Local Government Role

TTP220 Transportation Policy and Planning
S. Handy
5/4/16
Final Environmental Impact Report for the 2016 Metropolitan Transportation Plan/ Sustainable Communities Strategy

State Clearinghouse # 2014062060

Prepared by: Sacramento Area Council of Governments
1415 I Street, Suite 300
Sacramento, California, 95814
January 2016

SACOG MTP

EIR for the MTP
Role 1: MPO Member

Federal Government
- Funding
- Planning reqs

State Government
- Projects
- Approvals

Metropolitan Planning Organizations
- Long-range plans
- Short-term programs

Local Governments
- Membership on MPO board
- Submission of proposed projects

Regional transportation system
## SACOG Board of Directors

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>City/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Susan Rohan</td>
<td>Chair</td>
<td>Roseville</td>
</tr>
<tr>
<td>Phil Serna, Vice Chair</td>
<td>Vice Chair</td>
<td>Sacramento County</td>
</tr>
<tr>
<td>Cecilia Aguiar-Curry</td>
<td>Mayor</td>
<td>Winters</td>
</tr>
<tr>
<td>John Buckland</td>
<td>Vice Mayor</td>
<td>Yuba City</td>
</tr>
<tr>
<td>David Butler</td>
<td>Council Member</td>
<td>Rocklin</td>
</tr>
<tr>
<td>Christopher Cabaldon</td>
<td>Mayor</td>
<td>West Sacramento</td>
</tr>
<tr>
<td>John Clerici</td>
<td>Council Member</td>
<td>Placerville</td>
</tr>
<tr>
<td>Mark Cres</td>
<td>Mayor</td>
<td>Galt</td>
</tr>
<tr>
<td>Gary Davis</td>
<td>Mayor</td>
<td>Elk Grove</td>
</tr>
<tr>
<td>Kim Douglas</td>
<td>Council Member</td>
<td>Colfax</td>
</tr>
<tr>
<td>Jack Duran</td>
<td>Supervisor</td>
<td>Placer County</td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lucas Frerichs</td>
<td>Council Member</td>
<td>Davis</td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kevin Johnson</td>
<td>Mayor</td>
<td>Sacramento</td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jay Schenirer</td>
<td>Council Member</td>
<td>Sacramento</td>
</tr>
</tbody>
</table>

**31 members currently**
- 2 from City of Sacramento
- 3 from Sacramento County
- 1 each from other counties
- 1 each from each city

*Votes weighted by population*

[See the Joint Powers Agreement](#)
### Nominating a New Project as an Amendment

Moving a project from the MTP into the current MTIP, or submitting a brand new project to the MTIP

1. From Main Menu, under AGENCY WORKING AREA, click on “Nominate a Project”

   If this is a project that is new to the MTIP but exists in the MTP...

   1. ...but also new to the MTIP...

   2. Click on “MTIP Project.”
   3. To search for the project in the MTIP, enter the ID # for the project under project ID, or try key words in the project description box. (Sandwich the key word with an asterisk on either side.)
   4. Select a project to nominate
   5. Make changes to appropriate sections
   6. *Mark the project on the map by clicking “Mark Location on Map.” (A new screen pops up with instructions.)
   7. Click “Save Project” to save your changes—this *D O E S N O T* submit your amendment!
   8. Repeat for all projects needing changes.
   9. To view your saved amendments go to
   10. Main Menu. Under AGENCY WORKING AREA, click on “NOMINATIONS IN PROGRESS”
   11. You can edit or delete saved work
   12. When you are ready to submit, click “SUBMIT TO SACOG.”

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<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>From Main Menu, under AGENCY WORKING AREA, click on “Nominate a Project”</td>
</tr>
<tr>
<td>2</td>
<td>Click on “MTIP Project.”</td>
</tr>
<tr>
<td>3</td>
<td>To search for the project in the MTIP, enter the ID # for the project under project ID, or try key words in the project description box. (Sandwich the key word with an asterisk on either side.)</td>
</tr>
<tr>
<td>4</td>
<td>Select a project to nominate</td>
</tr>
<tr>
<td>5</td>
<td>Make changes to appropriate sections</td>
</tr>
<tr>
<td>6</td>
<td>*Mark the project on the map by clicking “Mark Location on Map.” (A new screen pops up with instructions.)</td>
</tr>
<tr>
<td>7</td>
<td>Click “Save Project” to save your changes—this <em>D O E S N O T</em> submit your amendment!</td>
</tr>
<tr>
<td>8</td>
<td>Repeat for all projects needing changes.</td>
</tr>
<tr>
<td>9</td>
<td>To view your saved amendments go to Main Menu. Under AGENCY WORKING AREA, click on “NOMINATIONS IN PROGRESS”</td>
</tr>
<tr>
<td>10</td>
<td>You can edit or delete saved work</td>
</tr>
<tr>
<td>11</td>
<td>When you are ready to submit, click “SUBMIT TO SACOG.”</td>
</tr>
</tbody>
</table>

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* This step is required of all projects that are being amended.

