TRANSPORTATION COMMITTEE AND REGIONAL PLANNING COMMITTEE

JOINT MEETING AGENDA

Friday, July 19, 2013
10:30 a.m. to 12 noon
SANDAG Board Room
401 B Street, 7th Floor
San Diego

AGENDA HIGHLIGHTS

• SAN DIEGO FORWARD: THE REGIONAL PLAN:
  DRAFT RANGE OF ALTERNATIVE LAND USE AND
  TRANSPORTATION SCENARIOS AND INITIAL
  EMERGING TECHNOLOGY CONCEPTS

• SAN DIEGO FORWARD: THE REGIONAL PLAN:
  DRAFT WHITE PAPER ON PUBLIC HEALTH

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REGIONAL PLANNING AND TRANSPORTATION COMMITTEES
Friday, July 19, 2013

ITEM #  RECOMMENDATION

10:30 a.m. – 12 noon

CONVENE JOINT MEETING OF THE
REGIONAL PLANNING AND TRANSPORTATION COMMITTEES

1. PUBLIC COMMENTS/COMMUNICATIONS/MEMBER COMMENTS

Members of the public shall have the opportunity to address the Regional Planning and Transportation Committees on any issue within the jurisdiction of the Committees that is not on this agenda. Anyone desiring to speak shall reserve time by completing a “Request to Speak” form and giving it to the Clerk prior to speaking. Public speakers should notify the Clerk if they have a handout for distribution to Committee members. Public speakers are limited to three minutes or less per person. Committee members also may provide information and announcements under this agenda item.

REPORTS (2 through 4)

+2. TransNet SMART GROWTH INCENTIVE PROGRAM AND ACTIVE TRANSPORTATION GRANT PROGRAM: STATUS UPDATE AND PROPOSED GRANT AMENDMENTS (Suchi Mukherjee)

SANDAG approved the first round of Smart Growth Incentive Program projects under TransNet in May 2009. Two rounds of Active Transportation Program grants were approved in June 2009 and September 2012. This report provides an overview of the progress made through March 31, 2013, by the grant recipients. The TransNet Independent Taxpayer Oversight Committee recommends that the Transportation Committee approve a no-cost, time-only schedule extension for the City of National City’s Bicycle Parking Enhancements project (an Active Transportation Program Grant). In addition, the Transportation Committee is asked to (1) approve a no-cost, time-only extension to the Active Transportation Grant Program project for the City of National City’s Bicycle Parking Enhancements project; and (2) approve amendments to the FY 2014 Program Budget to reprogram unspent SGIP funds of: approximately $100,000 for the City of San Diego 4th Avenue/Quince Pedestrian Crossing and Traffic Calming project to SANDAG CIP No. 1223022; and approximately $461,000, for the City of San Diego 4th & 5th Avenues/Nutmeg Pedestrian Crossing & Traffic Calming project to SANDAG CIP No. 1223022.
SAN DIEGO FORWARD: THE REGIONAL PLAN: DRAFT RANGE OF ALTERNATIVE LAND USE AND TRANSPORTATION SCENARIOS AND INITIAL EMERGING TECHNOLOGY CONCEPTS (Carolina Gregor, Phil Trom, and James Dreisbach-Towle)

The attached report describes a proposed range of land use scenarios that could be tested this summer to further reduce greenhouse gas emissions, and potential emerging transportation technology concepts that could be paired with the land use scenarios. Input on the land use scenarios and emerging technology concepts has been provided by the Regional Planning Technical Working Group, Cities/County Transportation Advisory Committee, and the public, and is requested from the Transportation and Regional Planning Committees. Feedback from the Committees will be presented to the Board in September. The next phase of the effort, with a greater focus on transportation, will start this fall.

SAN DIEGO FORWARD: DRAFT WHITE PAPER ON PUBLIC HEALTH (Dan Gallagher)

The purpose of this item is to provide opportunities for the Transportation and Regional Planning Committees to discuss the role of public health in San Diego Forward: The Regional Plan. Comments from the Regional Planning Technical Working Group, the Public Health Stakeholders Group, and from the public from the San Diego Forward workshops will be relayed.

UPCOMING MEETINGS

- The next meeting of the Transportation Committee is scheduled for Friday, September 6, 2013, at 9 a.m.
- The next meeting of the Regional Planning Committee is scheduled for Friday, September 6, 2013, at 12 noon.

ADJOURN JOINT MEETING OF THE REGIONAL PLANNING AND TRANSPORTATION COMMITTEES
TransNet SMART GROWTH INCENTIVE PROGRAM AND ACTIVE TRANSPORTATION GRANT PROGRAM: STATUS UPDATE AND PROPOSED GRANT AMENDMENTS

File Numbers 3300100, 3300300

Introduction

This report provides an update through March 31, 2013, on projects funded by two grant programs included in the TransNet Extension Ordinance and Expenditure Plan: (1) the Smart Growth Incentive Program (SGIP), and (2) the Active Transportation Grant Program (ATGP). This report also provides information regarding ongoing oversight efforts and three proposed grant amendments, including one no-cost, time-only schedule extension for the ATGP and two budget amendments for the SGIP.

Discussion

The TransNet Extension Ordinance provides 2 percent of the annual TransNet revenues for both the SGIP and ATGP. In addition, the ATGP receives 2 percent of the annual Transportation Development Act (TDA) revenues. This report includes an update on the progress of both grant programs through March 31, 2013 (Attachments 1, 2, and 3), and information regarding ongoing oversight efforts and the current funding cycles for both programs.

Smart Growth Incentive Program

The SGIP was established through the TransNet Extension Ordinance “to provide funding for a broad array of transportation-related infrastructure improvements that will assist local agencies in better integrating transportation and land use.”

In May 2009, SANDAG awarded $9.4 million in funding to 14 projects (six planning grants and eight capital grants) for the first two-year cycle of the TransNet SGIP. Of the 13 projects that went forward, 6 have been completed and the remaining projects are scheduled to be completed by the end of FY 2014 (June 2014) with the exception of two SGiP projects as described below.

Recommendation

The Transportation Committee is asked to:

1. approve a no-cost, time-only extension to the Active Transportation Grant Program project for the City of National City’s Bicycle Parking Enhancements project; and

2. approve amendments to the FY 2014 Program Budget to reprogram unspent SGIP funds of:

- approximately $100,000 for the City of San Diego 4th Avenue/Quince Pedestrian Crossing and Traffic Calming project to SANDAG CIP No. 1223022; and

- approximately $461,000, for the City of San Diego 4th & 5th Avenues/ Nutmeg Pedestrian Crossing & Traffic Calming project to SANDAG CIP No. 1223022.
In June 2013, SANDAG awarded $9.6 million in funding to 13 projects (seven planning grants and six capital grants) for the second cycle of the TransNet SGIP. Progress on these projects will be included in future reports.

*Proposed Smart Growth Incentive Program Amendments*

The City of San Diego is requesting to transfer the responsibility for completion of the 4th Avenue/Quince and 4th and 5th Avenues/Nutmeg Pedestrian Crossing & Traffic Calming projects to SANDAG for implementation through the Regional Bicycle Plan Early Action Program (Attachment 4). Due to the planned regional bicycle and pedestrian improvements in the area, staff from the City of San Diego and SANDAG propose transferring the management, design, and completion of these projects for consolidation with the Uptown Regional Bicycle Corridor project, which is currently being managed by SANDAG. To assume these activities, SANDAG staff requests that the Transportation Committee (1) reprogram the unspent funds of approximately $100,000 from the original grant of $231,000 for the 4th Avenue/Quince project and (2) reprogram the unspent funds of approximately $461,000 from the original grant of $577,000 for the 4th and 5th Avenues/Nutmeg project to SANDAG Capital Improvement Program (CIP) Project No. 1223022, Bicycle Facilities: Old Town to San Diego, in the FY 2014 Program Budget (Attachment 5). The ITOC reviewed the proposed amendments at its July 10, 2013, meeting.

*Active Transportation Grant Program*

The TransNet Extension Ordinance specifies that ATGP funds be used “for bikeway facilities and connectivity improvements, pedestrian and walkable community projects, bicycle and pedestrian safety projects and programs, and traffic calming projects.”

In June 2009, SANDAG awarded $7.8 million in TDA and TransNet funding to 30 projects (12 planning, parking, and education program grants; and 18 capital grants) for the first cycle of this program under the TransNet Extension. Of the 30 projects, 23 have been completed and 5 remaining projects are scheduled to be completed by the end of FY 2014 (June 2014). One project from this cycle was terminated, and another was transferred to SANDAG for completion through the Regional Bicycle Plan Early Action Program.

In September 2012, SANDAG awarded $8.8 million in TDA and TransNet funding to 25 projects (14 planning, parking, and education program grants; and 11 capital grants) for the second cycle of this program under the TransNet Extension. This report provides the first quarterly status update for these projects. All grant agreements for this cycle have been executed. Currently, scheduled completion dates range between this summer through FY 2016 (June 2016).

Of these two cycles, one ATGP project is requesting a schedule extension.

*Proposed Active Transportation Grant Program Amendment*

The City of National City is requesting a no-cost, time-only schedule extension for the Bicycle Parking Enhancements project from September 31, 2013, to September 31, 2014 (Attachment 6). The 12-month extension would allow the grantee to pursue an opportunity to more actively engage the local community in the design and installation process for the bicycle racks by partnering with a local non-profit organization and Sweetwater High School students to custom design and fabricate the racks being funded through the grant. The ITOC approved the requested schedule amendment at its July 10, 2013, meeting.
Grant Monitoring & Oversight

Staff reviews quarterly reports to ensure that grantees are making timely progress with respect to the key milestones identified in Board Policy No. 035: Competitive Grant Program Procedures (Attachment 7) governing the timely use of grant funds, and their respective grant agreements. The “Watch List” column in Attachments 1 to 3 is used to identify those grantees in danger of missing their scheduled milestone dates who have not yet worked with staff to take corrective action. Delays in tasks leading up to either the award of a contract or project completion may place grantees on the watch list.

In addition, staff reviews project deliverables for consistency with the agreed-upon scope of work. Quarterly status updates are presented to the ITOC and the Transportation and Regional Planning Committees on a regular basis.

Next Steps

If approved by the Transportation Committee, staff will process amendments to the grant agreements accordingly. The next status update on the SGIP and ATGP will be provided in fall 2013.

CHARLES “MUGGS” STOLL
Director of Land Use and Transportation Planning

4. City of San Diego Request to Transfer Completion for 4th & 5th Avenues/ Nutmeg and 4th Avenue/Quince Pedestrian Crossing & Traffic Calming
5. Proposed FY 2014 Budget Amendment for CIP 1223022, Bicycle Facilities: Old Town to San Diego
6. City of National City Schedule Extension Request for Bicycle Parking Enhancements
7. Board Policy No. 035: Competitive Grant Program Procedures

Key Staff Contact: Suchi Mukherjee, (619) 699-7315, suchitra.mukherjee@sandag.org
## Status of FY 2009 - FY 2010 TransNet Smart Growth Incentive Program Projects

Reporting period through March 31, 2013

<table>
<thead>
<tr>
<th>Grantee</th>
<th>Project Description of Project Activities</th>
<th>Grant Amount</th>
<th>Contract Execution Date</th>
<th>Contract Expiration Date*</th>
<th>Watch List**</th>
<th>Status</th>
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</thead>
<tbody>
<tr>
<td><strong>FY 2009 - FY 2010 Smart Growth Incentive Program Projects (In Progress)</strong></td>
<td></td>
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<tr>
<td>1 Chula Vista</td>
<td>Palomar Gateway District Specific Plan &amp; EIR PLANNING: Plans for smart growth development and the EIR necessary to allow the implementation of transit oriented development around the Palomar Street Trolley Station.</td>
<td>$399,632.00</td>
<td>01/25/10</td>
<td>06/30/13</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>2 Lemon Grove</td>
<td>Lemon Grove Trolley Plaza CAPITAL: Improves pedestrian access from buses to the Trolley and integrates planned mixed-use development around the station area.</td>
<td>$1,895,000.00</td>
<td>12/14/09</td>
<td>11/30/13</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>3 National City</td>
<td>8th Street Corridor Smart Growth Revitalization CAPITAL: Improves bicycle and pedestrian access from the 8th Street Trolley to the National City Town Center and enhances streetscape for public markets and other civic events along the corridor.</td>
<td>$2,000,000.00</td>
<td>01/26/10</td>
<td>06/30/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>4 San Diego</td>
<td>Chollas Triangle Master Plan PLANNING: Provides a master plan with specific land use and mobility recommendations to encourage a mixed-use, transit-oriented village supported by park, open space, and creek enhancements.</td>
<td>$275,000.00</td>
<td>02/04/10</td>
<td>12/31/13</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>5 San Diego</td>
<td>Park Boulevard/City College/San Diego High Pedestrian &amp; Transit Access Improvements CAPITAL: Improves safety and walkability for pedestrians and improves transit access near the entrances for two urban schools—City College and San Diego High.</td>
<td>$300,000.00</td>
<td>05/23/11</td>
<td>02/28/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>6 San Diego</td>
<td>4th &amp; 5th Avenue/Nutmeg Pedestrian Crossing &amp; Traffic Calming CAPITAL: Enhances pedestrian crossing with curb extensions and in-pavement flashing crosswalks.</td>
<td>$577,000.00</td>
<td>07/23/10</td>
<td>09/01/13</td>
<td>No</td>
<td>Request to transfer completion to SANDAG for consolidated implementation through the Regional Bicycle Plan Early Action Program.</td>
</tr>
<tr>
<td>7 San Diego</td>
<td>4th Avenue/Quince Pedestrian Crossing &amp; Traffic Calming CAPITAL: Enhances pedestrian crossing with curb extensions and in-pavement flashing crosswalks.</td>
<td>$231,000.00</td>
<td>07/23/10</td>
<td>09/01/13</td>
<td>No</td>
<td>Request to transfer completion to SANDAG for consolidated implementation through the Regional Bicycle Plan Early Action Program.</td>
</tr>
<tr>
<td><strong>FY 2009 - FY 2010 Smart Growth Incentive Program Projects (Completed)</strong></td>
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</tr>
<tr>
<td>8 Chula Vista</td>
<td>Industrial Boulevard Bike Lane &amp; Pedestrian Improvements CAPITAL: Provides sidewalk and bicycle improvements near Harbor Side School and the Palomar Blue Line Trolley Station.</td>
<td>$283,900.00</td>
<td></td>
<td>PROJECT COMPLETE - JULY 2012</td>
<td></td>
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</tr>
<tr>
<td>9 Chula Vista</td>
<td>Third Avenue Streetscape Implementation Project CAPITAL: Implements streetscape enhancements, traffic calming, and improved pedestrian crossings in Chula Vista's Third Avenue Village.</td>
<td>$2,000,000.00</td>
<td></td>
<td>PROJECT COMPLETE - MARCH 2013</td>
<td></td>
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</tr>
<tr>
<td>10 San Diego</td>
<td>Mid-City SR 15 BRT Station Area Planning Study PLANNING: Analyzes the development potential, proposes urban design guidelines, and creates a nonmotorized access plan for the SR 15 BRT station areas in Mid-City.</td>
<td>$225,000.00</td>
<td></td>
<td>PROJECT COMPLETE - FEBRUARY 2013</td>
<td></td>
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<tr>
<td>11 San Diego</td>
<td>Euclid &amp; Market Village Master Plan PLANNING: Provides a focused mobility and land use master plan for the Orange Line Trolley station area at Market Street.</td>
<td>$400,000.00</td>
<td></td>
<td>PROJECT COMPLETE - MARCH 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 San Diego</td>
<td>Imperial Avenue &amp; Commercial Street Corridor Plan PLANNING: Produces a new land use and mobility strategy for the corridor with urban design guidelines for streetscape and development projects.</td>
<td>$400,000.00</td>
<td></td>
<td>PROJECT COMPLETE - MARCH 2013</td>
<td></td>
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<tr>
<td>13 San Diego</td>
<td>Park Boulevard/Essex Street Pedestrian Crossing &amp; Traffic Calming CAPITAL: Improves safety, walkability, and transit access for the intersection of Park Boulevard and Essex Street by providing pop-outs and an in-pavement lighted crosswalk.</td>
<td>$224,000.00</td>
<td></td>
<td>PROJECT COMPLETE - MARCH 2013</td>
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</tbody>
</table>

