MEETING NOTICE
AND AGENDA

CITIES/COUNTY TRANSPORTATION ADVISORY COMMITTEE (CTAC)
The Cities/County Transportation Advisory Committee (CTAC) may take action on any item appearing on this agenda.

Thursday, January 8, 2009
10:00 to 11:30 a.m.

SANDAG, Conference Room 7
401 B Street, Suite 800
San Diego, CA 92101-4231

Chair: Frank Rivera, City of Chula Vista
Vice Chair: Robert Johnson, City of Carlsbad

Staff Contact: Dan Martin
(619) 699-6987
dma@sandag.org

AGENDA HIGHLIGHTS
• RAIL GRADE SEPARATION EVALUATION CRITERIA
• 2008 CONGESTION MANAGEMENT PROGRAM UPDATE
• SAN DIEGO REGION ECONOMIC STIMULUS PROPOSAL UPDATE

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<table>
<thead>
<tr>
<th>ITEM #</th>
<th>RECOMMENDATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. INTRODUCTIONS</td>
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<tr>
<td>+2. SUMMARY OF THE DECEMBER 4, 2008, CTAC MEETING (Frank Rivera, City of Chula Vista)</td>
<td>APPROVE</td>
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<tr>
<td></td>
<td>The summary of the December 4, 2008, CTAC meeting is attached. CTAC is asked to review and approve the meeting summary.</td>
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<tr>
<td>3. PUBLIC COMMENTS</td>
<td>COMMENTS</td>
</tr>
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<td></td>
<td>Members of the public will have the opportunity to address the Working Group during this time.</td>
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<tr>
<td>+4. RAIL GRADE SEPARATION EVALUATION CRITERIA (John Dorow, SANDAG)</td>
<td>DISCUSSION</td>
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<td>During the May 16, 2008 Transportation Committee meeting, a technical concern was raised regarding the criteria used to evaluate and recommend grade separation projects. Staff will provide an overview of the existing criteria, review the technical concern raised, and provide a recommendation for consideration by CTAC.</td>
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<td>5. 2008 CONGESTION MANAGEMENT PROGRAM (CMP) UPDATE (Heather Werdick, SANDAG)</td>
<td>DISCUSSION</td>
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<td>SANDAG staff provided an update on options for future CMP updates at the December 4, 2008 CTAC meeting. CTAC members were encouraged to discuss these options with other city/county management staff within their jurisdiction. CTAC members will be asked to provide a status report on these discussions. SANDAG staff will be available to answer any questions.</td>
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<tr>
<td>6. SAN DIEGO REGION ECONOMIC STIMULUS PROPOSAL UPDATE (Dan Martin, SANDAG)</td>
<td>INFORMATION</td>
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<td>SANDAG, in conjunction with member agencies, has developed a list of potential transportation and public works projects for a draft regional economic stimulus proposal. An update on the status of the effort will be provided.</td>
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<td>ITEM #</td>
<td>RECOMMENDATION</td>
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<td>7.</td>
<td><strong>CALTRANS UPDATES</strong>&lt;br&gt;(Luis Medina, Caltrans) &lt;br&gt;INFORMATION</td>
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</tbody>
</table>

An update on various Local Programs, funding program deadlines, and announcements regarding upcoming conferences will be provided.

| 8.    | **ANNOUNCEMENTS**<br>INFORMATION |

CTAC members are encouraged to share items of interest.

| 9.    | **UPCOMING MEETING**<br>INFORMATION |

The next CTAC meeting is tentatively scheduled for Thursday, February 5, 2009, from 9:30 to 11:00 a.m. The meeting will be held in the 7th floor conference room of the SANDAG offices located at 401 B Street in San Diego.

+ next to an item indicates an attachment
Introductions

Frank Rivera (CTAC Chair) chaired the meeting. Meeting participants introduced themselves.

Meeting Summaries

CTAC Members reviewed the meeting summary for the November 6, 2008 CTAC meeting. A correction was noted in the meeting summary. The first sentence of the second paragraph under the topic of TransNet Smart Growth Incentive Program as shown on page 5 of the agenda is revised to read:

“Bob Johnson (Carlsbad) asked if CTAC was advisory to the Planning Directors Group with respect to the criteria.”

After reviewing the proposed change and the meeting summary, CTAC approved the November 6, 2008 meeting summary.

Public Comments

There were no comments from the public.

