You CAN Get There from Here: How to Use the Development Approval Process to Improve Transportation Options

Silicon Valley: Transportation Choices and Healthy Communities Summit
March 7, 2015
Outline

• **Transportation Impact Analysis (TIA) Basics** – What they are, Who prepares them, and Why it’s important

• **2014 TIA Update** – Improved Bicycle, Pedestrian and Transit Analysis

• How to leverage the **TIA process** for better Multimodal Improvements
What is a TIA?

- A TIA (Transportation Impact Analysis) summarizes the transportation impacts of a development project or plan.
- TIAs help inform decision-makers and the public during the development review process.
- The information in a TIA is also usually used in an environmental study (e.g., Environmental Impact Report).
Who prepares a TIA? How does it fit in the process?

• TIAs are prepared by local agencies (cities, towns, counties), generally with the assistance of transportation consulting firms.

• TIA Guidelines are generally established by the Congestion Management Agency for each county (e.g. VTA for Santa Clara County, C/CAG for San Mateo County, etc.)

• TIAs are prepared to address local issues (e.g., a city’s policy for operation of its streets) and, for larger projects, to meet Congestion Management requirements.
Why are TIAs important?

• The analysis in a TIA affects whether a project is required to adopt mitigation measures, or how large a transportation fee it must pay (if a fee program exists).

• Transportation analysis may also determine how much growth can be accommodated, in a General Plan or an area plan.
• Emphasize the reduction of auto trips
• Take a balanced, multimodal approach to addressing congestion

*In a nutshell: Provide better information to enable better decision-making*
### Transit, Pedestrian and Bicycle Analysis

#### Transit Service
It can be assumed that some of the project trips could be made by transit. Assuming up to 2% transit mode share, which is probably the highest that could be expected, yields an estimate of 3 and 3 additional transit trips during the AM and PM peak hours, respectively. The 57 and 60 bus lines directly serve the project site with a stop located along Great America Parkway. Given that there are also other bus routes and Light Rail Transit (LRT) Station within walking distance of the project site, the projected transit riders associated with the project could be accommodated by the existing service.

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#### Pedestrian Facilities
There are existing sidewalks provided along the project’s frontages on Great America Parkway and on the east side of Old Ironsides Drive. Pedestrian crosswalks and signal heads with pushbutton actuators are present at all signalized intersections, including the Great America Parkway and Old Glory Lane intersection. The existing pedestrian facilities would be adequate to support pedestrians walking to and from the project site.

#### Bicycle Facilities
It is expected that bicycle trips would comprise no more than one percent of the total project-generated trips. Thus, the project could generate two new bicycle trips during each of the peak hours. The existing bicycle facilities would be adequate to serve the anticipated demand. There are bike lanes provided on Great America Parkway along the project’s frontage.

VTA recommends new developments to provide bicycle parking, and provides recommended bicycle parking rates in their VTA Countryside Bicycle Plan Technical Guidelines, September 1999. Two types of bicycle parking are described by VTA: Class I and Class II. Class I bicycle parking includes bicycle lockers, rooms with key access for regular bicycle commuters, guarded parking areas, and valet or check-in parking. Class II bicycle parking refers to a bicycle rack to which the frame and at least one wheel of the bicycle can be secured with a user-provided lock and cable. According to VTA’s recommended rates, an office project (such as the proposed project) should provide one bicycle parking space for every 6,000 sq ft of proposed space. Class I and II should have 75 and 25 percent of the new parking spaces, respectively. According to the recommended rates, the proposed project should provide 21 Class I and 7 Class II bicycle parking spaces to serve the proposed office space.
Development and Congestion: Conventional Approach

- **Mitigation Measures**
  - Road widening
  - Connections to Transit
  - Shuttle programs
  - Bike/Pedestrian improvements

- **Impact Fees**

- **Significant & Unavoidable Impacts**

**Source:** Jeffrey Tumlin, Nelson/Nygaard

**Diagram Description:**
- Estimate Auto Trips
- Evaluate Impacts on Roadways
- Faster Driving
- More People Drive
- Widen Roadways
- Congestion

**VTA Congestion Management Program**
- Estimate Auto Trips
- Consider Auto Trip Reductions
  - Transit/walk/bike friendly locations
  - TDM (Shuttles, carpool, bike, transit incentives)
  - Parking pricing & management

Evaluate All Modes

- Sensible Mitigation Measures
- Reduced Fees
- Fewer Significant Impacts

More Trip Reduction Efforts, Less Driving
Improved Analysis of Pedestrian, Bicycle and Transit

- Improve documentation of pedestrian & bicycle existing conditions
- Shift pedestrian & bicycle analysis from emphasizing capacity to focusing on quality/safety/comfort
- Provide guidance for analyzing the impacts of auto mitigation measures on other modes
- For transit analysis, focus on impacts on transit travel times
## AUTO TRIP REDUCTION STATEMENT