*Contract Expiration Date = Project Completion Date

**Watch List Projects are those grantees not making timely progress toward their milestones (which are defined in Policy No. 35 and Use-It-or-Lose-It) and not yet sought corrective action. Delays in tasks leading up to either the award of a contract or project completion may place grantees on the watch list.
<table>
<thead>
<tr>
<th>Grantee</th>
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</tr>
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<tbody>
<tr>
<td>Escondido</td>
<td>Escondido Creek Bike Path Lighting and Restriping</td>
<td>CAPITAL: Installs lighting and restriping for the existing Class I bike path along Escondido Creek Channel from Broadway to Ash Street.</td>
<td>$157,500.00</td>
<td>01/20/11</td>
<td>09/18/13</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>San Diego</td>
<td>EIR &amp; Feasibility Study for Bike Master Plan Update</td>
<td>PLANNING: Provides the EIR for the City of San Diego's Bicycle Master Plan Update.</td>
<td>$150,000.00</td>
<td>01/03/10</td>
<td>06/30/13</td>
<td>No</td>
<td>Staff-level extension is being processed to November 30, 2013, to allow time to respond to EIR public comments.</td>
</tr>
<tr>
<td>San Diego</td>
<td>Kelton Road Midblock Pedestrian Improvements Project</td>
<td>CAPITAL: Installs bulbouts and in-pavement lighted crosswalk on Kelton Road between Zircon Street and Luber Street, at the entrance of Johnson Elementary School</td>
<td>$248,400.00</td>
<td>06/30/10</td>
<td>07/31/13</td>
<td>No</td>
<td>Staff-level extension is being processed to November 30, 2013, to allow additional time for construction.</td>
</tr>
<tr>
<td>San Diego</td>
<td>Pedestrian &amp; Bicycle Safety Education Program</td>
<td>SUPPORT: Provides pedestrian and bicycle safety classes at elementary and middle schools citywide.</td>
<td>$290,000.00</td>
<td>07/14/10</td>
<td>06/30/13</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>San Diego</td>
<td>San Diego Pedestrian Master Plan Phase 4</td>
<td>PLANNING: Develops a pedestrian master plan for several communities in the City of San Diego, including San Ysidro, Midway, Old Town, Ocean Beach, College, Pacific Beach, and Kensington.</td>
<td>$150,000.00</td>
<td>04/30/10</td>
<td>04/30/13</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
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<tr>
<td>Carlsbad</td>
<td>Installation of Audible Pedestrian Signals &amp; Countdown Pedestrian Signals</td>
<td>CAPITAL: Installs audible pedestrian signals &amp; countdown pedestrian signals at twenty-one signalized intersections in the City of Carlsbad.</td>
<td>$150,660.00</td>
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<td>PROJECT COMPLETE - FEBRUARY 2012</td>
</tr>
<tr>
<td>Chula Vista</td>
<td>Chula Vista Bikeway Master Plan Update</td>
<td>PLANNING: Updates the City of Chula Vista's existing bikeway network.</td>
<td>$150,000.00</td>
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<td>PROJECT COMPLETE - FEBRUARY 2011</td>
</tr>
<tr>
<td>Chula Vista</td>
<td>Sidewalk Safety Program - I Street Sidewalk Improvements</td>
<td>CAPITAL: Installs ADA sidewalks and pedestrian ramps.</td>
<td>$115,220.00</td>
<td></td>
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<td>PROJECT COMPLETE - SEPTEMBER 2011</td>
</tr>
<tr>
<td>Coronado</td>
<td>Coronado Bicycle Master Plan</td>
<td>PLANNING: Plans for existing and future bicycle facilities within the City of Coronado.</td>
<td>$75,000.00</td>
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<td>PROJECT COMPLETE - MARCH 2011</td>
</tr>
<tr>
<td>Escondido</td>
<td>Downtown Escondido Bike Racks</td>
<td>BIKE PARKING: Installs bike lockers and decorative bike racks at Escondido City Hall and various locations throughout the downtown business and retail core.</td>
<td>$14,378.00</td>
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<td>PROJECT COMPLETE - OCTOBER 2011</td>
</tr>
<tr>
<td>Escondido</td>
<td>Ash Street Undercrossing</td>
<td>CAPITAL: Constructs an undercrossing at Ash Street/SR 78 for the Escondido Creek Channel Bike Path.</td>
<td>$457,357.00</td>
<td></td>
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<td>PROJECT COMPLETE - MARCH 2012</td>
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<tr>
<td>Escondido</td>
<td>Escondido Creek Bike Path</td>
<td>CAPITAL: Installs a Class I bike path from Escondido Transit Center to Centre City Parkway.</td>
<td>$524,100.00</td>
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<td>Project terminated July 2012 due to the request of the City of Escondido.</td>
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<td>Grantee</td>
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<td>13 Escondido</td>
<td>West Bernado Bike Path &amp; Cantilever</td>
<td>CAPITAL: Installs a Class I bike path and trail connection as the second phase of the Lake Hodges Bikeway Access Project.</td>
<td>$1,425,000.00</td>
<td>PROJECT COMPLETE - MARCH 2011</td>
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<td>14 La Mesa</td>
<td>La Mesa Bicycle Facilities Master Plan</td>
<td>PLANNING: Plans for existing and future bicycle facilities within the City of La Mesa.</td>
<td>$75,000.00</td>
<td>PROJECT COMPLETE - FEBRUARY 2012</td>
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<td>15 La Mesa</td>
<td>Spring Street Trolley Station Pedestrian Access Improvements</td>
<td>CAPITAL: Provides pedestrian improvements to reduce conflicts between pedestrians entering and exiting the Spring Street Trolley Station and motor vehicles.</td>
<td>$88,000.00</td>
<td>PROJECT COMPLETE - SEPTEMBER 2011</td>
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<tr>
<td>16 La Mesa</td>
<td>La Mesa/El Cajon Boulevards Intersection Improvements &amp; Pedestrian Infrastructure</td>
<td>CAPITAL: Reconfigures the intersection between La Mesa Boulevard and El Cajon Boulevard to reduce pedestrian crossing distances and incorporates additional streetscape enhancements.</td>
<td>$361,000.00</td>
<td>PROJECT COMPLETE - SEPTEMBER 2011</td>
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<tr>
<td>17 National City</td>
<td>National City Bicycle Master Plan</td>
<td>PLANNING: Plans for existing and future bicycle facilities within the City of National City.</td>
<td>$50,000.00</td>
<td>PROJECT COMPLETE - FEBRUARY 2011</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>18 National City</td>
<td>Sweetwater River Bike Path Gap Closure Design - Plaza Bonita Road</td>
<td>CAPITAL: Prepares the Environmental Document and Final Design Plans for a Class I bike path on Plaza Bonita Road.</td>
<td>$130,000.00</td>
<td>PROJECT COMPLETE - DECEMBER 2010</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>19 San Diego</td>
<td>UCSD Bicycle/Pedestrian Master Plan</td>
<td>PLANNING: Creates a comprehensive bicycle and pedestrian plan to link campus commuters to the City of San Diego’s bicycle and pedestrian paths, local transit stops, and regional transit stations.</td>
<td>$75,000.00</td>
<td>PROJECT COMPLETE - APRIL 2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 San Diego</td>
<td>Bicycle Detection at Signalized Intersections</td>
<td>CAPITAL: Installs bicycle detection systems and pavement markings at 20 signalized locations in the City of San Diego.</td>
<td>$73,500.00</td>
<td>PROJECT COMPLETE - MAY 2012</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>21 San Diego/Caltrans</td>
<td>SR 15 Bike Path Final Design &amp; Environmental Document</td>
<td>CAPITAL: Provides the final design and environmental documentation for a Class I bikeway along the east side of SR 15 between Camino Del Rio South and Adams Avenue.</td>
<td>$350,000.00</td>
<td>PROJECT COMPLETE - OCTOBER 2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 San Marcos</td>
<td>Barham Drive Urban Trail Improvement Project</td>
<td>CAPITAL: Designs and constructs an urban trail on the south side of Barham Drive from Twin Oaks Valley Road to the CSUSM SPRINTER Station and provides pedestrian enhancements.</td>
<td>$700,000.00</td>
<td>PROJECT COMPLETE - JANUARY 2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 SANDAG</td>
<td>Bicycle Locker Wireless Communication</td>
<td>SUPPORT: Establishes a wireless connection at transit centers that have electronic bicycle lockers.</td>
<td>$50,000.00</td>
<td>PROJECT COMPLETE - JANUARY 2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 SANDAG</td>
<td>Bicycle Locker Retrofits &amp; Upgrades</td>
<td>SUPPORT: Installs electronic lockers at various station locations along the Blue Line Trolley.</td>
<td>$50,000.00</td>
<td>PROJECT COMPLETE - JANUARY 2012</td>
<td></td>
<td></td>
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</tbody>
</table>
### Status of FY 2009 - FY 2010 TransNet / TDA Active Transportation Grant Program Projects Reporting period through March 31, 2013

<table>
<thead>
<tr>
<th>Grantee</th>
<th>Project</th>
<th>Description of Project Activities</th>
<th>Grant Amount</th>
<th>Contract Execution Date</th>
<th>Contract Expiration Date*</th>
<th>Watch List**</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>SANDAG</td>
<td>Bicycle Map Printing &amp; Distribution</td>
<td>$25,000.00</td>
<td></td>
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<td>PROJECT COMPLETE - JULY 2010</td>
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<td>26</td>
<td>SANDAG</td>
<td>Bayshore Bikeway Segments 7 &amp; 8</td>
<td>$1,078,000.00</td>
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<td>PROJECT COMPLETE - MARCH 2012</td>
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<td>27</td>
<td>Santee</td>
<td>Carlton Oaks Drive Class II Bike Lanes</td>
<td>$30,200.00</td>
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<td>PROJECT COMPLETE - MARCH 2010</td>
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<tr>
<td>28</td>
<td>Vista</td>
<td>Inland Rail Trail Phase IIIB - Right-of-Way Engineering</td>
<td>$500,000.00</td>
<td></td>
<td></td>
<td></td>
<td>Project transferred April 2013 to SANDAG for implementation through the Regional Bicycle Plan Early Action Program.</td>
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<tr>
<td>29</td>
<td>Vista</td>
<td>Safe Pedestrian Crossing at Longhorn Drive</td>
<td>$50,649.00</td>
<td></td>
<td></td>
<td></td>
<td>PROJECT COMPLETE - JUNE 2011</td>
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<tr>
<td>30</td>
<td>Vista</td>
<td>Boys &amp; Girls Club Sidewalk Improvements</td>
<td>$146,844.00</td>
<td></td>
<td></td>
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<td>PROJECT COMPLETE - JUNE 2011</td>
</tr>
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</table>

*Contract Expiration Date = Project Completion Date

**Watch List Projects are those grantees not making timely progress toward their milestones (which are defined in Policy No. 35 and Use-It-or-Lose-It) and not yet sought corrective action. Delays in tasks leading up to either the award of a contract or project completion may place grantees on the watch list.
### Status of FY 2011 - FY 2012 TransNet /TDA Active Transportation Grant Program Projects