**Congratulations! You have submitted an amendment!**

Staff is ready to assist you with your amendment. Email José Luis Cáceres jcaceres@sacog.org or by phone at (916) 340-6218.
## Role 2: Local Transportation System

<table>
<thead>
<tr>
<th>Level</th>
<th>Agency</th>
<th>Funding</th>
<th>Long-Range Plans</th>
<th>Project Selection</th>
<th>Project Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>US DOT</td>
<td>Federal gas tax</td>
<td>Sets requirements for states, MPOs, transit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>Caltrans</td>
<td>State gas tax +federal $</td>
<td>For state Sets reqs for local govt</td>
<td>Outside metro areas – State TIP</td>
<td>Build and maintain highways</td>
</tr>
<tr>
<td>Region</td>
<td>MPOs</td>
<td>Regional sales tax +federal, state $</td>
<td>For metro area – Regional TIP</td>
<td>Inside metro areas – Regional TIP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transit agencies</td>
<td>Regional sales tax, fares +federal, state $</td>
<td>For transit</td>
<td>Transit projects, for inclusion in Regional TIP</td>
<td>Build and operate transit facilities</td>
</tr>
<tr>
<td>Local</td>
<td>Planning Dept, Dept of Public Works</td>
<td>Property tax, fees +federal, state, regional $</td>
<td>For city, under state law</td>
<td>Inside city – Capital Improvement Program</td>
<td>Build and maintain local roads, bike/ped facilities</td>
</tr>
</tbody>
</table>
Key concept: Street hierarchy

- Freeway
- Major Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local Street

Source: http://ops.fhwa.dot.gov/access_mgmt/what_is_accsmgmt.htm
## Role 3: Land Use Planning

<table>
<thead>
<tr>
<th>Level</th>
<th>Transportation Agencies</th>
<th>Land Use Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>FHWA, FTA</td>
<td>none</td>
</tr>
<tr>
<td>State</td>
<td>DOT</td>
<td>none</td>
</tr>
<tr>
<td>Regional</td>
<td>MPO, Transit</td>
<td>none</td>
</tr>
<tr>
<td>Local</td>
<td>City and county planning and public works departments</td>
<td>City and county planning department</td>
</tr>
</tbody>
</table>
Susan’s Tenet

Land use and transportation are inextricably linked.
The General Plan

Where are we?
Where are we going
Where do we want to be?
How do we get there?

Land Development Code
Regulates private development

Capital Improvement Program
Dictates public investment

Planning Dept

Public Works Dept
California Requirements

• Every city and county must adopt “a comprehensive, long-term general plan for physical development”

• Key characteristics:
  – physical plan
  – long-range plan
  – comprehensive
  – statement of policy
## Required Elements of a General Plan

<table>
<thead>
<tr>
<th>Land Use</th>
<th>general location and intensity of different land uses (e.g. housing, business, industry, open space, education, public buildings, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circulation</td>
<td>general location and extent of existing and proposed major roads, other transportation facilities (transit, bike/ped), public utilities.</td>
</tr>
<tr>
<td>Housing</td>
<td>assessment of current and projected housing needs for all economic segments of community; affordable housing issues.</td>
</tr>
<tr>
<td>Conservation</td>
<td>conservation, development, and use of natural resources – water, forests, soils, rivers, and mineral deposits.</td>
</tr>
<tr>
<td>Open-space</td>
<td>preserving open-space for natural resources, managed production of resources, outdoor recreation, public health and safety, identification of agricultural land.</td>
</tr>
<tr>
<td>Noise</td>
<td>assessment of noise problems in community, distribution of new noise-sensitive land uses</td>
</tr>
<tr>
<td>Safety</td>
<td>policies and programs to protect community from risks associated with seismic, geologic, flood, and wildfire hazards.</td>
</tr>
</tbody>
</table>
City of Davis

GENERAL PLAN
TRANSPORTATION ELEMENT

December 10, 2013
Davis Transportation Goals

1. Davis will provide a comprehensive, integrated, connected transportation system that provides choices between different modes of transportation.