Regional Transportation Congestion Improvement Program (RTCIP) Status

Muggs Stoll provided a copy of the RTCIP language as included in the TransNet Extension ordinance. Muggs specifically reviewed paragraph 5 of Section A. “Funding Program”, Section C. “Fee Adjustment”, and Section G. “Procedures for the Levy, Collection, and Disposition of Funding Program Revenues”. Muggs stated that the fee adjustment will likely be the minimum (2 percent) established in the ordinance since the construction index is tracking very low. Muggs reminded all that we are half way through the current year and that an annual compliance audit by the Independent Taxpayer Oversight Committee will issued in October 2009. Notification will be sent out in February 2009 to clarify the fee adjustment.

Bob Johnson (Carlsbad) asked where the annual reports should be submitted. Muggs responded that the reports should be sent to John Meyer, ITOC Chair. Hank Leven (Imperial Beach) asked if there were established format requirements for the program reports. Muggs responded that there was no specific format required but reference should be made to the April program submitted by each jurisdiction.
Linda Marabian (City of San Diego) asked if RTCIP funds can be spent on either the 70% (new or expanded facilities) or 30% (maintenance) as defined by the Local Street and Road program. Muggs responded that these funds may be limited to the 70% but that he would clarify.

Gary Kellison (Oceanside) asked if cost sharing for the Sprinter project was possible. Muggs responded that the funds are to be spent on the Regional Arterial System.

**2008 Congestion Management Program Update**

Heather Werdick (SANDAG) provided an update on the 2008 CMP which was approved by the Transportation Committee on November 7, 2008. She reviewed the deficiency plan requirements and options for continuing the CMP. Options included a streamlined approach and potentially opting out of the State process while still complying with the Federal CMP provisions. Heather reviewed the benefits and limitations for each option. Next steps include CTAC representatives discussing these options with their respective City Managers in preparation for recommendations to the Transportation Committee next year. Dan Martin (SANDAG) agreed to send the presentation out to CTAC members to assist in these discussions.

Greg Humora (La Mesa) asked if a unanimous vote was required to approve opting out. Heather responded that a majority is all that’s required. Paul Vo (San Marcos) asked if opting out has any future funding implications. Heather responded that at this time there do not appear to be any ties to the State CIP. Maryam Babaki (National City) asked if SANDAG had developed a recommendation. Heather responded that SANDAG is soliciting feedback from all agencies and that we would work through CTAC to develop recommendation. Heather agreed to come back to CTAC in January to provide an update, a comparison between the State and Federal CMP provisions, and check in on status of jurisdiction discussions.

**Draft San Diego Region Economic Stimulus Update**

Dan Martin provided an update on the efforts to develop an economic stimulus proposal for the San Diego region. During November, SANDAG asked agencies in the region to submit transportation and public works projects that could be advertised for construction within 12 months. It was requested that projects be submitted in three categories:

- Ready to Advertise
- Ready to Advertise in six (6) months
- Ready to Advertise in twelve (12) months

In mid November SANDAG compiled the projects submitted by all agencies and reconciled the project information. At the end of November, SANDAG applied the San Diego Region Input – Output model to estimate the impacts that could potentially result if all projects were funded. The number of projects currently totals 1,043. The project costs associated with these project total approximately $7.4 billion. The impacts of completing the projects identified by the region in this proposal include the creation of approximately 96,000 jobs that receive more than $5 billion in wages. Next steps include taking the draft proposal to the SANDAG Board of Directors on December 19, 2008. Dan Martin indicated that he would send CTAC members a copy of the draft proposal via e-mail on December 5, 2008 in advance of the Board meeting.
Frank Rivera (Chula Vista) commented that Caltrans may want to look at streamlining the Local Assistance process if stimulus funds go through the State. Erwin Gojuangco (Caltrans) stated that they were currently reviewing the process.

**Caltrans Updates**

Luis Medina (Caltrans) announced the following:

**VTA applications due December 1, 2008**

Caltrans is assembling a committee to review applications.

**Safe Routes (State) - call for projects**

Local Assistance is looking to provide informal training on sample applications. It is anticipated that applications will be due in February 2009.

**Economic Stimulus**

This topic will be discussed at the December 10, 2008 external relations committee.

Luis reminded everyone that obligation packages will be due in July 2009 and that agencies should consider early requests for authorization.

**Announcements**

Minjie Mei announced that the City of Santee is seeking to hire a new City Director. Interested parties should go to the City's web site.

There were no other announcements.