#### Reporting period through March 31, 2013

<table>
<thead>
<tr>
<th>Grantee</th>
<th>Project</th>
<th>Description of Project Activities</th>
<th>Grant Amount</th>
<th>Contract Execution Date</th>
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<th>Watch List**</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad</td>
<td>Active Village Campaign</td>
<td>SUPPORT: Develops a multi-media campaign to promote the benefits of walking and biking in Carlsbad and Carlsbad Village, and aims to increase bicycling and walking for everyday trips, improve connectivity and create a pilot program that is scalable for other cities in the region.</td>
<td>$271,211.00</td>
<td>02/14/13</td>
<td>04/30/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
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<tr>
<td>Carlsbad</td>
<td>Bike the Village: 100 Racks</td>
<td>BIKE PARKING: Builds upon the Carlsbad Village’s Bike Rack Pilot Program and other related capital improvement projects in the vicinity and installs 80 additional custom racks and 6 bike corrals.</td>
<td>$33,000.00</td>
<td>02/22/13</td>
<td>07/31/13</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>Carlsbad</td>
<td>Carlsbad CATS</td>
<td>PLANNING: Develops an implementation strategy for livable streets. The plan will be tested by implementing up to five pilot projects.</td>
<td>$150,000.00</td>
<td>02/22/13</td>
<td>12/31/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>Carlsbad</td>
<td>Coastal Rail Trail - Reach 1</td>
<td>CAPITAL: Enhances safety and improves circulation and access for all modes of transportation between Carlsbad and Oceanside across a natural barrier and completes the northern sections of the Coastal Rail Trail into Oceanside.</td>
<td>$800,000.00</td>
<td>02/14/13</td>
<td>07/31/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
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<tr>
<td>Chula Vista</td>
<td>Main Street Streetscape Master Plan</td>
<td>PLANNING: Provides a plan using Complete Street principles, and improves access to nearby recreational facilities, and promotes water conservation through improved landscaping features.</td>
<td>$299,981.00</td>
<td>03/28/13</td>
<td>09/30/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
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<tr>
<td>Del Mar</td>
<td>Bike Parking Facilities</td>
<td>BIKE PARKING: Planning and implementation of bike parking facilities, including bike racks and lockers, throughout the city.</td>
<td>$25,000.00</td>
<td>02/07/13</td>
<td>12/31/13</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
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<tr>
<td>Imperial Beach</td>
<td>Eco-Bikeway 7th &amp; Seacoast</td>
<td>CAPITAL: Provides construction of Class II and Class III bikeways, and expands the local pedestrian network along Palm Avenue. Provides an important connection from the Bayshore Bikeway to Seacoast Drive.</td>
<td>$1,500,000.00</td>
<td>12/11/12</td>
<td>02/28/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>National City</td>
<td>4th Street Community Corridor</td>
<td>CAPITAL: Provides roughly 2.0 miles of Class II bicycle facilities, including bicycle detector loops and bicycle boxes. The project includes installation of high-visibility crosswalks, and traffic calming elements.</td>
<td>$450,000.00</td>
<td>03/05/13</td>
<td>03/14/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
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<tr>
<td>National City</td>
<td>Bicycle Parking Enhancements</td>
<td>BIKE PARKING: Installs bicycle racks throughout National City's bicycle network, providing cyclists with secure and convenient parking for end-of-trip storage.</td>
<td>$50,000.00</td>
<td>03/05/13</td>
<td>09/30/13</td>
<td>No</td>
<td>The Transportation Committee is requested to extend the project completion date to September 30, 2014.</td>
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<td>Grantee</td>
<td>Project</td>
<td>Description of Project Activities</td>
<td>Grant Amount</td>
<td>Contract Execution Date</td>
<td>Contract End Date*</td>
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<td>Status</td>
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<tr>
<td>10 National City</td>
<td>D Avenue Corridor</td>
<td>CAPITAL: Provides approximately 2.5 miles of Class II and III bicycle facilities, including bicycle detector loops and bicycle boxes at all signalized intersections. The project also includes installation of high-visibility crosswalks and traffic calming elements.</td>
<td>$ 600,000.00</td>
<td>03/05/13</td>
<td>03/31/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>11 Oceanside</td>
<td>2 Year Education, Encouragement, and Awareness Project</td>
<td>SUPPORT: Provides adult and student education for active transportation skills and concepts, bilingual Public Service Announcements, and bike route maps of Oceanside bike facilities.</td>
<td>$ 180,808.00</td>
<td>03/13/13</td>
<td>07/31/15</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>12 Oceanside</td>
<td>Mission Avenue Improvements</td>
<td>CAPITAL: Provides a mix of bicycle, pedestrian, and roadway improvements including: increased sidewalk width with curb bulb-outs, streetscape improvements, and Class III bicycle improvements.</td>
<td>$ 1,500,000.00</td>
<td>03/22/13</td>
<td>05/31/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>13 Oceanside</td>
<td>North Coast Transit Station Bike Station</td>
<td>BIKE PARKING: Provides a 200 sq. ft. bike station for 30 bicycles to provide secure, indoor bike parking, which bicyclists can access 24 hours a day, 7 days a week.</td>
<td>$ 100,000.00</td>
<td>03/13/13</td>
<td>10/31/15</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>14 Oceanside</td>
<td>Oceanside Boulevard Transit Access &amp; Beautification</td>
<td>CAPITAL: Improves the sidewalk and landscaping along Oceanside Boulevard, facilitating pedestrian access to transit stations and destinations.</td>
<td>$ 400,000.00</td>
<td>03/11/13</td>
<td>09/30/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>15 San Diego</td>
<td>Chollas Creek to Bayshore Bikeway - Multi-Use Path Design</td>
<td>CAPITAL: Provides environmental review and design for an envisioned Class I Multi-Use Path to connect between Southeastern San Diego, Barrio Logan, the San Diego Bay and Downtown San Diego for everyday non-motorized travel.</td>
<td>$ 441,250.00</td>
<td>02/21/13</td>
<td>12/31/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>16 San Diego</td>
<td>Linda Vista CATS</td>
<td>PLANNING: Develops a Comprehensive Active Transportation Strategy (CATS) for the Linda Vista Community Planning Area, providing direct and convenient connections to various destinations, while increasing bicyclist and pedestrian safety.</td>
<td>$ 300,000.00</td>
<td>02/21/13</td>
<td>03/31/16</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>17 San Diego</td>
<td>Microwave Bicycle Detection (The Intersector)</td>
<td>CAPITAL: Installs microwave-based bicycle detection devices at 17 intersections that distinguish between bicycles and vehicles and adjusts signal timing to better accommodate cyclists.</td>
<td>$ 200,000.00</td>
<td>06/11/13</td>
<td>04/30/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>18 San Diego</td>
<td>San Diego River Bike Path &amp; Mission Center Boulevard Improvement: Pedestrian Hybrid Beacon</td>
<td>CAPITAL: Improves pedestrian safety with the installation of the Pedestrian Hybrid Beacon using the ‘Hawk Signal’ at the project intersection.</td>
<td>$ 293,000.00</td>
<td>06/11/13</td>
<td>12/31/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
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<tr>
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<tr>
<td>19 San Diego</td>
<td>Downtown Complete Streets Mobility Plan</td>
<td>PLANNING: Establishes a comprehensive Complete Streets approach for downtown San Diego.</td>
<td>$300,000.00</td>
<td>04/11/13</td>
<td>11/30/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>20 San Marcos</td>
<td>Bicycle and Pedestrian Master Plan</td>
<td>PLANNING: Identifies needed improvements to the existing network and new routes to provide bicycle and pedestrian connectivity.</td>
<td>$80,000.00</td>
<td>02/21/13</td>
<td>12/31/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>21 San Marcos</td>
<td>San Marcos Boulevard Complete Street Multi-Way Boulevard</td>
<td>PLANNING: Project creates a multi-modal transportation corridor and prepares a set of Complete Street concepts for the future re-development of San Marcos Boulevard.</td>
<td>$124,000.00</td>
<td>03/01/13</td>
<td>02/28/15</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>22 Santee</td>
<td>San Diego River Trail - South Side of the San Diego River</td>
<td>CAPITAL: Improves trail by installing a Class I bike path with decomposed granite shoulders for pedestrians.</td>
<td>$281,750.00</td>
<td>02/14/13</td>
<td>11/30/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>23 Santee</td>
<td>Town Center Parkway/ Olive Lane/ Prospect Avenue Bike Project</td>
<td>CAPITAL: Improves safety for bicyclists by installing Class II bike lanes, narrowing vehicle lanes, adding bike lanes at intersections and adjusting video detection to detect bicycles.</td>
<td>$134,000.00</td>
<td>02/14/13</td>
<td>10/31/13</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>24 Solana Beach</td>
<td>Comprehensive Active Transportation Strategy (CATS)</td>
<td>PLANNING: Comprehensive update of the bicycle master plan, and consideration of pedestrian facilities and traffic calming needs, especially around schools, transit and commercial neighborhoods.</td>
<td>$136,000.00</td>
<td>02/20/13</td>
<td>06/30/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
<tr>
<td>25 Vista</td>
<td>Bicycle Master Plan</td>
<td>PLANNING: Updates the City of Vista's 2002 Bicycle Master Plan. Provides connections to neighboring bikeways in adjacent communities of Oceanside, Carlsbad, San Marcos, and unincorporated parts of the County.</td>
<td>$150,000.00</td>
<td>03/28/13</td>
<td>07/31/14</td>
<td>No</td>
<td>Project is making timely progress toward their milestones.</td>
</tr>
</tbody>
</table>

*Watch List Projects are those grantees not making timely progress toward their milestones (which are defined in Board Policy No. 035 and Use-It-or-Lose-It) and not yet sought corrective action. Delays in tasks leading up to either the award of a contract or project completion may place grantees on the watch list.
June 12, 2013

Coleen Clementson
Principal Regional Planner
San Diego Association of Governments
401 B Street, Suite 800
San Diego, CA 92104

SUBJECT: City of San Diego 4th & 5th Avenues/Nutmeg and 4th Avenue/Quince Pedestrian Crossing & Traffic Calming Projects and SANDAG Uptown Regional Bike Corridor Project

Dear Ms. Clementson:

On May 22, 2009, the San Diego Association of Governments (SANDAG) Board of Directors awarded FY 2009 – FY 2010 Smart Growth Incentive Program grant to the City of San Diego for the 4th & 5th Avenues/Nutmeg and 4th Avenue/Quince Pedestrian Crossing & Traffic Calming projects. Grant agreements for both projects were executed on July 23, 2010. Currently, both projects are at 95% design and scheduled for completion by September, 2013. Over the past several months, we postponed implementation of these two projects at the request of SANDAG to discuss design considerations associated with the Uptown Regional Corridor project, which envisions a protected bikeway and enhanced pedestrian and traffic calming improvements along 4th and 5th Avenues. To implement this regional bikeway project, SANDAG informed us that the bulb-outs we have planned adjacent to the following intersections, as currently designed, would likely be impacted:

- 4th and Nutmeg
- 4th and Quince
- 5th and Nutmeg

On April 15, 2013, our staff met with SANDAG’s staff to discuss the best way to coordinate these projects. After discussing several options, we agreed that the best option would be to transfer the management, design, and completion of the 4th & 5th Avenues/Nutmeg and 4th Avenue/Quince Pedestrian Crossing & Traffic Calming Projects to SANDAG for consolidated implementation with the Uptown Regional Corridor Project and the Regional Bicycle Plan Early
Action Program. This letter is to confirm our agreement to transfer the completion of the above projects to SANDAG and to authorize the re-programming of approximately $500,000 of unspent grant funds associated with these projects.

We look forward to the implementation of bicycle, pedestrian, and traffic calming improvements along 4th and 5th Avenues and are happy to provide collaborative support as the Uptown Regional Project and Regional Bicycle Plan Early Action Program progress.

Sincerely,

[Signature]

Hasan Yousef
Deputy Director

cc: Garth K. Sturdevan, Director, Transportation & Storm Water Department
    Linda Marabian, Deputy Director, Transportation & Storm Water Department
    Marnell Gibson, Deputy Director, Public Works Department
    Sabrina Carnell, Grant Administrator, Transportation & Storm Water Department
**PROJECT LIMITS**
From Old Town, Mission Valley, and Downtown San Diego to Hillcrest. Along Robinson Ave from Park Boulevard to 3rd Avenue. Along Park Boulevard from Meade Avenue to Village Place.

**SITE LOCATION**

**PROGRESS TO DATE**
Draft environmental draft is 10 percent complete.

**PROJECT SCOPE**
Final environmental document for ten miles of Class II - Bike Lane, Class III - Bike Route, Bicycle Boulevard, and Cycle Track.

**SANDAG EXPENDITURE PLAN ($000)**

<table>
<thead>
<tr>
<th>TASK</th>
<th>FY 13</th>
<th>FY 14</th>
<th>FY 15</th>
<th>FY 16</th>
<th>FY 17</th>
<th>FY 18</th>
<th>FY 19</th>
<th>FY 20</th>
<th>FY 21</th>
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<td>$700</td>
<td>$311</td>
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**CALTRANS EXPENDITURE PLAN ($000)**

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<th>FY 14</th>
<th>FY 15</th>
<th>FY 16</th>
<th>FY 17</th>
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**FUNDING PLAN ($000)**

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**TOTAL:**
$29   | $385  | $700  | $311  | $0    | $0    | $0    | $0    | $0    | $0    | $0    | $1,425 |
TDA/TransNet Active Transportation Grant Program
QUARTERLY PROGRESS REPORT

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Stephen Manganiello
City of National City
Engineering Department
1243 National City Boulevard
National City, CA 91950
(619) 336-4380

Contract #: 5001751
Invoice Date: N/A

Invoice #: N/A
Invoice Period: 1/1/2013 to 3/31/2013

Description of Activity for Invoice Period

Task 1 – Baseline Data Collection
1. Work Accomplished this Invoice Period
   - Held meetings to discuss data collection strategy.

2. Work Anticipated for Next Invoice Period
   - Complete baseline data collection.

3. Challenges or Problems Experienced and Actions Toward Resolution
   - None.

Task 2 – Construction Bidding, Award & Management
1. Work Accomplished this Invoice Period
   - Met with local non-profit organization to discuss developing a Community-based project for design and fabrication of bicycle racks.

2. Work Anticipated for Next Invoice Period
   - Finalize scope of work.

3. Challenges or Problems Experienced and Actions Toward Resolution
   - Community-based effort will require an amendment to the project scope of work and schedule.
Summary of Progress

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<th>Scheduled Completion Date (per amendment)</th>
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<th>Start Next Invoice Period? (mark x)</th>
<th>Complete Next Invoice Period? (mark x)</th>
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Action/s requested to SANDAG (check appropriate box/es):

☐ No action requested

☒ Amendment to*:

☒ Scope of Work

Describe: The original scope of work for the National City Bicycle Parking Enhancements Project involves selecting a preferred bicycle rack design and specification, then contracting out the fabrication and installation to the lowest bidder. In order to better engage the Community, staff has decided to partner with ARTS (A Reason to Survive), a local non-profit organization based in National City, for design and fabrication of custom bike racks. ARTS will use its workshop to host welding classes for Sweetwater High School students for the 2013-2014 school year. Through our partnership with ARTS, part of the curriculum will involve having the students design and fabricate custom bike racks for schools, parks and other key locations throughout National City, consistent with the National City Bicycle Master Plan. The materials for the bike racks will be funded through the Active Transportation Grant. The use of recycled / “green” materials will be encouraged. All designs will be submitted to SANDAG for consistency review prior to authorizing fabrication. This change in scope of work will also require a revision to the project schedule as summarized below.

☐ Project Budget

Describe:

☒ Project Schedule

Describe: Staff is requesting a one-year extension for project completion to incorporate two full semesters of the welding program for design and fabrication of the bike racks, installation and project close-out.

* It is the Grantee’s responsibility to ensure compliance with Board Policy No. 35 (Use-It-or-Lose-It) milestones and grant agreement terms and conditions. Amendment requests are subject to SANDAG’s approval.