2. The Davis transportation system will evolve to improve air quality, reduce carbon emissions, and improve public health by encouraging usage of clean, energy-efficient, active (i.e. human powered), and economically sustainable means of travel.

3. Davis will provide a safe and convenient Complete Street network that meets the needs of all users, including children, families, older adults, and people with disabilities.

4. Davis will strengthen its status as a premier bicycling community in the nation by continuing to encourage bicycling as a healthy, affordable, efficient, and low-impact mode of transportation accessible to riders of all abilities, and by continuously improving the bicycling infrastructure.
### Table 1: Street Classifications and Guidelines

<table>
<thead>
<tr>
<th>Street Type</th>
<th>Description</th>
<th># of Lanes</th>
<th>Median</th>
<th>Bike Lanes</th>
<th>ROW Width¹</th>
<th>Typical Street Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Arterial</td>
<td>A continuous street located to serve large traffic volumes and designed to minimize access to abutting property via driveways, alleys and business entrances. Streets feeding into major arterials should be spaced at one-quarter-mile intervals. Major arterials should not penetrate neighborhoods and should be planned so as to eliminate through traffic in residential neighborhoods and adjacent to schools.</td>
<td>4</td>
<td>✓</td>
<td>✓</td>
<td>102'-145'</td>
<td>78'</td>
</tr>
<tr>
<td>Minor Arterial</td>
<td>A continuous street located to provide a direct route between, but not through, separate neighborhoods. Minor arterials should be planned to eliminate through traffic in residential neighborhoods and adjacent to schools.</td>
<td>2</td>
<td>Varies</td>
<td>✓</td>
<td>75'</td>
<td>51-58'</td>
</tr>
<tr>
<td>Collector Street</td>
<td>A noncontinuous street located to collect traffic from local streets and distribute it to minor and major arterials. The difference, other than size, between a collector and an arterial is that a collector penetrates a neighborhood, while an arterial does not.</td>
<td>2</td>
<td>✓</td>
<td></td>
<td>62'</td>
<td>52'</td>
</tr>
<tr>
<td>Modified Local Street</td>
<td>Same as a local street, but with additional right-of-way. Typically used for higher volume local streets, particularly with high bicycle volumes.</td>
<td>2</td>
<td>✓</td>
<td></td>
<td>50'</td>
<td>40'</td>
</tr>
<tr>
<td>Local Street</td>
<td>A street, other than a collector or arterial, providing access to abutting property and designed not to accommodate or encourage through trips.</td>
<td>2</td>
<td>✓</td>
<td></td>
<td>44'</td>
<td>34'</td>
</tr>
<tr>
<td>Cul-de-sac</td>
<td>A local street terminating in a turning area and generally not exceeding 400 feet in length.</td>
<td>2</td>
<td>✓</td>
<td></td>
<td>38'</td>
<td>28'</td>
</tr>
</tbody>
</table>

¹Includes sidewalks, landscape strips, bike paths, any buffers, and/or utility corridors, where applicable
Map 4
2015 Planned Lane Configurations

1. Streets with more than 2 lanes.
2. Number of lanes.
3. With turn lanes.

NOTES:
1. The number of lanes shown reflect through travel lanes.
2. Streets not showing number of lanes are two lane streets. There are no through streets planned for greater than 4 lanes.
3. The number of lanes shown does not reflect turn lanes at diagonal intersections.
4. Consider plans identified on this section may supersede planned lane configurations.

Davis General Plan

100 acres  0  1000  3000  5000  M:4
Figure 1: Complete Street Concepts

Existing Conditions

Improvement Concept
Table 2: Geometric Cross Section Guidelines

<table>
<thead>
<tr>
<th>Item</th>
<th>Typical Width</th>
<th>Street Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving Lane</td>
<td>Arterials:</td>
<td>12'. May be reduced to 11' to accommodate up to 7' each for parking and for a bike lane.</td>
</tr>
<tr>
<td>Moving Lane</td>
<td>11'</td>
<td>Collector with bike lanes</td>
</tr>
<tr>
<td>Two-Way Left-Turn Lane</td>
<td>10'</td>
<td>Minor Arterials</td>
</tr>
<tr>
<td>Parking</td>
<td>7'</td>
<td>All Streets</td>
</tr>
<tr>
<td>Center Median</td>
<td>14'</td>
<td>Major Arterials and some Minor Arterials</td>
</tr>
<tr>
<td>Bike Lane</td>
<td>7'</td>
<td>Arterial and Collectors (add 1 foot next to curb lane). Negotiable with application of buffered bike lane</td>
</tr>
<tr>
<td>Bike Path</td>
<td>10'</td>
<td>Arterial and Collector</td>
</tr>
<tr>
<td>Curb Lane</td>
<td>Add 2' to minimum lane width (<em>slip distance</em>)</td>
<td></td>
</tr>
</tbody>
</table>