**Next Meeting**

The next planned meeting of the CTAC will be Thursday January 8, 2008 at 10:00 a.m. It will be held at the SANDAG offices in conference room 7 immediately after the SANTEC meeting.
Introduction

The Transportation Committee (TC) at its May 16, 2008 meeting raised a technical concern regarding the criteria used to recommend grade separation projects to be submitted to the CPUC for its biannual grade separation list. SANDAG staff used the SANDAG Rail Grade Separation Evaluation Criteria documented in the 2007 Regional Transportation Plan (Evaluation Criteria). The TC requested additional information to assure Evaluation Criteria considered traffic impacts on the adjacent streets when an at grade rail crossing is evaluated in San Diego County. A review of the Criteria has been performed and the following discussion and recommendations are hereby submitted for your information and comment.

Discussion

The Evaluation Criteria does indeed contain language that requires consideration of traffic on streets with signals interconnected to or adjacent to railroad crossings. The vehicular traffic volume from adjacent streets will be used in the calculation of an evaluation score for each crossing when SANDAG issues a request for projects to grade separate crossings. The specific statement contained in the criteria is as follows:

“For crossings where two or more streets that are adjacent to each other that are impacted simultaneously by the operation of the train, the vehicular traffic volume on those streets is cumulative for purposes of the calculation of this congestion relief factor.”

This statement is included in two sections of the Criteria:

Section 1: Peak Period Exposure Index
Section 2: Peak Day Total Delay Exposure Index

In both sections, traffic volumes are parameters used to calculate a score and engineering judgment must be used to capture all the volume of traffic which is impacted by the operation of a train. This would possibly include traffic volumes at adjacent signalized intersections depending on the specific configuration of each site.

The evaluation scores submitted to the TC were developed by staff to recommend applications for CPUC grade separation funds. These scores used the major components of the evaluation criteria
but did not include traffic volumes for adjacent streets because of time constraints and the level of effort required to develop the data to include all the evaluation factors. Other sections of the Evaluation Criteria not included were: noise reduction, benefit to emergency services, impact to truck freight operations, and Regional Housing Needs Assessment (RHNA) criteria.

Upon review of the Evaluation Criteria, we do not recommend changes to the criteria to establish a SANDAG list with a call for projects. We would request comments and a recommendation for prioritizing which evaluation factors from the Evaluation Criteria should be used when SANDAG applies for funding or grants for grade separations such as the CPUC biannual list, state bond funding or other sources.

Attachments: 1. Rail Grade Separation Evaluation Criteria

Key Staff Contact: John Dorow, (619) 699-1915, jdo@sandag.org
RAIL GRADE SEPARATION EVALUATION CRITERIA

The Cities/County Transportation Advisory Committee (CTAC) developed regional rail grade separation prioritization criteria that stress congestion relief, safety and funding needs as the primary elements, with additional consideration of other factors including impacts to pedestrian traffic, bus transit operations, emergency services, truck freight operations and noise.

In preparation for the development of the criteria staff conducted a literature search of other rail grade separation prioritization criteria. These included the California Public Utilities Commission criteria, other states’ criteria, the federal government as well as articles published in research journals. The findings formed the basis for the initial discussions within CTAC.

The intent of the implementation of a regional rail grade separation program is to provide funding for construction of significant traffic congestion relief projects through the implementation of rail grade separations where other more economical alternatives are demonstrably not feasible or practical. Elimination of crossings is considered a potentially practical alternative. Program allocations will need to be considered in conjunction with other regional transportation funding priorities and needs, and will be dependent on the availability of funding from federal, state and local sources.

The rail grade separation prioritization criteria were accepted by the SANDAG Board of Directors for inclusion in the 2030 RTP on October 13, 2006. To date, a regional list of potential grade separations has not been created or prioritized.

Projects will be prioritized based on two criteria categories: Project Specific Criteria and Regional Housing Needs Assessment (RHNA) Housing Production. The Project Specific Criteria will be worth 75 percent and the RHNA Housing Production criteria will compose 25 percent of the total project score.

Project-Specific Criteria

These criteria take into account existing vehicular and train traffic, accident history, cost, noise, access to emergency services and other factors.

The following criteria and point system will be implemented, with a potential maximum of 100 points. The total Project Specific Criteria score will be multiplied by .75 to produce a scaled 75 point score for the total regional rail grade separation project score.