* Note that any changes from scheduled start and completion dates are subject to approval by SANDAG. Please refer to Board Policy No. 35 in your grant agreement regarding milestones that fall behind schedule, and the actions required for schedule adjustments.
COMPETITIVE GRANT PROGRAM PROCEDURES

Applicability and Purpose of Policy

This Policy applies to the following grant programs administered through SANDAG, whether from TransNet or another source: Smart Growth Incentive Program, Environmental Mitigation Program, Bike and Pedestrian Program, Senior Mini Grant Program, Job Access Reverse Commute, New Freedom, and Section 5310 Elderly & Persons with Disabilities Transportation Program.

Nothing in this Policy is intended to supersede federal or state grant rules, regulations, statutes, or contract documents that conflict with the requirements in this Policy. There are never enough government grant funds to pay for all of the projects worthy of funding in the San Diego region. For this reason, SANDAG awards grant funds on a competitive basis that takes the grantees’ ability to perform their proposed project on a timely basis into account. SANDAG intends to hold grantees accountable to the project schedules they have proposed in order to ensure fairness in the competitive process and encourage grantees to get their projects implemented quickly so that the public can benefit from the project deliverables as soon as possible.

Procedures

1. Project Milestone and Completion Deadlines

   1.1. When signing a grant agreement for a competitive program funded and/or administered by SANDAG, grant recipients must agree to the project delivery objectives and schedules in the agreement. In addition, a grantee’s proposal must contain a schedule that falls within the following deadlines. Failure to meet the deadlines below may result in revocation of all grant funds not already expended. The final invoice for capital, planning, or operations grants must be submitted prior to the applicable deadline.

      1.1.1. Funding for Capital Projects. If the grant will fund a capital project, the project must be completed according to the schedule provided in the grant agreement, but at the latest, any necessary construction contract must be awarded within two years following execution of the grant agreement, and construction must be completed within eighteen months following award of the construction contract. Completion of construction for purposes of this policy shall be when the prime construction contractor is relieved from its maintenance responsibilities. If no construction contract award is necessary, the construction project must be complete within eighteen months following execution of the grant agreement.

      1.1.2. Funding for Planning Grants. If the grant will fund planning, the project must be completed according to the schedule provided in the grant agreement, but at the latest, any necessary consultant contract must be awarded within one year following execution of the grant agreement, and the planning project must be complete within two years following award of the consultant contract. Completion of planning for purposes of this policy shall be when grantee approves the final planning project deliverable. If no consultant contract award is necessary, the
planning project must be complete within two years of execution of the grant agreement.

1.1.3 Funding for Operations Grants. If the grant will fund operations, the project must be completed according to the schedule provided in the grant agreement, but at the latest, any necessary services contract for operations must be awarded within one year following execution of the grant agreement, and the operations must commence within six months following award of the operations contract. If no services contract for operations is necessary, the operations project must commence within one year of execution of the grant agreement.

1.1.4 Funding for Equipment or Vehicles Grants. If the grant will fund equipment or vehicles, the project must be completed according to the schedule provided in the grant agreement, but at the latest, any necessary purchase contracts for equipment or vehicles must be awarded within one year following execution of the grant agreement, and use of the equipment or vehicles for the benefit of the public must commence within six months following award of the purchase contract.

2. Project Milestone and Completion Deadline Extensions

2.1. Schedules within grant agreements may include project scopes and schedules that will identify interim milestones in addition to those described in Section 1 of this Policy. Grant recipients may receive extensions on their project schedules of up to six months for good cause. Extensions of up to six months aggregate that would not cause the project to miss a completion deadline in Section 1 may be approved by the SANDAG Executive Director. Extensions beyond six months aggregate or that would cause the project to miss a completion deadline in Section 1 must be approved by the Policy Advisory Committee that has been delegated the necessary authority by the Board. For an extension to be granted under this Section 2, the following conditions must be met:

2.1.1 For extension requests of up to six months, the grantee must request the extension in writing to the SANDAG Program Manager at least two weeks prior to the earliest project schedule milestone deadline for which an extension is being requested. The Executive Director or designee will determine whether the extension should be granted. The Executive Director’s action will be reported out to the Board in following month’s report of delegated actions.

2.1.2 A grantee seeking an extension must document previous efforts undertaken to maintain the project schedule, explain the reasons for the delay, explain why the delay is unavoidable, and demonstrate an ability to succeed in the extended time frame the grantee proposes.

2.1.3 If the Executive Director denies an extension request under this Section 2, the grantee may appeal within ten business days of receiving the Executive Director’s response to the responsible Policy Advisory Committee by sending the appeal to the SANDAG Program Manager.

2.1.4 Extension requests that are rejected by the Policy Advisory Committee will result in termination of the grant agreement and obligation by the grantee to return to SANDAG any unexpended funds within 30 days. Unexpended funds are funds for project costs not incurred prior to rejection of the extension request by the Policy Advisory Committee.
3. Project Delays and Extensions in Excess of Six Months

3.1 Requests for extensions in excess of six months, or that will cause a project to miss a completion deadline in Section 1 (including those projects that were already granted extensions by the Executive Director and are again falling behind schedule), will be considered by the Policy Advisory Committee upon request to the SANDAG Program Manager.

3.2 A grantee seeking an extension must document previous efforts undertaken to maintain the project schedule, explain the reasons for the delay, explain why the delay is unavoidable, and demonstrate an ability to succeed in the extended time frame the grantee proposes. The grantee must provide the necessary information to SANDAG staff to place in a report to the Policy Advisory Committee. If sufficient time is available, and the grant utilized TransNet funds, the request will first be taken to the Independent Taxpayer Advisory Committee (ITOC) for a recommendation. The grantee should make a representative available at the meeting to present the information to, and/or answer questions from, the ITOC and Policy Advisory Committee.

3.3 The Policy Advisory Committee will only grant an extension under this Section 3 for extenuating circumstances that the grantee could not have reasonably foreseen.

4. Resolution and Execution of the Grant Agreement

4.1 Two weeks prior to the review by the Policy Advisory Committee of the proposed grants, prospective grantees must submit a resolution from their authorized governing body that includes the provisions in this Subsection 4.1. Failure to provide a resolution that meets the requirements in this Subsection 4.1 will result in rejection of the application and the application will be dropped from consideration with funding going to the next project as scored by the evaluation committee. In order to assist grantees in meeting this resolution deadline, when SANDAG issues the call for projects it will allow at least 90 days for grant application submission.

4.1.1 Grantee governing body commits to providing the amount of matching funds set forth in the grant application.

4.1.2 Grantee governing body authorizes staff to accept the grant funding and execute a grant agreement if an award is made by SANDAG.

4.2 Grantee’s authorized representative must execute the grant agreement within 45 days from the date SANDAG presents the grant agreement to the prospective grantee for execution. Failure to meet the requirements in this Subsection 4.2 may result in revocation of the grant award.

5. Increased Availability of Funding Under this Policy

5.1 Grant funds made available as a result of the procedures in this Policy may be awarded to the next project on the recommended project priority list from the most recent project selection process, or may be added to the funds available for the next project funding cycle, at the responsible Policy Advisory Committee’s discretion. Any project that loses funding due to failure to meet the deadlines specified in this Policy may be resubmitted to compete for funding in a future call for grant applications.

Adopted: January 2010
SAN DIEGO FORWARD: THE REGIONAL PLAN
DRAFT RANGE OF ALTERNATIVE LAND USE AND TRANSPORTATION SCENARIOS AND INITIAL EMERGING TECHNOLOGY CONCEPTS

Introduction

As part of the 2050 Regional Transportation Plan and its Sustainable Communities Strategy (2050 RTP/SCS) adopted in 2011, the Board of Directors committed to preparing alternative land use and transportation scenarios to explore what it would take to further reduce greenhouse gas (GHG) emissions. At their April 5, 2013, meetings, the Regional Planning and Transportation Committees directed staff to include emerging technologies in the alternative scenarios and evaluate their potential to reduce GHG emissions. This work will inform the SCS and Revenue Constrained Transportation network to be included in San Diego Forward: The Regional Plan.

The purpose of this item is to:
1. Solicit input from the Committees on potential land use scenarios that could be tested in a sketch model this summer, and
2. Explore emerging transportation technologies that could be paired with the scenarios.

Setting the Stage

The region’s vision of its future has been evolving for decades. This change is illustrated in the figures below, which show the planned housing and employment growth from the Series 9 Regional Growth Forecast (RGF) between 1995 and 2020 compared to the planned housing and employment growth in the Series 12 RGF between 2008 and 2050. During the past decade, many jurisdictions have updated their local land use plans and zoning ordinances, collectively moving toward more compact development near public transit and greater habitat and open space preservation.
Proposed Land Use Scenarios

The evaluation of alternative land use and transportation scenarios will provide information that could help further refine the region’s vision over time. The first phase of this effort is to develop alternative land use concepts that could accommodate the region’s future growth, and test those alternatives with the 2050 RTP/SCS transportation network. The next phase would focus on exploring transportation alternatives and emerging technologies that could be paired with the land use scenarios to further reduce GHG emissions.

Based upon input received from the Regional Planning Technical Working Group (TWG), the Cities/County Transportation Advisory Committee (CTAC), and members of the public during the last two months, staff has developed three land use concepts for consideration.

Proposed 2050 Land Use Scenario Concepts

- **Scenario A**: Second Units and Infill/Redevelopment in Urban and Suburban Areas
- **Scenario B**: Transit Oriented Development
- **Scenario C**: Multiple Dense Cores

The proposed concepts illustrate different ways of distributing future job and housing growth in the region. Each scenario builds upon and responds to a series of demographic trends seen in recent forecasts, including the aging of the population; the growing interest by Generation Y to live in denser urban environments; and financial concerns due to the effects of the 2007-2010 financial downturn. In addition, the scenarios respond to an increasing interest in creating more complete, walkable, and healthy communities. Attachment 1 summarizes feedback on the land use scenarios from the San Diego Forward workshop held on June 21, 2013.

Alternative Economic Development Futures

It may be useful to view the land use scenarios through an economic development lens, with the idea that job type and distribution will have an effect on urban form, transportation, and potentially GHG emissions. In other words, a more coordinated spatial matching of jobs and housing (“jobs-housing fit”) could reduce vehicle miles traveled, which could potentially reduce GHG emissions. Building upon this
concept, staff is proposing to hold a workshop in August with economic development stakeholders from throughout the region to brainstorm on alternative economic futures. This approach would provide an opportunity to explore economic trends and strategies that the region could use to proactively consider longer-term housing and transportation needs.

2050 Regional Growth Forecast, Modeling and Visioning Tools, and Metrics

Concurrent with the scenario effort, SANDAG is developing the Series 13 Regional Growth Forecast, which will provide an updated forecast through 2050. The forecast, which will provide the foundation for the regional plan, currently projects nearly one million new people, nearly 500,000 new jobs, and more than 330,000 new homes. The forecast is a separate and independent effort from the scenarios. Depending upon the scenario outcomes and subsequent policy discussions by the Board of Directors and Policy Advisory Committees, the scenarios could potentially influence the SCS, the final forecast, and/or policies in the regional plan.

SANDAG also is developing new modeling and visioning tools. The new modeling tools include the transportation-related Activity-Based Model (ABM) and the land use-related Production, Exchange, Consumption, and Allocation System (PECAS), which will offer several enhancements by introducing economic conditions and return on investment calculations into the projections of development, redevelopment, and infill. The new visioning tools include a sketch model called UrbanFootprint that is being used in California by other Metropolitan Planning Organizations on similar efforts. The sketch model will provide visual representations of each land use scenario and initial “easy-to-understand” metrics related to scenario performance. Additional indicators could be considered during the second phase of the project through the use of PECAS and ABM. A demonstration of the sketch planning tool will be scheduled this fall, and the scenario outcomes will be presented at a public workshop in mid-October.

Emerging Technologies

In response to the Committees’ direction to integrate emerging technologies into the scenario planning effort, staff has developed illustrations and an initial list of existing and emerging transportation technologies in the categories of personal technology, vehicle technology, and infrastructure technology (Attachments 2 and 3). It is envisioned that these technologies will initially be considered in the scenario planning efforts, and then be integrated into the regional plan’s preferred transportation network. Many of the concepts are derived from the SANDAG Intelligent Transportation System (ITS) Strategic Plan.

At their June and July meetings, the CTAC and TWG provided feedback on the proposed technologies included in Attachment 3 and on relevant trends related to land use and transportation decisions or behaviors. Comments included enthusiasm about exploring emerging technologies, concerns about implementation costs, thoughts on the public sector’s role, strategic thinking about how the technologies could best be implemented most successfully in the near-, mid-, and long-term, and the need to coordinate with the private sector to incorporate emerging technologies into the region’s existing transportation facilities in conjunction with ongoing upgrades. Emerging technologies also were discussed by the public at the June workshop; comments are reflected in Attachment 1.
Staff proposes to reach out to individuals and/or organizations working in transportation technology fields to engage them in a dialogue regarding technologies that have the highest potential to impact the region’s travel patterns and urban form. An important component of this effort will be to develop an understanding of which existing, emerging, and advanced technologies could be included in the scenario planning effort and in the regional plan, and to what degree they could be applied, modeled, and used in the next round of Senate Bill 375 (Steinberg, 2008) target-setting.

Parking Management

Staff also is responding to Board direction to analyze parking management strategies in conjunction with the scenario planning efforts, and to prepare a parking toolbox. Parking management strategies such as shared parking, parking maximums, remote parking, unbundled parking, demand-based parking, and other strategies could be considered, and those strategies that can be modeled could be included in the scenario planning effort along with the emerging technologies. A more detailed report on parking management strategies will be brought to the Committees this fall. Feedback on parking issues from the workshop last month is included in Attachment 1.

Discussion and Next Steps

Staff is seeking input from the Committees on (1) the land use scenarios to be tested this summer in the sketch modeling tool, and (2) the emerging technology concepts. This item and preliminary information resulting from the sketch model will be presented to the Board of Directors at its policy meeting in September.

A workshop with economic development stakeholders will be scheduled in August to further explore the economic component of the land use scenarios, and input from transportation technology leaders will be sought this fall. The sketch-level land use scenario results will be presented at a public workshop in October, with the workshop results reported to the Committees and the SANDAG Board in November.

Further development of transportation, emerging technologies, and parking/pricing strategies will occur over the next several months. The final phase will focus on policy discussions related to the scenario outcomes for consideration in the regional plan.