d. The following Levels of Service (LOS) are acceptable for automobiles for major intersections (see Glossary for definition of "Major Intersections"):  
   - 'D' during non-peak traffic hours.  
   - 'E' during peak traffic hours.  
   - 'F' during peak traffic hours in the Core Area and Richards Boulevard/Olive Drive area.  
   - 'F' during peak traffic hours in other areas if approved by City Council.

e. In each direction, Davis streets shall have no more than two through automobile lanes plus a single left-hand turning lane, even if this requirement reduces level of service. Additional turning lanes may be added for safety or design considerations.

f. Existing bike lanes shall not be removed to add through traffic lanes.

g. Class I bike paths and II bicycle lanes shall be provided along all collector and arterial streets except where physically infeasible.

h. The City shall require right-of-way necessary for the number of lanes projected for each existing and planned arterial street shown in Table 3 (Planned Lane Configurations of
Figure 4: Corridor Plan Improvement Concepts
Complete Streets

Figure 2: Street Connectivity Concepts

- Ped/Bike Connection
- East-West Culis with Ped/Bike Connections
- Streets Providing Window on Open Space
- Traditional Streets and Alleys
- Ped/Bike Connection

Loops with Cul-de-Sac
Modified Grid with Alleys
Arterial
Collector
Neighborhood Greenbelt
Entry Street
e.g. Culver City Land Use Element
key concept: mixed-use
e.g. Davis Housing Element
key concept: jobs-housing balance
The General Plan

Where are we?
Where are we going
Where do we want to be?
How do we get there?

Land Development Code
Regulates private development

Capital Improvement Program
Dictates public investment

Planning Dept

Public Works Dept
Side note: Institutional and Professional Divisions

Planning department
Planners

Public Works department
Engineers
Capital Improvement Programs

• Public physical improvements scheduled for 5-6 years
• Facilities with long-term usefulness or permanence: sidewalks, sewers, etc.
• Key questions:
  – How to prioritize projects?
  – How to fund them?
Transportation

- **CIP7252 - 2010/11 Road Rehabilitation**
  updated: April 5, 2010
  status: Planning Stage
  This project utilizes Federal funds that can only be used on arterial streets. This project will be constructed in the Summer of 2010 or 2011, depending on when the funds are approved by Cal Trans.
  location: B Street, Arlington and 3rd Street

- **CIP7252 - Bike Path Reconstruction**
  updated: April 5, 2010
  status: On Going
  Reconstruct various bike paths within the City of Davis. Some major bikepaths will be reconstructed in concrete (current City Standard) and some minor bikepaths will be reconstructed in asphalt. This project utilizes some Stimulus funding.
  location: Various locations

- **CIP7259 - Annual Concrete Contract**
  updated: October 14, 2009
  status: On Going
  The purpose of this program is: Repair / replace damaged concrete sidewalk and curb and gutter.
  location: Various Locations

- **CIP8126 - CBDG Block Grant for ADA Compliance**
  updated: August 14, 2009
  status: On Going
  Install curb ramps and eliminate barriers on City Sidewalks leading to public transportation and in high pedestrian traffic areas.
  location: Various

- **CIP8138 - Fifth Street Corridor Improvement**
  updated: September 14, 2009
  status: On Going
  Investigate the feasibility to convert the vehicle lanes on Fifth Street from four lanes to two lanes. This lane reduction would enable accommodation for the addition of bike lanes and left turn pockets.
  location: 5th Street

- **CIP8139 - Investigate Bicycle/Pedestrian Crossing at Depot**
  updated: August 21, 2008
  status: On Going
  Pursue an application to the PUC for pedestrian and bicyclists crossing. (i.e., a physical crossing of the tracts). The crossing would be protected with automatic gates, warning lights and alarms.
  location: Amtrak Depot & vicinity
CIP Project Prioritizing

All cities have a capital improvement program... but what kinds of projects do they choose to fund?
CIP Project Prioritizing