1. Peak-period Exposure Index (PPEI) factor, measured as the product of the existing high directional traffic and the total measured blocking delay during the same three hours of the day experiencing the highest congestion at the crossing.

\[ PPEI = VT3 \times BD3 \times C3 \]

Where the score is the product of the above formula, rounded to the next whole number, up to a maximum of 20; and, where

- \( VT3 \) = Vehicular traffic in high direction during selected three hour period
- \( BD3 \) = Total blocking delay during same three hour period selected
- \( C3 \) = \( \frac{1}{1,350,000} \), a mathematical constant used for the three hour peak-period calculation

MAXIMUM POINTS = 20
Notes:

a. For crossings where two or more streets that are adjacent to each other that are impacted simultaneously by the operation of the train, the vehicular traffic volume on those streets is cumulative for purposes of the calculation of this congestion relief factor.

b. Selected three hour period consists of three, one-hour periods which may be consecutive. However, the selected three-hour period shall be the same when counting vehicular and train traffic.

c. Blocking delay shall be measured as the time period beginning when the warning devices are activated to the time when the warning devices are de-activated.

Example:

At a crossing, there are 5,400 total cars in the high direction counted between 6:30 am and 7:30 am, 8:00 am and 9:00 am and between 5:00 pm and 6:00 pm, with eight trains per hour during those same hours and 60 seconds delay time per train during those same hours.

\[ \begin{align*}
VT3 &= 5,400 \text{ cars in high direction selected three hour period} \\
BD3 &= 8 \text{ trains x 2 directions x 3 hours x 60 second delay} = 2,880 \\
PPEI &= 5,400 \times 2,880 \times \left[ \frac{1}{1,350,000} \right] = 11.52 \\
\end{align*} \]

Rounding up to next whole number: PPEI Score = 12

2. **Peak Day Total Delay Exposure Index (PDEI)** factor, measured as the product of the existing average daily traffic (ADT), the total number of trains, and an average train crossing delay time factor.

\[ PDEI = PD-ADT \times PD-NT \times ATCDF \times PD-C \]

Where the score is the produce of the above formula, rounded to the next whole number, up to a maximum of 20; and, where

- \( PD-ADT \) = Peak Day Average Daily Traffic
- \( PD-NT \) = Peak Day Total Number of Trains
- \( ATCDF \) = Average Train Crossing Delay Factor, corresponds to point scale as shown in table below.
- \( PD-C \) = \( 1/1,000,000 \), a mathematical constant used for peak day period calculation

### Average Train Crossing Delay Factor (ATCDF) Table

<table>
<thead>
<tr>
<th>From (minutes)</th>
<th>To (minutes)</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00</td>
<td>0.75</td>
<td>1</td>
</tr>
<tr>
<td>0.75</td>
<td>1.00</td>
<td>2</td>
</tr>
<tr>
<td>1.00</td>
<td>1.25</td>
<td>3</td>
</tr>
<tr>
<td>1.25</td>
<td>1.50</td>
<td>4</td>
</tr>
<tr>
<td>1.50</td>
<td>2.00</td>
<td>5</td>
</tr>
<tr>
<td>2.00</td>
<td>3.00</td>
<td>6</td>
</tr>
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<td>3.00</td>
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<td>4.00</td>
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<td>8</td>
</tr>
<tr>
<td>6.00</td>
<td>8.00</td>
<td>9</td>
</tr>
<tr>
<td>8.00</td>
<td>10.00</td>
<td>10</td>
</tr>
</tbody>
</table>

MAXIMUM POINTS = 20
Notes:

a. For crossings where two or more streets that are adjacent to each other that are impacted simultaneously by the operation of the train, the vehicular traffic volume on those streets is cumulative for purposes of the calculation of this congestion relief factor.

b. Average Annual Daily Traffic can be used for peak day, but ADT for weekday or week-end day may be used as appropriate if available. However, the selected day period shall be the same when counting vehicular and train traffic. As an example, if ADT for weekday is available, the highest train traffic of any day between Monday and Friday can be used for the calculations, and not the week-end day train traffic.

c. Blocking delay shall be measured as the time period beginning when the warning devices are activated to the time when the warning devices are de-activated.

Example:

At a crossing, there is an arterial with an ADT of 30,000 vehicles on weekdays, 144 daily trains in both directions also on weekdays, averaging 55 seconds per crossing.

\[
PDEI = PD-ADT \times PD-NT \times ATCDF \times PD-C
\]

\[
PD-ADT = 30,000 \text{ vehicles on weekdays}
\]

\[
PD-NT = 144 \text{ trains in both directions, on weekdays}
\]

\[
ATCDF = 2 \text{ points}
\]

\[
PDEI = 30,000 \times 144 \times 2 \times \frac{1}{1,000,000} = 8.64
\]

3. Rounding up to the next whole number: PDEI Score = 9

4. Accident History: Accident History in the past five years involving vehicles, pedestrians and bicycles with trains, not including accidents involved in attempted suicides.

\[\text{MAXIMUM POINTS} = 20\]

Assign points to according to the following schedule

<table>
<thead>
<tr>
<th>Number of Qualifying Accidents</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

Increase the number of points for an accident or accidents by 100% when heavy rail is involved.