CHARLES “MUGGS” STOLL
Director of Land Use and Transportation Planning

Attachments: 1. Workshop Summary: Focus on Land Use and Transportation, June 21, 2013
   2. Emerging Technologies Illustration Sheet
   3. Existing, Emerging, and Advanced Transportation Technologies

Key Staff Contacts: Carolina Gregor, (619) 699-1989, carolina.gregor@sandag.org
                 Phil Trom, (619) 699-7330, phil.trom@sandag.org
                 James Dreisbach-Towle, (619) 699-1914, james.towle@sandag.org
WORKSHOP SUMMARY: FOCUS ON LAND USE AND TRANSPORTATION - JUNE 21, 2013

Over 125 participants took part in the June 21st workshop on San Diego Forward: The Regional Plan. Below is a summary of input provided by stakeholders on the six topics addressed at the workshop. More information and more detailed notes are available at www.sandag.org/sandiegoforward.

Land Use Scenarios

- Give more priority to protecting our urban open space, recreation, and habitat areas.
- Expand the higher density core to include Chula Vista and the border area.
- Include the area south of the border for affordable housing opportunities.
- Explore the impacts of each scenario on the economy, health, environment, and quality of life.
- Explore smart growth scenarios that help with transportation choices, transportation costs, and health benefits.
- Consider second units close to the transit oriented development areas.
- Look at the redevelopment of the region’s commercial areas and development of shopping malls near transit hubs.
- Address jobs/housing fit and try to do a better job of matching income levels with housing choices to address the range of income levels in a job place (i.e., high-paying jobs versus service workers working in high-tech buildings). SANDAG’s modeling process should look at the implications of jobs/housing fit.
- Modify scenarios to acknowledge and better integrate the major employment clusters.
- Conduct a market feasibility analysis on all of the scenarios.
- Map topographic land constraints; many slopes are uninhabitable for human development. River valleys and steep slopes are not suitable for human development.
- Create a scenario with urban growth boundaries.
- Address sea level rise in the scenarios.
- Consider placing just as much emphasis on creating more walkable and bikeable communities than is placed on transit oriented (TOD) communities so we do not have to invest in so much public transit.
- The TOD scenario is more reflective of where job centers are throughout the region.
- Consider housing costs and affordability in scenarios.
- Consider quality of life issues and transit access to parks, healthcare, education, family resource centers, clinics, childcare, and other community resources/social service facilities.
- Adapt to current trends such as telecommuting, co-work spaces, etc. which are becoming more popular and more sustainable.

Emerging Technologies

- The ability to track the bus is important when people are going somewhere.
- Self-driving vehicles can help reduce accidents.
- When considering emerging technologies, include sustainability, mobility/accessibility, and safety.
- The idea of crowd sourcing would be easy to focus on and easy to do. Provide the cloud to interested individuals and go beyond what is traditionally done.
- Expand Car2Go system geographically so that there is coverage across the whole county.
- Expand the availability of plug-in charging.
- Use technology for information such as real-time traffic information. This would help people decide what mode of transit to take and what route.
- Provide a greenhouse gas calculator application to help change people’s behavior.
• Apply emerging technology to infrastructure improvements that reduce reliance on vehicles.
• Consider security and loss of privacy.
• Keep up with technology – signal detection, loops, etc.
• Technology can help with lowering costs.
• Autonomous vehicles are an easy solution to reckless drivers; they would allow more cars on the road without building more lanes, and the idea holds promise.
• The shared economy (Car2Go, etc.) is growing. Consider this in the planning process.
• Provide better traveler information.
• Consider equity as an issue since there are barriers to entry for technology, and not everyone can afford a smart phone, car, or Google glasses.

Parking and Pricing

• Integrate parking with purposeful economic returns.
• Balance demand management strategies (congestion pricing) with alternative transportation modes (public transit, active transportation, etc.).
• Make car-sharing a more attractive option for transit users.
• Develop park-once strategies where people are encouraged to ‘park once’ during a day/trip.
• Use metered parking in a manner that creates turnover of spaces in high demand (for shopping or dining purposes, for example) and allows longer term metered parking (for work/employment) further away.
• Use emerging technologies to connect the public with available parking (available parking spots/vacant lots, variably priced metered parking, etc.).
• Survey communities to better understand their specific needs, in order to create more tailored solutions rather than a one-size-fits-all.
• Consider shared parking strategies that balance the peak AM/PM use and off-peak uses.
• Allocate the parking revenues to contribute to not only the enhancement of the transit experience, but the walkability of the street.
• On the private side, we need to give carpools priority parking. Cities should require it.
• Companies should be incentivized to reduce employee parking and to subsidize transit passes.

Active Transportation

• Focus on Safe Routes to Transit as a key goal.
• SANDAG is doing an admirable job at trying to connect with communities but needs to do a better job in reaching out.
• SANDAG’s efforts to reach out and invite participation from groups that traditionally are not engaged in the process are appreciated and beneficial.
• Broaden the active transportation goal to include skateboarding, scooters, etc.
• Implement separated bicycle infrastructure facilities on major corridors.
• Plan according to younger generations that want to live in communities where they can walk and bike.
• Improve systems for carrying bicycles on transit vehicles.
• Engage schools as a method of encouraging kids to walk and bike to school.
• Consider expanding wayfinding signage to direct users to transit stops which would encourage people to bike.
• Develop infrastructure such as bike stations to encourage more people to bike to transit.
• Separation between bicyclists and vehicles is critical since a fear of safety is a barrier.
• Incorporate the complete streets concept into SANDAG’s planning.
• Offer incentives to encourage more biking; encourage employers to provide more shower and locker room facilities to employees.
• Encourage bicycle education.
• Emphasize utilitarian trips and not just commuter trips.
• Having an Active Transportation discussion puts health first and foremost including individual and environmental health.
Mobility

- Focus on intra-regional mobility which can bring money to outlying areas which can foster regional economic vitality.
- Consider a child bike-share program with helmets as a part of a larger bike-share program.
- Create reliability for developers to invest around transit stations.
- Consider moving air freight travel out of Lindbergh, separating passenger from freight and moving freight to Carlsbad or Brown Field.
- Any type of bike-share program needs to include infrastructure to support safer routes to ride.
- Expand traveler information to ease of use of the systems (e.g., “Next Bus” signs)
- Develop a “transit ambassador” program for seniors.
- Make transit competitive with driving in terms of travel time.
- Apply a complete streets model for main boulevards accommodating multiple modes of travel.
- Provide transit service that reaches hard-to-access job centers (e.g., North County).
- Design transit so that it accounts for different areas (e.g., higher density areas merit light rail projects).
- Improve walk/bike/other connections between bus and rail and to/from destinations.
- Direct growth through transportation investments.
- Encourage growth along Smart Growth transportation corridors.
- Consider public health in decision-making.
- Consider including punitive measures to effect change, rather than just incentivizing change; the 18 cities and Port District should be required to follow the Regional Plan goals and principles.
- Include transportation options for all demographics (e.g., youth without licenses trying to get to beach as well as aging population of baby boomers).
- Promote telecommuting and encourage businesses to offer telecommuting to their employees 1-2 days per week.
- Consider sidewalk access and improvements.
- Look at impacts of freight movement versus other modes – do the needs of trucks conflict with the needs of bikes, for example.
- Make transit convenient, cost-effective, and reliable so that transit is competitive with driving.

Transportation Project Evaluation

- Consider sustainability and return on investment. Can you sustain what you are building?
- Incorporate public health into the evaluation criteria and prioritization of transportation projects.
- Balance return on investment and use of transportation facilities.
- Provide a complete analysis of the costs and benefits of the projects, on other forms of transportation, and compare between all modes of transportation.
- Encourage smart growth, neighborhood shuttles.
- Add reduced GHG emissions to the criteria.
- Place greater value on community involvement and input in the evaluation of these projects. Make sure the community's voice is heard.
- Focus priority on moving the most people at the least cost and increasing transit frequency.
- Consider density as a factor in determining transit project priorities.
- Think about health costs, too.
- Keep equity in mind … neighborhoods that don’t have many transportation options should be focused on first.
- Think about students, where they need to get to, and how they get to school, and how they make their connections.
EMERGING TECHNOLOGIES

Introduction
Technology has shaped our lives allowing us to be more connected, more productive, and with the potential to change the way we live, work, and play. We will look at three aspects of emerging technology and compare today with what might be in the future.

Personal Technology

Today
- Cell Phones
- Smart Phones
- Tablets

Application: Mobile 511, Traveler Information, Way Finding, Parking Guidance

Tomorrow
- Wearable Computers
- Google Glass
- Augmented or Enhanced Reality

Application: Enhanced 511, Reduction in Travel Demand – Virtual Shopping, Medical Care

Vehicle Technology

Today
- GPS, Way Finding, Routing
- Driver Assist Technology – Lane Keeping, Forward Collision Warning, Self-Parking

Tomorrow
- Autonomous Vehicle, Automated Vehicle, Connected Vehicle
- Co-operative Adaptive Cruise Control – Self Platooning of Vehicles

Application: Improved Safety, Mobility, Throughput, Reduction of Greenhouse Gases

Infrastructure Technology

Today
- Link Transportation Networks (Freeway, Transit, Arterials, Pedestrian, Bicycle, etc.) to work together
- Real Time and Pro-Active Transportation Management and Operations

Tomorrow
- Smart Roads Communicating with Connected Vehicles

Application: Safety, Mobility, Reduction of Greenhouse Gases
EMERGING TECHNOLOGIES

Personal Technology

Google Glass

Vehicle Technology

Self-Driving Vehicle

Connected Vehicles

Infrastructure Technology

Smart Intersections
### Existing, Emerging, and Advanced Transportation Technologies

*Research for Possible Inclusion & Application to Regional Plan and Land Use and Transportation Scenarios*

#### A. Roadway Capacity Strategies

<table>
<thead>
<tr>
<th>Transportation Technology</th>
<th>Application to GHG Reduction</th>
<th>When?</th>
<th>Model Application (Y/N)</th>
<th>Primary Responsible Party</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Vehicle Automation/ Semi-Automation</td>
<td>Less Stop-N-Go/Reduced Idling</td>
<td>Near*, Mid, and Long-Term</td>
<td>Y</td>
<td>Public/Private</td>
<td>Vehicles are partially or fully automated or able to navigate without human input improving roadway performance and safety</td>
</tr>
<tr>
<td>2. Real-Time Traveler Information Via Personal Devices</td>
<td>Fewer SOV Trips More Bike/Walk Trips More Transit/Carpool/ Vanpool</td>
<td>Near-Term*</td>
<td>Y</td>
<td>Public/Private</td>
<td>Provides real-time traveler and parking information, available on-the-fly, to influence mode choice, route choice and time of travel</td>
</tr>
<tr>
<td>3. Arterial, Freeway, and Transit Management System</td>
<td>Fewer SOV Trips Less Stop-N-Go/Reduced Idling More Transit/Carpool/Vanpool</td>
<td>Near-Term*</td>
<td>Y</td>
<td>Public</td>
<td>Extension of the Integrated Corridor Management concept for real time and multi-agency congestion management to proactively improve mobility and corridor travel efficiency</td>
</tr>
<tr>
<td>4. Green GPS Fleet Tracking Systems</td>
<td>Fewer SOV Trips Less Stop-N-Go/Reduced Idling</td>
<td>Near-Term</td>
<td>N</td>
<td>Public</td>
<td>Reduces GHG emissions and operating costs by using real-time tracking to monitor fuel consumption, route efficiency, etc.</td>
</tr>
<tr>
<td>5. Corridor Level Signal Timing</td>
<td>Less Stop-N-Go/Reduced Idling</td>
<td>Near-Term*</td>
<td>Y</td>
<td>Public</td>
<td>Improvements to real-time data collection and arterial management, operations, and coordination.</td>
</tr>
<tr>
<td>6. Dynamic Lanes on Arterials to Support HOV Access</td>
<td>Fewer SOV Trips Less Stop-N-Go/Reduced Idling More Bike/Walk Trips More Transit/Carpool/Vanpool</td>
<td>Near-Term*</td>
<td>Y</td>
<td>Public</td>
<td>Infrastructure and lane control that enables arterial lanes to be switched on-the-fly from general purpose, to HOV use, for certain time periods or based on demand</td>
</tr>
<tr>
<td>7. Smart Intersections</td>
<td>Less Stop-N-Go/Reduced Idling More Bike/Walk Trips</td>
<td>Near-Term*</td>
<td>N</td>
<td>Public</td>
<td>Improvements to intersection infrastructure to allow real-time and pro-active signal timing operations and support Multi-Agency Arterial Management. Improved mobility and efficiency</td>
</tr>
</tbody>
</table>
## B. Vehicle and Personal Strategies

<table>
<thead>
<tr>
<th>Transportation Technology</th>
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<th>When</th>
<th>Model Application (Y/N)</th>
<th>Primary Responsible Party</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Car Sharing</strong></td>
<td>Fewer SOV Trips</td>
<td></td>
<td>Near-Term</td>
<td>Y</td>
<td>Public/Private</td>
</tr>
<tr>
<td></td>
<td>More Bike/Walk Trips</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>More Transit/Carpool/Vanpool</td>
<td></td>
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<tr>
<td></td>
<td>Increased Fuel Efficiency</td>
<td></td>
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</tr>
<tr>
<td><strong>2. Variable Speed Limits on Freeway Network</strong></td>
<td>Less Stop-N-Go/Reduced Idling</td>
<td></td>
<td>Near-Term*</td>
<td>Y</td>
<td>Public</td>
</tr>
<tr>
<td><strong>3. Personal Technology</strong></td>
<td>Fewer SOV Trips</td>
<td></td>
<td>Mid, Long-Term</td>
<td>Y</td>
<td>Public/Private</td>
</tr>
<tr>
<td></td>
<td>More Bike/Walk Trips</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>More Transit/Carpool/Vanpool</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4. Universal Transportation Account (UTA)</strong></td>
<td>Fewer SOV Trips</td>
<td></td>
<td>Near-Term*</td>
<td>Y</td>
<td>Public</td>
</tr>
<tr>
<td></td>
<td>More Bike/Walk Trips</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>More Transit/Carpool/Vanpool</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5. On-the-Fly Trip Planning and Ride Matching</strong></td>
<td>Fewer SOV Trips</td>
<td></td>
<td>Near-Term</td>
<td>N</td>
<td>Public/Private</td>
</tr>
<tr>
<td></td>
<td>More Bike/Walk Trips</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>More Transit/Carpool/Vanpool</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6. Enhanced Virtual Office/Telework</strong></td>
<td>Fewer SOV Trips</td>
<td></td>
<td>Near-Term</td>
<td>N</td>
<td>Private</td>
</tr>
<tr>
<td></td>
<td>More Bike/Walk Trips</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>More Transit/Carpool/Vanpool</td>
<td></td>
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</tr>
</tbody>
</table>
## C. Infrastructure Strategies