• Funding criteria based on goals of General Plan
• Projects awarded points based on criteria
• Projects with the most points get funded
• Example: Give points to projects that support growth management goals
  – Projects serve existing areas
  – Projects serve redevelopment areas
<table>
<thead>
<tr>
<th>#</th>
<th>10 CRITERIA SUGGESTED BY THE TAG AND STAFF</th>
<th>I support this criterion (mark &quot;yes&quot;)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>----------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td><strong>Transportation Element Goals</strong></td>
<td>Draft weight by TAG</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Travel Choices</td>
<td>I oppose this criterion (mark &quot;no&quot;)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Promotes a range of viable choices among different modes of transportation.</td>
<td>Draft weight by TAG</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Criterion guidance: Project facilitates reaching destinations by bicycle, walking, transit, and automobiles.</em></td>
<td>I support a weight of 1, 2 or 3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Sustainability (common to City Council goal)</td>
<td>Draft weight by TAG</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transportation Element goal: Improves public health by encouraging clean, active and economically sustainable means of travel.</td>
<td>I support a weight of 1, 2 or 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>City Council goal: Enact policies that conserve resources and improve environmental quality.</td>
<td>Draft weight by TAG</td>
<td></td>
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<tr>
<td></td>
<td><em>Criterion guidance: Potential for reduced GHG emissions, reduced tailpipe emissions, improved storm water runoff, and increased public health.</em></td>
<td>I support a weight of 1, 2 or 3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Complete Streets</td>
<td>Draft weight by TAG</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contributes to a Complete Street network that meets the needs of all users.</td>
<td>Draft weight by TAG</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Criterion guidance: Street infrastructure design encourages (not just accommodates) walking, bicycling, transit, and automobiles.</em></td>
<td>I support a weight of 1, 2 or 3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Bicycling</td>
<td>Draft weight by TAG</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Encourages bicycling as a healthy, affordable, efficient, and low-impact mode of transportation.</td>
<td>Draft weight by TAG</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Criterion guidance: Potential to facilitate increased bicycling.</em></td>
<td>Draft weight by TAG</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Safety</td>
<td>Draft weight by TAG</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Addresses specific safety issues unique to the project area location.</td>
<td>Draft weight by TAG</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Criterion guidance: Potential to reduce collisions and/or injury. Improves perception of safety.</em></td>
<td>Draft weight by TAG</td>
<td></td>
</tr>
</tbody>
</table>
## TRANSPORTATION IMPLEMENTATION PLAN
Draft Scoring Criteria / Community Outreach Question

<table>
<thead>
<tr>
<th>#</th>
<th>10 CRITERIA SUGGESTED BY THE TAG AND STAFF</th>
<th>I support this criterion (mark “yes”)</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td><strong>CITY COUNCIL GOALS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 6 | Fiscal Stability  
- Ensure short- and long-term expenditures and revenues are equivalent, matching community resources to needs without reliance on growth.  
Criterion guidance: Extent to which project may contribute directly or indirectly to net positive City revenue or, conversely, create continuous costs to the City. | I support this criterion (mark “yes”) | 1 |
| 7 | Economic Development  
- Promote economic development consistent with our community values and niche as home of a world-class university.  
Criterion guidance: Direct, indirect, or synergistic effect in promoting business community well-being. Promotes private investment by improving access and/or mobility. | I support this criterion (mark “yes”) | 1 |
| 8 | Downtown  
- Ensure downtown Davis remains the vibrant economic, cultural, and social center of the community.  
Criterion guidance: Project is located in, improves connectivity to, or otherwise benefits the downtown. | I support this criterion (mark “yes”) | 1 |
| 9 | Community Strength and Effectiveness  
- Create an environment at all levels of the city that encourages effective engagement and results in quality customer service and service delivery.  
Criterion guidance: Improves sense of community and/or identity, human interaction, connectivity between neighborhoods, utilizes extensive community engagement/participation, or similar benefits. | I support this criterion (mark “yes”) | 1 |
| 10 | Infrastructure  
- Maintain and improve current infrastructure to meet community needs now and into the future.  
Criterion guidance: Consider scale of project, importance, volume of users benefitting. | I support this criterion (mark “yes”) | 1 |
## TIER 2 SCORING: Capital Projects only

<table>
<thead>
<tr>
<th>#</th>
<th>CRITERIA SUGGESTED BY THE TAG AND STAFF</th>
<th>I support this criterion (mark “yes”)</th>
<th>I oppose this criterion (mark “no”)</th>
<th>Weight</th>
<th>Draft weight by TAG</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Traffic Congestion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Project’s potential to reduce traffic congestion.</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Connectivity</td>
<td></td>
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<td></td>
<td>• Facilitates connectivity, completes a connection, or fills a significant gap in the transportation system.</td>
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<tr>
<td>13</td>
<td>Recreational / Social Value</td>
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<tr>
<td></td>
<td>• Provides recreational opportunity, has cultural value and/or beautifies the public realm.</td>
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<tr>
<td>14</td>
<td>Operations and Maintenance</td>
<td></td>
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<td></td>
<td>• O&amp;M costs over the life of the project or improvement.</td>
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<td>1</td>
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<tr>
<td>15</td>
<td>Readiness</td>
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<tr>
<td></td>
<td>• Readiness to proceed and be built (i.e. construction drawings complete)</td>
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</tbody>
</table>