5. Funding Request: The funding request criterion awards points for amount of funds requested from the program as an equivalent cost benefit criterion by awarding a higher score for those projects that request a lower amount of funds. Score points are based on the total request for funds, with a cap of $45 million.

\[\text{MAXIMUM POINTS} = 20\]

Note: Minimum 10% participation is required.
Assign points according to the following schedule:

<table>
<thead>
<tr>
<th>Funding Request ($millions)</th>
<th>Points (Planning-Level Estimate)</th>
<th>Points (NEPA-Level Estimate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.0 - $15.0</td>
<td>10.0</td>
<td>20.0</td>
</tr>
<tr>
<td>$15.1 - $20.0</td>
<td>8.5</td>
<td>17.0</td>
</tr>
<tr>
<td>$20.1 - $25.0</td>
<td>7.0</td>
<td>14.0</td>
</tr>
<tr>
<td>$25.1 - $30.0</td>
<td>5.5</td>
<td>11.0</td>
</tr>
<tr>
<td>$30.1 - $35.0</td>
<td>4.0</td>
<td>8.0</td>
</tr>
<tr>
<td>$35.1 - $40.0</td>
<td>2.5</td>
<td>5.0</td>
</tr>
<tr>
<td>$40.1 - $45.0</td>
<td>1.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>

NEPA: National Environmental Protection Act

6. Pedestrian Benefits

Assign points according to following criteria:

MAXIMUM POINTS = 4

a. Grade separation would serve 1-50 pedestrians during top 4 hours: 1 point
b. Grade separation would serve 51-100 pedestrians during top 4 hours: 2 points
c. Grade separation would serve 101-150 pedestrians during top 4 hours: 3 points
d. Grade separation would serve more than 150 pedestrians during top 4 hours: 4 points

7. Bus Operations Impacts

Assign points according to following criteria:

MAXIMUM POINTS = 4

e. Grade separation would serve up to four buses an hour: 1 point
f. Grade separation would serve from four to eight buses an hour: 2 points
g. Grade separation would serve from eight to sixteen buses an hour: 3 points
a. Additional point if the grade crossing is adjacent to a transit center.

8. Noise Reduction

Assign points according to following criteria:

MAXIMUM POINTS = 4

a. Rail crossing area located within 200 feet of sensitive receptors: 4 points
b. Rail crossing area located between 200-500 feet of sensitive receptors: 2 points
c. Rail crossing area located more than 500 feet away from sensitive receptors: 0 points
d. Sensitive receptors include: Residential areas, hospital, school, house of worship.

Rail crossing area includes crossing plus 200 feet along track in either direction away from crossing.
9. Benefit to Emergency Services

Assign points according to the following criteria:

a. Rail crossing located within ½ mile of emergency service provider and no alternate grade-separated crossing exists within ½ mile: 4 points

b. Rail crossing located between ½ and 1 mile of emergency service provider and no alternate grade-separated crossing exists within ½ mile: 2 points

c. Rail crossing located between 1 and 1½ miles of emergency service provider and no alternate grade-separated crossing exists within ½ mile: 1 point

d. Rail crossing located further than 1½ miles of emergency service provider and no alternate grade-separated crossing exists within ½ mile: 0 points

Emergency service providers include services such as police, fire, paramedic, ambulance, and hospital services. Distance is measured as driven distance from crossing.

10. Impact to Truck Freight Operations

Assign points according to the following criteria:

a. Rail crossing located between freeway and major truck freight transfer point (200+ trucks per day): 4 points

b. Rail crossing located between freeway and medium sized truck freight transfer point (100-200 trucks per day): 2 points

c. Rail crossing located between freeway and medium sized truck freight transfer point (0-100 trucks per day): 0 points

Step 2: Once the projects have been prioritized according to the criteria above, consideration for funding would include the following project readiness elements:

a. Project feasibility (e.g., physical constraints, reliability of cost estimate)

b. Environmental document status

c. Right-of-way acquisition status

d. Permits (e.g., PUC, Coastal Commission, Dep’t of Fish & Game, etc.)

Regional Housing Needs Assessment (RHNA) Criteria

As dictated in SANDAG Board Policy Number 033, rail grade separation projects must include incentive points (a minimum of 25 points out of 100 possible) to be given to projects in jurisdictions in which lower income housing units are being produced in accordance with the housing unit figures contained in Alternative 3 of the Board RHNA Memo.