<table>
<thead>
<tr>
<th>Transportation Technology</th>
<th>Application to GHG Reduction</th>
<th>When?</th>
<th>Model Application (Y/N)</th>
<th>Primary Responsible Party</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Automated Truck Corridors</strong></td>
<td>Less Stop-N-Go/Reduced Idling  &lt;br&gt; Increased fuel efficiency</td>
<td>Near-Term</td>
<td>N</td>
<td>Private</td>
<td>Hybrid, fuel-cell, battery, corridor-level, etc. for energy efficiency</td>
</tr>
<tr>
<td><strong>2. Alternative Fueling Stations</strong></td>
<td>Increased Fuel Efficiency</td>
<td>Near-Term</td>
<td>N</td>
<td>Private</td>
<td>Fuels under CA’s Low Carbon Fuel Standard</td>
</tr>
<tr>
<td><strong>3. Solar Highways &amp; Parking Lots</strong></td>
<td>Increased Fuel Efficiency</td>
<td>Long-Term</td>
<td>N</td>
<td>Public</td>
<td>Road surfaces and parking lots that generate electricity by solar power</td>
</tr>
<tr>
<td><strong>4. Eco-Driving</strong></td>
<td>Less Stop-N-Go/Reduced Idling</td>
<td>Mid-Term</td>
<td>N</td>
<td>Public/Private</td>
<td>Technologies that control and maintain vehicle speed for optimal fuel efficiency and reduced carbon emission</td>
</tr>
<tr>
<td><strong>5. Mobility Hub – Shared Vehicles</strong></td>
<td>Fewer SOV Trips  &lt;br&gt; More Bike/Walk Trips  &lt;br&gt; More Transit/Carpool/Vanpool  &lt;br&gt; Increased Fuel Efficiency</td>
<td>Mid-Term</td>
<td>N</td>
<td>Public/Private</td>
<td>Interconnected “mobility hubs,” integrate regional transit services with communities. Mobility hubs provide a source of shared vehicles and services including cars, neighborhood electric vehicles, personal electric vehicles, and bicycles, along with supporting amenities and technologies.</td>
</tr>
<tr>
<td><strong>6. Electric Vehicle En-Route Charging</strong></td>
<td>Increased Fuel Efficiency</td>
<td>Near-Term</td>
<td>N</td>
<td>Public/Private</td>
<td>Transition to fully electric bus/vehicle fleets</td>
</tr>
<tr>
<td><strong>7. Electric Vehicle Charging Stations</strong></td>
<td>Increased Fuel Efficiency</td>
<td>Near-Term</td>
<td>N</td>
<td>Public/Private</td>
<td>Expansion of efficient vehicle charging stations to support an increase in electric cars and light duty trucks</td>
</tr>
<tr>
<td><strong>8. Rail Technologies</strong></td>
<td>Less Stop-N-Go/Reduced Idling</td>
<td>Near-Term</td>
<td>N</td>
<td>Public/Private</td>
<td>Electric catenary rail systems, dual-mode locomotives, etc.</td>
</tr>
<tr>
<td><strong>9. Bike Sharing or Other Shared Services</strong></td>
<td>Fewer SOV Trips  &lt;br&gt; More Bike/Walk Trips  &lt;br&gt; More Transit/Carpool/Vanpool  &lt;br&gt; Increased Fuel Efficiency</td>
<td>Near-Term</td>
<td>N</td>
<td>Public/Private</td>
<td>Expand shared transportation services such public bike and car sharing and peer-to-peer carsharing.</td>
</tr>
</tbody>
</table>

**"*" Included in the Intelligent Transportation System for the San Diego Region (SANDAG)**  
Near-Term = 2013-2020; Mid-Term = 2020-2030; Long-Term = 2030-2050
SAN DIEGO FORWARD: THE REGIONAL PLAN:  
DRAFT WHITE PAPER ON PUBLIC HEALTH  

Introduction

All original subject areas contained in the Regional Comprehensive Plan (RCP) and the 2050 Regional Transportation Plan/Sustainable Communities Strategy (2050 RTP/SCS) require some level of review in the preparation of San Diego Forward: The Regional Plan. Some subject areas will require more policy-level discussion than others, especially topics that have emerged since the RCP was adopted in 2004. Examples of these include:

- Public health considerations in regional planning
- Climate change and adaptation
- Housing (effects of elimination of redevelopment on affordable housing, housing to meet the region’s changing demographics)
- Transportation (parking management, pricing, new technologies, complete streets)
- Habitat (urban open space, wildfire risk)

For these topic areas, white papers are being prepared to provide SANDAG working groups, Policy Advisory Committees, the Board of Directors, and the public information to create new or validate/modify existing policy considerations and actions.

Discussion

Attachment 1 is the draft Public Health white paper for the Regional Planning and Transportation Committees to review and discuss. The white paper provides background on the topic area, why it matters, how the built environment affects public health, and a review of existing efforts to integrate public health into regional and local planning programs. Based upon the vision and goals established by the Board of Directors, the Regional Planning and Transportation Committees are asked to discuss possible public health policy considerations. The draft white paper provides a framework and context for the focus area of public health.

Input from Working Groups and Public Workshops

The draft Public Health White Paper was presented to the Regional Planning Technical Working Group and the Public Health Stakeholders Group. Some of the comments included the following:

- Public health should be a core value in San Diego Forward: The Regional Plan
- Public health should be used as an indicator of good infrastructure planning
• Urban parks benefit public health
• Sprawl and traffic congestion are a cost to public health
• Public health should influence local land use planning
• Climate change affects public health
• Public health should be used as an indicator within Communities of Concern

Similar comments were received during the recently held public workshops for San Diego Forward: The Regional Plan, including:

• The ability to walk and bike within communities and to school is important
• Consider rethinking the methodology of how trips are calculated within a complete streets framework, using something other than Level of Service (LOS) and moving toward a multimodal analysis
• Look at the inequities and health disparities between neighborhoods and focus the investments in areas of need
• Look at areas with concentrations of obesity and diabetes and examine current transportation infrastructure to find the gaps. Shift transportation modes toward active transportation.
• Make public health a line item within the policymaking process, and not an afterthought
• Consider the needs of all populations including the aging population
• Create bike facilities for commuting AND recreation
• Marry functionality and safety in neighborhood design to encourage more walkable communities which can lead to greater social interaction
• Need walkability connections to grocery stores, creating access to healthy foods
• Where one lives should not determine the quality and length of life

Schedule and Next Steps

Input from the Regional Planning and Transportation Committees will be incorporated into the draft Public Health White Paper. The revised white paper will be presented to the Board of Directors in the fall for consideration in San Diego Forward: The Regional Plan.

CHARLES “MUGGS” STOLL
Director of Land Use and Transportation Planning

Attachment: 1. Draft Public Health White Paper

Key Staff Contact: Dan Gallagher, (619) 595-5354, dan.gallagher@sandag.org
A. SUMMARY

“Transportation impacts more than just how Americans get from place to place. It influences physical activity, accessibility to goods and services, air pollution, greenhouse gases, stress levels, family budgets, and our amount of leisure time, as well as a host of other lifestyle and health variables...While transportation may not immediately be thought of as a key determinant of health, transportation policies and accompanying land use patterns have far-reaching implications for our risk of disease and injury”¹ – Robert Wood Johnson Foundation’s Center to Prevent Childhood Obesity Working Group

Evidence suggests that land use and transportation planning and policy have a direct impact on public health. Studies have consistently shown that people who live in compact, mixed-use, and walkable communities are less likely to be obese and hypertensive compared to people who live in auto-oriented communities.² Research also has established a clear connection between these built environment characteristics and chronic diseases, such as heart disease, diabetes, cancer, and asthma.

The focus of public health practitioners has shifted away from the infectious diseases of the 20th century, which have generally been contained, toward chronic diseases that now account for seven out of every ten deaths in the United States.³ In addition, both urban planners and public health practitioners are becoming increasingly aware of the need to reduce the incidence of traffic injuries involving pedestrians and bicyclists and health disparities (the difference in health outcomes between people of different ethnicities, education attainment, and/or income levels).

As SANDAG develops regional policies and programs to guide transportation infrastructure investments over the next four decades, an understanding of the public health benefits and impacts of those decisions will support the agency’s efforts in creating a safe, viable, and efficient transportation system for the San Diego region. The investments, in turn should support improved public health outcomes. Public health is an emerging subject area considered in the previous Regional Comprehensive Plan (RCP) adopted in 2004, and the 2050 Regional Transportation Plan and Sustainable Communities Strategy (2050 RTP/SCS), but a subject in which SANDAG has become more fully involved in through a U.S. Centers for Disease Control (CDC) grant to the County of San Diego. This paper will expand upon previous efforts in defining the most effective approaches for achieving public health objectives.

The paper includes the following sections: a brief history of public health and urban planning; why public health matters; the rationale for the link between health outcomes and the built environment; a list of current efforts in the San Diego region; and policy considerations for San Diego Forward: The Regional Plan. This white paper will eventually serve as the basis for developing goals, policies, and actions for the regional plan.
B. HISTORY OF PUBLIC HEALTH AND URBAN PLANNING

Modern urban planning grew out of concerns for public health in early 20th century cities where people lived next to farm animals, butcher shops, and heavy industries. In response to frequent outbreaks of contagious diseases such as tuberculosis and cholera, planners and health advocates established zoning regulations to separate incompatible uses and activities such as tanneries and butcher shops from residential neighborhoods. Shops, restaurants and schools, however, remained integrated in the neighborhood, and people could still live relatively close to where they worked.4

After World War II, many factors including a growing population, rising standards of living, the increasing popularity of the private automobile as the primary mode of transportation, and federal policies that encouraged homeownership led to a housing boom in the outskirts of existing cities. The construction of the national highway system further fueled a more dispersed land development pattern with employment and other uses leaving the inner cities as well. Single-family suburban homes on large lots became a reality for many middle-class families.

While highways provided convenient access to the suburbs, many of them cut through inner cities, separating and isolating many traditional neighborhoods. Lack of infrastructure investment and a declining population base convinced many families that suburban neighborhoods were safer and healthier, with cleaner air, lack of crime and blight, wide streets and new homes.

As a predominant model for urban development, the walkable, compact, mixed-use neighborhoods, built on a grid street pattern with public facilities such as a school or a park at its core were being replaced by the automobile-oriented suburbs, connected to consolidated retail and employment centers or public facilities by parkways or arterial streets with fast-moving traffic.5 Today, many people in the United States live in such neighborhoods.6

Traffic patterns are in line with this trend. Between 1977 and 1995, people who walked to their destination declined by more than 42 percent while those driving increased by about 90 percent.7 From 1969 to 2001, the number of children who walked or bicycled to school decreased by 68 percent. Concerns about traffic and safety were cited as the key reasons why parents preferred to drive their children to school.8 Ironically, between 20 percent to 30 percent of the morning commute-time traffic is generated by parents driving their children to school.9

C. WHY PUBLIC HEALTH MATTERS

Chronic Diseases

As described in the previous section, chronic disease rates among adults and children have reached epidemic levels. According to the U.S. Centers for Disease Control and Prevention (CDC), the percentage of the population in California that is obese increased from less than ten percent in 1985 to nearly 25 percent in 2008. The San Diego County Health and Human Services Agency reports that in 2007, 33 percent of county residents were overweight and nearly 22 percent were obese.10 Childhood obesity in the country has more than tripled in the last 30 years.11 In the San Diego region, more than one-quarter of all children are obese.12 As with the adults, poor nutrition and a lack of physical activity are cited as the primary causes.
Traffic Fatalities

In addition to chronic diseases, traffic fatalities also have become a major public health issue. In 2008, there were more than 37,000 traffic-related fatalities in the United States. Despite improvements in vehicle safety such as seat belts and air bags, roadway design changes, and reductions in drunk driving, the per capita traffic fatality rate has changed very little since 1960, in part because of the continuing increase in total vehicle miles travelled (VMT).

In the San Diego region, between 250 and 300 people die in crashes on the roadway every year. Of these, approximately 50 to 60 are pedestrians. Bicyclists and pedestrians combined represent nearly one-quarter of all fatalities while they account for only 3 percent of trips in the region. This disparity has added significance since safety is a primary concern for people when they choose a mode of travel, especially for children travelling to school.

Air Quality

While the region’s air quality has improved, the health impacts of transportation-related pollutants remain a concern. Internal combustion engines in vehicles emit a number of air-borne pollutants, which are regulated by state and federal air quality standards to protect public health and safety. The San Diego region has met the federal standards for carbon monoxide, nitrogen dioxide, particulate matter, sulfur dioxide, and lead, and attained the federal 1997 Eight-Hour Ozone standard in 2011; however it has not met the more stringent federal 2008 Eight-Hour Ozone Standard. The San Diego region is a non-attainment area for the state ozone and particulate matter standards. According to the California Air Resources Board (CARB), attaining the California standards for particulate matter and ozone would prevent about 28 premature deaths annually in the San Diego region.

Cost Implications

Poor health outcomes can often have a significant cost burden on society. The CDC estimates that in 2008, obesity-related medical care costs were estimated to be as high as $147 billion. In 2006, obese people spent $1,400 more in medical care costs compared to people of normal weight. The California Center for Public Health Advocacy estimated that in 2006, the total annual cost to California from an overweight, obese, and physically inactive population was $41.2 billion. The estimated cost for the San Diego region was $3 billion.

D. HOW THE BUILT ENVIRONMENT AFFECTS HEALTH

As discussed before, land use patterns in many communities today make driving a necessity, and discourage walking and bicycling. A decrease in walking and bicycling results in a decrease in daily physically activity, which is considered a critical factor in the rising obesity epidemic across the United States, especially among children. In light of growing evidence that links land use patterns and transportation infrastructure with public health outcomes, urban planners and public health practitioners have begun collaborating to develop strategies that improve community health and wellness through the design of the built environment. Some of these strategies are described below.
Active Transportation and Public Transit

Streets that are designed for the safety of multiple users—including pedestrians of all ages, bicyclists, people with disabilities, buses, and cars—have been shown to reduce the risk of pedestrian and bicycle injuries.20 Walking or biking to school, work, daily errands and public transit helps people meet the Surgeon General’s recommendation of at least 30 minutes of physical activity per day.21 Physical activity includes moderate-intensity exercise, which varies among individuals depending on fitness level, such as walking and jogging.