**Criteria applied at end of TIP (all projects):**

- Cost / Benefit
- Competitiveness for External Funding
- Funding capabilities / Staff Resources
- Balancing different types of projects
- Overriding Considerations

**Why apply at end of TIP?**

- Applying four above bullets in some circumstances requires comparing projects against each other versus being more objectively evaluated in Tier 1 and Tier 2.
- More subjective in nature
- Some projects may not be defined well enough (scope/cost) to assess objectively
“Fix it First”

“...prioritizing investments in roads, schools, utilities, housing, and other infrastructure in a way that leverages and enhances existing assets before building new...”

– NGA Center for Best Practices
“there’s a multibillion-dollar maintenance backlog on California’s streets and roads” – Brian Kelly, Secretary of the California State Transportation Agency

http://www.sfchronicle.com/opinion/openforum/article/Road-funding-must-include-construction-and-6115448.php
“Participatory Budgeting”

Vallejo’s experiment with direct democracy – May 2013

Every resident age 16 and over given the chance to vote on how to spend $3.2 million in sales tax money

See article on course website
“Road Diets”

Four Lanes w/o center turn lanes  center turn lanes, bike lanes, ped refuge island at bus stop

Before Conversion to Road Diet
1 foot=.305 meters

After Conversion to Road Diet
STRIP GARDENS: Raised and widened medians with plantings serve as refuge, help "calm" traffic, and give the street a boulevard-like feel.

LOUNGE AREAS: Encouraging cycling will require more bike racks and bike parking; making the streets safer for pedestrians will require more bollards and better lighting for sidewalks; and benches, tables, and other places to watch the world go by will foster community in public spaces.
“Green Streets”
March 8, 2016 8:00 a.m.

The Bike Wars Are Over, and the Bikes Won

By Janette Sadik-Khan

Photo: Spencer Platt/Getty Images
When I accepted Mayor Bloomberg’s offer to become Transportation commissioner, I told him I wanted to change the city’s transportation status quo. The DOT had control over more than just concrete, asphalt, steel, and striping lanes. These are the fundamental materials that govern the entire public realm and, if applied slightly differently, could have a radical new impact. I saw no reason why New York couldn’t become one of the world’s great biking cities — or why it wouldn’t want to. But the act of actually achieving it launched the bitterest public fight over transportation in this city since Jane Jacobs held the line against Robert Moses’s Lower Manhattan Expressway half a century earlier. By the time the fight localized — in October 2010, when police attempted to control hundreds of dueling protesters for and against a new bike lane along Prospect Park — *The Brooklyn Paper* called the proposal “the most controversial slab of cement outside the Gaza Strip.”
Side note:
Plan versus Implementation

Complete Streets

<table>
<thead>
<tr>
<th>Item</th>
<th>Topical Area</th>
<th>Street Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting Lane</td>
<td>Antelope</td>
<td>Small, single</td>
</tr>
<tr>
<td>Meeting Lane</td>
<td>42</td>
<td>w/ on-street parking</td>
</tr>
<tr>
<td>Turning Lane</td>
<td>40</td>
<td>w/ on-street parking</td>
</tr>
<tr>
<td>Turning Lane</td>
<td>40</td>
<td>w/ on-street parking</td>
</tr>
<tr>
<td>J-turn Lane</td>
<td>30</td>
<td>w/ on-street parking</td>
</tr>
<tr>
<td>Park Lane</td>
<td>35</td>
<td>w/ on-street parking</td>
</tr>
</tbody>
</table>

8. The following levels of service are unacceptable for those streets requiring major improvements (see Exhibit for definition of "major improvement"):
   - 25 during peak traffic hour.
   - 15 during off-peak hours.
   - 15 during peak traffic hour in other areas (outside City limits).
   - Inside intersections, Davis streets shall have at least one lane that is divided by a continuous line or a broken line where a single off-road turning lane exists.

