mapping, data entry and marketing in 2011, and will seek more stable, long-term funding for SR2S program activities and projects. The SR2S Plan is scheduled to be updated in 2012.**

4. Solano Bicycle and Pedestrian Master Plans. STA has completed the update of the Countywide Bicycle Plan and Countywide Pedestrian Plan, with only minor graphics content remaining before adoption. These plans set out a long-term vision for bicycle and pedestrian investments, and identify top priority projects for funding as it becomes available.

**STATUS – The final Plans will be presented to the STA Board in the fall of 2011.**

5. Solano County Priority Development Areas Implementation. STA is actively working with the 5 Solano cities that have designated PDAs (1 in Benicia, 1 in Vallejo, 1 in Suisun City, 4 in Fairfield and 2 in Vacaville) to develop appropriate transportation and land use projects in these locations. STA is also working with the cities of Benicia and Vallejo to develop 2 new PDAs. The City of Rio Vista has expressed interest in obtaining a PDA designation, and is working with Association of Bay Area Governments staff on determining if the city can meet the land use and transit requirements for a PDA.

**STAUS - STA programmed all of its First Cycle TLC funds to the Vallejo PDA based on the project's readiness. STA has awarded a \$150,000 T-PLUS Planning Grant to the City of Fairfield for access improvements to the Fairfield Transportation Center.**

6. AB 811 Implementation. AB 811 program allows property owners to opt in to a voluntary property tax assessment program that will use the proceeds to fund energy improvements, such as the installation of solar panels, to the individuals property. The City of Benicia is pursuing implementation of and AB 811 program, with initial funds possibly coming from air quality fines levied by the Bay Area Air Quality Management District. Solano County may also pursue an AB 811 program.

**STATUS – Solano County decided to not implement an AB 811 program. There is no further activity on this project.**