Using public transit and active transportation options such as walking and biking reduces vehicle miles traveled, vehicle emissions, respiratory disease, and hypertension from exposure to high decibels of traffic noise.22 Proximity to transit also is associated with improved access to social, medical, employment, and recreational activities.23

Access to Parks and Recreation

Residents with convenient access to parks are more likely to utilize them for recreation and physical activity.24 Quality recreational facilities and programs also can increase physical activity. The health benefits of physical activity include a reduced risk of premature mortality, coronary heart disease, hypertension, stroke, some cancers and diabetes mellitus.25 Regular participation in physical activity can help reduce depression and anxiety, improve mood and enhance ability to perform daily tasks throughout the life span.26 Contact and exposure to open spaces also can reduce stress, improve mental health and facilitate recovery from illness.27

Complete Neighborhoods

The term “complete neighborhoods” refers to the ability of residents to walk easily to all of the goods and services needed in daily life. A complete neighborhood encourages walking and bicycling because goods are nearby, and helps contribute to neighborhood safety by ensuring that many pedestrians are on the street throughout the day, helping to keep eyes on the street. Complete neighborhoods also reduce residents’ reliance on cars, with fewer automobile trips required. This in turn leads to reduced air and noise pollution as well as risk of collisions and injuries.

The availability of medical services throughout the community can reduce vehicle trips with benefits to air quality, community noise and injuries. The availability of primary medical care has a role in preserving good health and preventing morbidity and hospitalizations from chronic and communicable diseases, including asthma and diabetes.

Access to Affordable Housing

In a healthy community, residents have access to safe and affordable housing. The lack of adequate affordable housing may result in families living in substandard housing, overcrowded situations, overpaying (paying more than 30 to 50 percent of their income for housing), and/or living far from their work and commuting long distances, negatively affecting both physical and emotional health.

Residents of substandard housing are at increased risk for fire, electrical injuries, lead poisoning, rodent infestation, mold, childhood asthma, and other illnesses and injuries. Overcrowded housing conditions can contribute to higher mortality rates, infectious disease, inhibited childhood development, and stress. Excessive rent or housing cost burdens contribute to emotional stress,
hunger, and overcrowding\(^28\). Conversely, lower housing costs result in more disposable income for essential non-housing needs, allowing a more balanced and healthier lifestyle.

**Environmental Quality**

Studies have found consistent associations between living in proximity to a busy roadway and respiratory disease symptoms, including asthma and poor lung function. Diesel particulate matter from truck and train engine exhaust has acute short-term impacts and disproportionate effects on the elderly, children, and people with illnesses or others who are sensitive to air pollutants. Health risks increase with closer proximity to roadways with high-volume traffic. In addition, truck routes on local streets contribute to traffic congestion, which may lead to unsafe conditions for pedestrians and bicyclists. Conversely, in dense communities where mixed-use provides access to goods and services, there is a need for delivery trucks which too can contribute to traffic congestion and sometimes cause conflicts with pedestrians and bicyclists. Trade-offs in the decision making process for physical health benefits or smart growth developments can sometimes outweigh location near or next to busy roadways.

Traffic also is a significant source of environmental noise. Chronic noise exposure can result in sleep disturbance, cognitive impairment in children and adults, adult hypertension and stress hormone activation\(^29\). With the exception of low emissions and natural gas-powered vehicles, traffic contributes directly to air pollution and greenhouse gas emissions. These emissions and other air pollutants, including ozone and particulate matter, are risk factors for cardiovascular mortality and respiratory disease and illness.

Street trees can mitigate some of the negative effects of roads and vehicle emissions and provide multiple benefits. Trees capture air pollution, reduce carbon dioxide and increase oxygen levels\(^30\). Trees close to traffic have been found to absorb nine times more pollutants than distant trees. In addition to the numerous environmental benefits, trees in urban areas also provide social benefits. Speeding vehicles can also endanger pedestrians and bicyclists, posing additional safety concerns in neighborhoods\(^31\). Street trees have shown to have a calming effect on traffic, causing motorists to slow down. Urban trees can facilitate stress reduction and better mental health\(^32\).

Global climate change and changing weather patterns also have a range of direct and indirect impacts on public health. Extreme temperature fluctuations can lead to deaths from heat strokes and higher temperatures can lead to higher counts of pollen and other aeroallergens that affect an estimated 300 million people with allergies around the world\(^33\).

**Access to Healthy Food**

The presence of a grocery store or food market in a neighborhood correlates with higher fruit and vegetable consumption, reduces the prevalence of overweight and obesity and reduces the incidence of hunger and malnutrition\(^34\).

Farmers’ markets can provide another source of fresh, locally produced fruits, vegetables and other food products. This in turn may help residents meet the recommended daily servings of healthy foods such as fruits and vegetables. Healthy food is generally low in fat and saturated fat, contains limited amounts of cholesterol and sodium, and provides natural vitamins. Farmers’ markets may be particularly important in areas poorly served by full-service grocery stores\(^35\).
Community gardens also can provide a source of fresh fruits and vegetables for users, increase physical activity and provide opportunities for social interaction and cohesion. Locally produced food helps attain other benefits, such as sustaining the local economy and reducing long-distance shipping, thereby decreasing vehicle emissions, which are associated with chronic diseases and global climate change.

Neighborhood studies demonstrate that where there are high numbers of fast food restaurants compared to grocery stores, there also are higher rates of diabetes, cardiovascular disease, and cancer. Increasing the number of full-service grocery stores relative to fast food restaurants in neighborhoods can help to combat these health conditions.

**Access to Regional Food Systems**

The development of regional food systems, or food hubs, supports locally grown and healthy food. Regional Food Hubs are defined as “integrated food distribution systems that address agricultural production and the aggregation, storage, processing, distribution, and marketing of locally or regionally-produced food products.” Local food hubs have been shown to reduce the redundancy inherent in small-scale food systems by providing a platform for producers to collectively meet consumer demand within a region, primarily, prior to the product entering the global market. Presently, San Diego County lacks its own Regional Food Hub while the Los Angeles terminal market acts as a proxy wholesale distribution center.

A San Diego Regional Food Hub could reduce the redundant transportation miles that are accrued by the producers and distributors alike. Regionalized food hubs facilitate higher economic impact of consumer dollars within the local economy, increased economic viability of small and mid-scale producers, improved community food security, decreased reliance on imported foreign goods, and decreased food miles and correlating greenhouse gas emissions.

**Public Safety**

Community design affects social interactions, which in turn may affect violence. Violence has a negative effect on the physical and mental health of victims and their families, friends and neighbors. It also negatively impacts the social and economic well-being of the neighborhood, influencing business investment, job and housing security, educational attainment, resident participation in community development and community integration. When neighborhoods are well designed, the resulting social cohesion contributes to lower crime and violence and therefore better health outcomes.

Design factors associated with levels of perceived and actual neighborhood safety include sidewalk cleanliness and width, street design for pedestrian safety and speed control, street lighting, number of liquor stores, degree of community isolation, and access to services and housing for low-income persons. Other factors include the presence of drugs or gangs, police presence, availability of weapons, employment and access to community activities for families and youth.

A table discussing built environment strategies, policy considerations, and community health outcomes is included at the end of this paper.
E. EXISTING REGIONAL AND LOCAL EFFORTS

A number of existing policies, programs at the regional and local level support planning and implementation for healthy communities in the San Diego region. These are described below.

Regional Plans and Programs

San Diego Forward: The Regional Plan

In May 2012, the SANDAG Board of Directors approved merging the update of the Regional Comprehensive Plan (RCP) with the next Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). This new plan, San Diego Forward: The Regional Plan, will combine the update of these two major planning efforts giving citizens a single, easily accessible document that includes an overall vision for the San Diego region and an implementation program to make that vision a reality. In addition, the consolidation will enhance public participation opportunities, as well as save staff time and resources.

Regional Comprehensive Plan (RCP)

Adopted in July 2004 by SANDAG, the RCP provides a blueprint for managing the region’s growth while preserving natural resources and limiting urban sprawl in the San Diego region. A key component of the RCP is the smart growth strategy that promotes compact, mixed-use development in communities that provide a variety of transportation choices. SANDAG supports smart growth development through a Smart Growth Tool Box and a variety of planning and transportation funding programs.

The 2004 RCP states:

Healthy communities are a matter of effective land use distribution, good design, and responsible management of the urban environment. The Centers for Disease Control and Prevention has identified community design as a major contributor to the threefold increase in obesity in the United States over the last 20 years. Healthy communities address this issue by supporting an active lifestyle through zoning that puts commercial and community services within walking and bicycling distances of most residents, and by providing safe, attractive places to walk or ride a bike. Designing for healthy communities also means separating incompatible land uses and providing transition zones and buffers between urban, industrial, and rural lands.

Goal: Create safe, healthy, walkable, and vibrant communities that are designed and built to be accessible to people of all abilities

Action: Avoid and mitigate incompatible land uses, for example, by establishing buffers or transition zones between housing and industrial uses or major transportation corridors that could pose health risks while encouraging a mix of uses that supports healthy communities such as grocery, community services, office and housing uses.
Adopted in October 2011, by SANDAG, the 2050 RTP/SCS is a blueprint for improving mobility in the San Diego region and reducing greenhouse gas (GHG) emissions to meet the targets set by the California Air Resources Board (CARB) per Senate Bill 375 (Steinberg, 2008). This long-range plan includes policies, strategies, and investments to maintain, manage, and improve the region’s transportation system. It also better integrates planning for land use and transportation. The 2050 RTP/SCS included the following public health-related goal and action:

**Goal:** Increase the use of transit, ridesharing, walking and biking in major corridors and communities

**Action:** Continue to collaborate with the region’s public health professionals to enhance how public health issues are addressed in regional planning, programming, and project development activities.

SANDAG crafted a new vision for public transit as part of the 2050 RTP/SCS through the preparation of the Urban Area Transit Strategy (UATS). The goals of the transit strategy were twofold: first, maximize transit ridership in the greater urbanized area of the region; and second, test the role of the transit network to reduce vehicle miles traveled and GHG emissions. The 2050 RTP/SCS also includes a Climate Action Strategy, Regional Energy Strategy, Regional Bicycle Plan, and high-speed rail planning.

Better integrating the connections between land use and transportation into the design of communities provide more opportunities for the development of a variety of modes of travel including light rail, buses, biking and walking. Co-benefits of this integration include reduced VMT, reduced GHG emissions, fuel cost savings, reduced air pollution, decreased obesity, and increased public health through more active transportation.

**TransNet Ordinance**

TransNet is the half-cent sales tax for local transportation projects that was first approved by voters in 1988, and then extended in 2004 for another 40 years beginning in 2008. Administered by SANDAG, the program has been instrumental in expanding the region’s transportation system, reducing traffic congestion, and bringing critical transportation programs to life. During the 60-year life of the program, more than $17 billion will be generated and distributed among highway, transit, and local road projects in approximately equal thirds.

The TransNet extension ordinance approved in 2004 dedicated two percent of revenues to the Smart Growth Incentive Program, and two percent of revenues to the Bicycle, Pedestrian, Neighborhood Safety and Traffic Calming Program (now the Active Transportation Grant Program). These grant programs provide funding for the planning and construction of street improvements along local corridors and intersections, such as sidewalks, crosswalks, streetscape enhancements, and other pedestrian upgrades, traffic calming, and safety measures. The Smart Growth Incentive Program supports compact, mixed-use development, and more housing and transportation choices in the Smart Growth Opportunity Areas located on the Smart Growth Concept Map through planning and infrastructure grants.
To date, the TransNet Smart Growth Incentive Program has committed $15.6 million to local jurisdictions in support of compact, transit-oriented development. In addition, $15.3 million from the Active Transportation Grant Program have been dedicated to bicycle and pedestrian improvements.

Board Policy No. 31: TransNet Ordinance and Expenditure Plan Rules, Rule 21, provides guidance on section 4(E)(3) of the Ordinance, which requires routine accommodation of bicyclists and pedestrians in all TransNet-funded projects. The guidelines address all aspects of the program, including highways, public transit, and local roads.

Since taking effect in 2008, the TransNet extension has distributed $215.6 million to the region’s 18 cities and the County of San Diego to fix, maintain, and expand local streets. As with the original TransNet, the extension program distributes local road revenue yearly to each jurisdiction using a formula based on population and road miles.

Active Transportation Implementation Strategy Framework

With the adoption of the 2050 RTP/SCS in 2011, the Board of Directors made an unprecedented commitment to Active Transportation. The final action by the Board calls for planning for a broad Active Transportation Program within two years of the 2050 RTP/SCS adoption. Staff has begun identifying a proposed framework for this Implementation Strategy, which incorporates Safe Routes to School, Safe Routes to Transit, the Regional Bike Plan, and other related active transportation efforts at SANDAG. This work will both inform and address active transportation in San Diego Forward: The Regional Plan.

iCommute Transportation Demand Management (TDM) Program

The goal of the iCommute program is to manage and reduce traffic congestion during peak-times, as well as reduce greenhouse gas emissions and other environmental pollutants that result from commuters driving to work each day alone. iCommute plays a vital role in promoting active transportation through employer incentive programs, bicycle programs such as Bike to Work Day, and marketing and outreach efforts such as the Walk, Ride and Roll to School Campaign in 22 schools across the region. A reference guide for local jurisdictions entitled, Integrating Transportation Demand Management into the Planning and Development Process was completed in May 2012.

San Diego Regional Bicycle Plan

The Regional Bike Plan, adopted in May 2010, establishes a network of regional bikeway corridors for intercommunity bicycle travel and proposes a comprehensive set of programs to support bicycling in order to make the bicycle a practical means of transportation in the San Diego region.

Healthy Works Project

In March 2010, the County of San Diego Health and Human Services Agency (HHSA) received $16.1 million from the federal Centers for Disease Control and Prevention through the American Recovery and Reinvestment Act (ARRA) for the Healthy Works project. The overarching goal of the program is to expand the use of evidence-based, community-wide strategies that focus on
environmental, systems and policy changes, resulting in increased levels of physical activity, improved nutrition and decreased prevalence of overweight and obesity.

The goals and objectives of Healthy Works are being achieved through partnerships between HHSA, community partners and contracted agencies including UC San Diego, San Diego County Office of Education, San Diego State University, Community Health Improvement Partners and SANDAG. In particular, HHSA has partnered with SANDAG to implement six Communities Putting Prevention to Work (CPPW) interventions that focus on integrating public health principles in local and regional planning, encouraging active transportation, and promoting Safe Routes to School.