Planning department
Planners

Public Works department
Engineers
Funding Sources

• Federal or state grants
  – Direct: e.g. state SRTS and BTA
  – Through MPO: e.g. TE, federal SRTS

• Bonds (e.g. borrow now, pay later)
  – General revenues – sales taxes, etc.
  – Assessment districts – those who benefit pay fee
  – Tax increment financing – property tax increases

• Developers (as condition of project approval)
  – Impact fees
  – Exactions
The General Plan

Where are we?
Where are we going
Where do we want to be?
How do we get there?

Land Development Code
Regulates private development

Capital Improvement Program
 Dictates public investment

Planning Dept

Public Works Dept
Zoning

• Zoning map: shows category for each parcel
• Text: specifies rules for each category
  – **Land uses** for each category:
    • “immediate, allowable” uses
    • conditionally permitted uses
    • prohibited uses
  – **Development standards** for each category:
    • intensity or bulk or “envelope”: setbacks, height limits, FAR requirements
    • impact or performance: e.g. parking requirements
Woodland Zoning Map
§ 20.08.040 OFF-STREET PARKING AND LOADING.

A. **Intent and purpose.** These regulations are established to provide for on-site maneuvering and parking of motor vehicles that are attached to and generated by land uses within the city. The parking requirements contained herein are assumed to be **minimums** only. It is the responsibility of the developer, owner or operator of any specific use to provide adequate off-street parking and maneuvering facilities. The following requirements are designed to **lessen traffic congestion and contribute to public safety** by providing sufficient on-site parking facilities.
### D. Parking space requirements

All land uses shall provide off-street parking in conformity with the following requirements, unless otherwise modified by the provisions contained herein.

<table>
<thead>
<tr>
<th>Use</th>
<th>Minimum Parking Stalls Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td></td>
</tr>
<tr>
<td>Automobile service stations</td>
<td>A minimum of five (5) parking spaces per use plus an additional space for each service bay.</td>
</tr>
<tr>
<td>Automobile washing and cleaning establishments</td>
<td>Minimum twenty (20) queuing spaces; minimum (not self-service) ten parking stalls; plus two (2) stalls per detail bay; minimum seventeen (17) drying stalls (drying stalls shall be a minimum ten (10) foot by twenty (20) foot clear area).</td>
</tr>
<tr>
<td>Banks, savings and loans, other financial institutions and related offices</td>
<td>One (1) per two hundred (200) square feet may include stacking credit for drive-through window on the basis of one (1) car for every twenty-three (23) lineal feet of striped stacking lanes). A maximum credit not to exceed thirty percent (30%) of the total required parking for the site or no more than twenty (20) spaces for stacked credit, whichever is less. Drive through lanes shall provide a minimum of one hundred fifteen (115) feet per lane for required stacking space.</td>
</tr>
<tr>
<td>Barbershops and beauty parlors</td>
<td>One (1) per two hundred fifty (250) square feet.</td>
</tr>
<tr>
<td>Coin-operated laundromats</td>
<td>One (1) per two hundred (200) square feet</td>
</tr>
<tr>
<td>Coin-operated dry cleaning</td>
<td></td>
</tr>
</tbody>
</table>
“Free parking isn't really free. In fact, the average parking space costs more than the average car. Initially, developers pay for the required parking, but soon tenants do, and then their customers, and so on, until the cost of parking has diffused throughout the economy. When we shop, eat in a restaurant, or see a movie, we pay for parking indirectly because its cost is included in the price of everything from hamburgers to housing. The total subsidy for parking is staggering, about the size of the Medicare or national defense budgets. But free parking has other costs: It distorts transportation choices, warps urban form, and degrades the environment.”

Source: http://www.planning.org/bookservice/highcost.htm
What are the negative effects of parking requirements…?

Fun fact: parking spaces outnumber drivers 3 to 1

Source: Forbes, 4/10/08
Subdivisions Ordinance

Regulates division of a single property into multiple properties.
Subdivision Ordinance vs. Zoning

• Applies only to land being subdivided.
• Affects physical appearance of neighborhood more than zoning does.
  – Neighborhood layout
  – Street design, parks, etc.
What’s already there:
- Topography
- Streets
- Infrastructure
- Easements

What’s proposed:
- Lot boundaries
- Streets
- Infrastructure
- Easements
Proposed improvements to be shown shall include but not be limited to:

1. The location, grade, centerline radius and arc length of curves, pavement, right-of-way width and name of all streets. Typical sections of all streets shall be shown. Proposed private streets shall be clearly indicated.
2. The location and radius of all curb returns and cul-de-sacs.
3. The location, width, and purpose of all easements.
4. The angle of intersecting streets if such angle deviates from a right angle by more than four degrees.
5. Proposed recreation sites, trails and parks for private or public use.
Key Concept: Street Connectivity

“The purpose of a street network is to connect spatially separated places and to enable movement from one place to another.”