**UPDATED:** October 2014

### PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Relevant TIA Section</th>
<th>Project Name:</th>
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<tbody>
<tr>
<td>Location:</td>
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<tr>
<td>Description:</td>
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</table>

- **Site (net new):** DU Residential, Sq. Ft. Comm., Acres (EA)
- **Density:** DU/Acre, Floor Area Ratio (FAR)
- Located within 2000 feet walking distance of an LRT, BART or Caltrain station or major bus stop? Yes/No

### PROJECT AUTO TRIP GENERATION

- **Auto Trips Generated:** AM Peak, PM Peak, Total (Weekly)
- **Methodology (check one):** ITE, Other (Please describe below)
- Describe alternative trip generation methodology, if applicable

### AUTO TRIP REDUCTION APPROACH

- **Standard:** Complete Table A below
- **Peer/Study-Based:** Complete Table B below
- **Target-Based:** Complete Table C below
- **None Taken:**

### TRIP REDUCTION REQUIREMENTS

- **Is the project required to meet any trip reduction requirements or targets?** Yes/No
- If so, specify percent:
- Reference code or requirement:

### TRIP REDUCTION APPROACHES

#### A. STANDARD APPROACH

<table>
<thead>
<tr>
<th>Type of Reduction</th>
<th>Relevant TIA Section</th>
<th>% Reduction from ITE Rates</th>
<th>% Reduction from AM/FM/Daily</th>
<th>% Reduction from AM, PM, and/or Daily reduction</th>
<th>TOTAL REDUCTION CLAIMED</th>
<th>Relevant TIA Section</th>
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<tbody>
<tr>
<td>Transit</td>
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<td>Mixed-Use</td>
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<td>Financial Incentives</td>
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<tr>
<td>Shuttle</td>
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#### B. PEER/STUDY-BASED APPROACH

<table>
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<tr>
<th>Basis of Reduction</th>
<th>Relevant TIA Section</th>
<th>TOTAL REDUCTION CLAIMED</th>
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</table>

- Summarize basis of reduction, addressing:
  - Data used to justify trip reduction rate
  - Source(s) referenced
  - Assumptions and methodologies used to develop the trip reduction
  - How the trip reduction rate is appropriate for the proposed development

### C. TARGET-BASED APPROACH

<table>
<thead>
<tr>
<th>Relevant TIA Section</th>
<th>Type of Reduction (check all that apply)</th>
<th>TOTAL REDUCTION CLAIMED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Trip Reduction</td>
<td></td>
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<tr>
<td></td>
<td>% SOV mode share</td>
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<tr>
<td></td>
<td>Trip Cap</td>
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</table>

- Specify AM, PM, and/or Daily reduction
  - Specify AM, PM, Daily reduction

### OTHER TDM/REDUCTION MEASURES

- **Recycle/Pedestrian:** Yes/No
- **Parking Management:** Yes/No
- **Transit:** Yes/No
- **Site Planning and Design:** Yes/No
- **TDM Program:** Yes/No

### IMPLEMENTATION

- Have the project sponsor and Lead Agency agreed to any of the following measures?
  - Monitoring
  - Enforcement
  - Data Sharing

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VTA Congestion Management Program
Key Things to Look for in a TIA

- Sidewalk presence/width
- Street trees and buffers
- Pedestrian crossings
- Pedestrian paths within site
- Bike lanes
- Bike parking
- Project location

- Project efforts to reduce auto trips (e.g. transit pass, trip monitoring, etc.)
- Parking management
- Connections to existing development nearby
- Site design (orientation of buildings to sidewalk, etc.)

*If you don’t see an analysis or don’t think it’s sufficient, ask for it!*
### How to Leverage the TIA Process

<table>
<thead>
<tr>
<th>Effective Strategies</th>
<th>Less Effective Strategies</th>
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<tbody>
<tr>
<td>• Review a TIA as soon as possible – often included as an Appendix to CEQA document (e.g. DEIR, Initial Study)</td>
<td>• Simply stating that you dislike the project</td>
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<tr>
<td>• Focus on the transportation analysis:</td>
<td>• Stating that the numbers in the TIA are not correct, without providing evidence</td>
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<td>o Were pedestrian, bicycle and transit conditions described accurately?</td>
<td>• Suggest improvements greatly out of scale with the project (e.g. asking a small residential project to revamp the city’s entire bike trail network)</td>
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<td>o Is the project doing enough to reduce auto trips and support alternative modes?</td>
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<td>o Suggest an improvement at the appropriate scale for the project.</td>
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Questions and Discussion

vta.org/cmp/tia-guidelines

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