**Safe Routes to School Programs (SRTS)**

At the local level, a number of jurisdictions have initiated comprehensive Safe Routes to School programs in order to encourage more walking and bicycling to school. For example, the City of Chula Vista is collaborating with education, public health and community partners on the Healthy Eating Active Communities (HEAC) campaign with the goal of improving access to healthy food and physical activity in schools and neighborhoods.41

SANDAG approved a Regional Safe Routes to School Strategic Plan to guide future SANDAG involvement in promoting walking and bicycling to school as safe and attractive travel choices. The Strategic Plan is guiding work on an implementation program currently underway and funded through Healthy Works.

**Safe Routes to Transit**

The Safe Routes to Transit Program will prioritize projects and develop program that provide bicycle and pedestrian access around existing and planned transit stops and stations. SANDAG will work closely with the local jurisdictions to identify opportunities to complement projects and programs identified in their bicycle and pedestrian plans.

**Public Health Elements for General Plans**

A number of jurisdictions in the San Diego region have adopted public health elements as part of their general plan updates. These include the cities of Chula Vista, Escondido, La Mesa, National City, San Marcos, and Vista. In addition, Encinitas and Lemon Grove are currently in the process of developing public health elements for their general plans.

**San Diego County Childhood Obesity Initiative**

In 2006, the County Board of Supervisors, launched the “Call to Action: Childhood Obesity Action Plan” for San Diego County. Representing a collaborative effort of numerous partners and stakeholders, the Action Plan paved the way for the funding and formation of the San Diego County Childhood Obesity Initiative (COI), which serves to engage partners and assure the effective implementation of the strategies outlined in the Call to Action.

The Initiative, coordinated by Community Health Improvement Partners (CHIP), is a public/private partnership whose mission is to reduce and prevent childhood obesity in San Diego County by creating healthy environments for all children and families through advocacy, education, policy development and environmental change. COI consists of seven domains including: Government,
Healthcare, Schools and After-School, Early Childhood, Community, Media, and Business. The Government domain component addresses health in the built environment.42

**Building Better Health**

On July 13, 2010, the Board of Supervisors adopted the County’s *Health Strategy Agenda: Building Better Health*, which serves as a blueprint for improving community health and quality of life over the next decade. With input from staff, advisory boards, partners and community stakeholders, Building Better Health has created a framework embracing four main themes: building a better service delivery system; supporting healthy choices; pursuing policy and environmental changes; and changing the culture from within the organization to support positive health outcomes.

Building Better Health will transform the way the County does business through prevention efforts that reflect systems change, incorporate strategies that address the social determinants of health, and advance changes to the built environment. A key component in this effort is the CPPW program, mentioned previously.

**G. POLICY CONSIDERATIONS**

Only recently have urban planners and public health professionals come to understand the extent to which our transportation system, land use patterns, and community design play a role in determining health outcomes in our communities. Therefore how SANDAG invests in transportation infrastructure that maximizes public health benefits, social interaction, and community cohesion is an important policy consideration. How the emerging subject area of public health can both inform and enhance SANDAG transportation investment decisions in San Diego Forward: The Regional Plan provides an opportunity to consider public health in ways that has not been done previously.

**Table 1: How the Built Environment Affects Public Health**

<table>
<thead>
<tr>
<th>Built Environment Strategies</th>
<th>Policy Considerations</th>
<th>Community Health Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Active Transportation and Public Transit</td>
<td>Invest in Transportation Infrastructure that maximizes Public Health Benefits, Social Interaction and Community Cohesion. Complete streets; pedestrian- and bicycle-friendly neighborhoods; regional and local bicycle routes; safe routes to school and other destinations; traffic calming on neighborhood streets; and safe and convenient public transit within walking distance of homes/work.</td>
<td>Increased physical activity; lower risk of injury; reduced air and noise pollution; lower greenhouse gas emissions; improved neighborhood safety; and greater social cohesion.</td>
</tr>
<tr>
<td>Access to Parks and Recreation</td>
<td>Parks, recreation and trails within walking distance of homes/work; and joint use facilities (with school districts and other public agencies).</td>
<td>Increased physical activity; improved mental health; improved neighborhood safety; and greater social cohesion.</td>
</tr>
<tr>
<td><strong>Built Environment Strategies</strong></td>
<td><strong>Policy Considerations</strong></td>
<td><strong>Community Health Outcomes</strong></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Complete Neighborhoods</td>
<td>Complete Neighborhoods include healthy, walkable, bikeable, and vibrant communities with a variety of housing choices, access to goods, services, recreation and jobs. Neighborhood-serving retail and public amenities within walking distance of homes; and retrofit of underutilized retail centers or corridors into mixed-use development.</td>
<td>Increased physical activity; lower risk of injury; reduced air and noise pollution; lower greenhouse gas emissions; improved neighborhood safety; and greater social cohesion.</td>
</tr>
<tr>
<td>Access to Affordable Housing</td>
<td>Promoting the availability of a diverse range of housing types close to major job centers to reduce the length of commute trips and combined cost of housing and transportation, especially for lower and moderate income households.</td>
<td>Lower housing costs result in more disposable income for essential non-housing needs, allowing a more balanced and healthier lifestyle.</td>
</tr>
<tr>
<td>Environmental Quality</td>
<td>Encouragement of the location of sensitive uses (such as parks and childcare centers) away from major sources of pollution (such as major regional highways); remediation of contaminated sites; habitat and open space (including canyons in urban areas) preservation; and urban forests/greenery.</td>
<td>Reduced risk of respiratory diseases; reduced exposure to toxic substances; and improved mental health.</td>
</tr>
<tr>
<td>Access to Healthy Food</td>
<td>Improve access to healthy, affordable, and culturally appropriate food and nutrition while also considering transportation access. Food Deserts, Farmer’s Markets.</td>
<td>Improved nutrition; increased physical activity; and reduced incidence of hunger.</td>
</tr>
<tr>
<td>Access to Regional Food Systems</td>
<td>Explore the development of a Regional Food Hub within San Diego County</td>
<td>Increased food security; and lower greenhouse gas emissions</td>
</tr>
<tr>
<td>Public Safety</td>
<td>Encourage active uses in streets and public space to promote public safety. Crime prevention through environmental design; street lighting;</td>
<td>Improved neighborhood safety; greater social cohesion; improved mental health; and lower risk of injury.</td>
</tr>
</tbody>
</table>
REFERENCES:

1 Robert Wood Johnson Foundation Center to Prevent Childhood Obesity; Position Statement on the Intersection of Transportation and Health; http://www.reversechildhoodobesity.org/webfm_send/64; (accessed December 11, 2009)
3 US Center for Disease Control and Prevention (2009)
5 See http://factfinder.census.gov/jsp/saff/SAFFInfo.jsp?_pageId=tp13_housing_physical. Since 1960, more than 50% of all new housing is built in the suburbs.
6 US Census 2000 (See http://www.census.gov/). Between 1970 and 2000, the percentage of the total population living in suburbs grew from 38 percent to 50 percent.
8 Active Living Research, Active Transportation: Making the Link from Transportation to Physical Activity and Obesity, Active Living Research Bulletin, Summer 2009.
11 US Center for Disease Control and Prevention (2009)
16 California Air Resources Board Proposed Amendments to State Area Designations and Maps (2011)


Kahn EB. The effectiveness of interventions to increase physical activity. American Journal of Preventative Medicine, 2002.


Inagami S, Cohen DA, Finch BK, Asch SM. You are where you shop: grocery store locations, weight and neighborhoods. Am J Prev Med, 2006. A grocery store is defined as a retail outlet where a variety of fresh fruits, vegetables and meats could be purchased. A food market is a store that carries some fruits and vegetables.
38 Ozer EJ, McDonald KL. Exposure to violence and mental health among Chinese American urban adolescents, 2006.
41 See http://www.healthyeatingactivecommunities.org/grantee_showcase1_2.php for a summary of the Chula Vista HEAC project.
Regional Plan
Series of Workshops
2013

Workshop at Caltrans – Environment & Public Health
Workshop in San Ysidro

Thank you for coming.
Workshop in Escondido
Workshop in Escondido

Workshop in Oceanside
Workshop in Oceanside

Workshop in Oceanside
San Diego Forward: The Regional Plan
Draft Range of Alternative Land Use and Transportation Scenarios and Initial Emerging Technology Concepts
July 19, 2013

Why Prepare Scenarios?

GHG emission reduction targets:

<table>
<thead>
<tr>
<th>Target Year</th>
<th>CARB Targets</th>
<th>2050 RTP/SCS</th>
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<tbody>
<tr>
<td>2020</td>
<td>7%</td>
<td>14%</td>
</tr>
<tr>
<td>2035</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>2050</td>
<td>N/A</td>
<td>10%</td>
</tr>
</tbody>
</table>
What Can Happen in 40 years?

Comparing Projected Change

Planned Job and Housing Growth in 2020 and 2050
2050 Population, Job, and Housing Growth

- **2010 - 2050**
  - 973,000 more people
  - 479,000 more jobs
  - 333,000 more housing units

Population, Jobs, Housing Growth

Input and Ideas

- 2010 – 2050
  - 973,000 more people
  - 479,000 more jobs
  - 333,000 more housing units

Chart showing population, jobs, and housing growth from 1970 to 2050.

Images of input and ideas sessions.
Three Alternative Land Use Concepts

- **Scenario A**: Second Units and Infill/Redevelopment in Urban and Suburban Areas
- **Scenario B**: Transit Oriented Development
- **Scenario C**: Multiple Dense Cores

Alternative Economic Development Futures

- Major Employment Areas: 2006 Employment Density
- October 2011
## Scenario Timeline

<table>
<thead>
<tr>
<th>Spring 2013</th>
<th>Summer 2013</th>
<th>Fall 2013</th>
<th>Winter 2014</th>
</tr>
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<tbody>
<tr>
<td>Land Use and Transportation Concepts</td>
<td>Scenario Testing, Analysis, and Refinement</td>
<td>Findings for Regional Plan</td>
<td></td>
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<tr>
<td>Public Outreach</td>
<td>Public Outreach</td>
<td></td>
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</tbody>
</table>

Coordination with other related areas

## Emerging Technologies
Emerging Technology Challenge

Henry Ford:

“If I had asked people what they wanted, they would have said faster horses.”

A Look at Today and Tomorrow
A Look at Today and Tomorrow

Technology Investments
Emerging Technology Approach

On the Road to Fully Automated

The Autonomous Vehicle
Infrastructure

Input from CTAC, TWG, and Workshops
Next Steps for Scenarios

- **August** – Outreach with economic stakeholders
- **September** – Update to Board of Directors
- **October** – Workshop on land use scenarios
- **November** – Discussion with RPC, TC, and Board
- **Winter** – Findings for Regional Plan

Your Thoughts and Ideas

- **Scenario A**
  - Second Units and Infill/Redevelopment in Urban and Suburban Areas
- **Scenario B**
  - Transit Oriented Development
- **Scenario C**
  - Multiple Dense Cores
Public Health Policy Considerations for San Diego Forward: The Regional Plan

July 19, 2013

History of Public Health/Planning

SANDAG
Why Public Health Matters

<table>
<thead>
<tr>
<th>3 Behaviors</th>
<th>4 Diseases</th>
<th>50+ Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco use</td>
<td>Heart Disease</td>
<td>Percent of deaths</td>
</tr>
<tr>
<td>Poor diet</td>
<td>Type 2 diabetes</td>
<td></td>
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<tr>
<td>No exercise</td>
<td>Lung Disease</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cancer</td>
<td></td>
</tr>
</tbody>
</table>

History of Public Health/Transit
Obesity Trends* among U.S. Adults:

- 1990:
- No Data
- <10%
- 10%–14%
- 15%–19%

- 1999:
- <10%
- 10%–14%
- 15%–19%
- 20%–24%
Significant one year change 2009/2010

Obesity Trends* Among U.S. Adults:

2009

2010

<10%  10%-14%  15%-19%  20%-24%  25%-29%  ≥30%

<10%  10%-14%  15%-19%  20%-24%  25%-29%  ≥30%
7/10 deaths each year are from chronic diseases

CDC's National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), USA

Childhood Obesity Trends

San Diego County

Overweight among San Diego Children and Adolescents by Gender, 2011-2012

5210 Campaign

5210 Every Day!
HEALTHY HABITS FOR HEALTHY COMMUNITIES

How the Built Environment Affects Public Health

From Active Living Research – www.activelivingresearch.org
Sidewalks

• People who live in neighborhoods with sidewalks on most streets are **47 percent** more likely to be active at least 30 minutes a day.
The City of Long Beach installed two one-way protected bikeways in the heart of downtown, increasing bike ridership by **33 percent** along the street and reducing bike accidents **80 percent** from five per year to one.

From BikeLongBeach-www.bikelongbeach.org
Traffic Calming

• Medians, roundabouts, and other traffic-calming efforts can reduce the number of automobile crashes with pedestrian injuries by up to 15 percent.
Public Transportation

• Public transit users take 30 percent more steps per day than people who rely on cars.

From Active Living Research – www.activelivingresearch.org

How Transportation & Land Use Patterns Impact Health

Transportation Options  Land Use Patterns  Travel Behavior  Health  Costs

From http://www.apha.org/advocacy/reports/reports/
Walkable Communities – A Triple Win


Existing Regional/Local Efforts: Groundbreaking Partnership
Healthy Works Phase I:
Contract: March 2010-March 2012

Healthy Community Mapping and Modeling
Regional Planning Policies and Metrics
Healthy Communities Campaign
Safe Routes to Schools
Active Commuters Transportation
Regional Bikeway Signage and Promotion

Public Health Stakeholders Group
Promote consideration of health co-benefits in SANDAG proposed policies, projects, and programs
Healthy Works Phase II

Community Transformation Grant Program (CTG) Contract July 2012-Sept 2016
• Support work on San Diego Forward: The Regional Plan
• Provide planning tools for local jurisdictions
• Regional monitoring and evaluation for public health

Regional Efforts on Public Health
Local Efforts on Public Health

- General plans with health considerations
- Zoning amendments
- Access to healthy food
- Safe Routes to Transit
- Safe Routes to School
- Tribal governments

Live Well San Diego

“Live Well, San Diego!” seeks partnerships with cities striving for healthy, safe, and thriving communities across the region
Vision and Goals

ADOPTED VISION
To provide innovative mobility choices and planning to support a sustainable and healthy region, a vibrant economy, and an outstanding quality of life for all.

ADOPTED GOALS

Healthy Communities:
• Invest in transportation infrastructure that maximizes public health benefits, social interaction, and community cohesion
Access to Healthy Foods

• Improve access to healthy, affordable, and culturally appropriate food and nutrition
• Access includes transportation

Public Safety

• Encourage active uses in streets and public space to promote public safety
How can transportation investments ensure healthy communities?