Source: Handy, et al. 2003
Institute of Transportation Engineers Street Layout Principles, 1984
Street Connectivity Ordinances

City of Eugene
Maximum Block Size

City of Hercules
Maximum Block Size
“The maximum perimeter of any block shall be no more than 1,600 ft. The minimum dimension of each block face shall be no more than 500 ft. Pedestrian passages leading from the street to the middle of the block shall be provided at intervals no greater than 250 ft.”

Source: Handy, Paterson, and Butler 2003
Village Homes, Davis

Source: Google Maps
Davis Greenbelt System
Houten, Netherlands
Accessibility = Proximity + Connectivity

Connectivity
(subdivision ordinance)

Proximity
(zoning ordinance)
Susan’s Tenet

Land use and transportation are inextricably linked.

Transportation Investments → Land Use Patterns → Travel Patterns
Nishi Gateway
Davis
Traffic Impact Studies

• Impact of proposed project on traffic levels in area

• Part of development review process, before project approval
  – California: part of CEQA
  – FL, WA: used to determine “concurrency”
Level of Service (LOS)

<table>
<thead>
<tr>
<th>LOS</th>
<th>Average Intersection Delay</th>
<th>Average Freeway Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>&lt; 10 seconds</td>
<td>&gt;55 mph</td>
</tr>
<tr>
<td>B</td>
<td>&gt;10-20 seconds</td>
<td>50 mph</td>
</tr>
<tr>
<td>C</td>
<td>&gt;20-35 seconds</td>
<td>45 mph</td>
</tr>
<tr>
<td>D</td>
<td>&gt;35-55 seconds</td>
<td>40 mph</td>
</tr>
<tr>
<td>E</td>
<td>&gt;55-80 seconds</td>
<td>35 mph</td>
</tr>
<tr>
<td>F</td>
<td>&gt;80 seconds</td>
<td>&lt;20 mph</td>
</tr>
</tbody>
</table>

LOS = f (delay) = f (volume/capacity)
Traffic Impact Studies - Process

1. Existing LOS in area
2. Projected LOS in area in future
3. New trips generated by project
4. Projected LOS in area in future with new trips added
5. Mitigations, if needed
TIA Mitigations?

- LOS = f (volume/capacity)
- What can you do to increase LOS?
Trip generation rates based on data from suburban sites... what does this mean for TIAs for infill projects?
Recent UCD project to collect trip data at “smart growth” projects

Another TIA Issue

Are LOS and traffic congestion the main concerns from an environmental standpoint...?
SB743 Environmental Quality

2013 bill instituted a shift from LOS to VMT (vehicle miles traveled) for traffic impact analysis for CEQA

Questions:
- How to predict VMT for proposed projects?
- How much VMT is a significant impact?
Land use and transportation are inextricably linked.
Susan’s Tenet

Land use and transportation are inextricably linked.
Sustainable Communities Strategies

How to get local governments on board?
State Policy
  e.g. VMT, GHG emissions targets

Regional Policy
  e.g. funding programs

Local Policy
  e.g. mixed-use zoning

Outcomes
  e.g. VMT, GHG emissions
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, May 9</td>
<td>MPO critique lecture</td>
</tr>
<tr>
<td>Wednesday, May 11</td>
<td>MPO presentations</td>
</tr>
<tr>
<td>Monday, May 16</td>
<td>Strategies overview</td>
</tr>
<tr>
<td>Wednesday, May 18</td>
<td>Work session</td>
</tr>
<tr>
<td>Monday, May 23</td>
<td>Topic 1 presentations</td>
</tr>
<tr>
<td>Wednesday, May 25</td>
<td>Topic 2 presentations</td>
</tr>
<tr>
<td>Monday, May 30</td>
<td>Memorial day</td>
</tr>
<tr>
<td>Wednesday, June 1</td>
<td>Topic 3 presentations</td>
</tr>
<tr>
<td>Friday, June 4</td>
<td>Strategies papers due</td>
</tr>
<tr>
<td>Wednesday 5/11</td>
<td>1. Lupine, Ena</td>
</tr>
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</tr>
<tr>
<td></td>
<td>2. Qian, Xiaodong</td>
</tr>
<tr>
<td></td>
<td>3. Volker, Jamey</td>
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<tr>
<td></td>
<td>4. Cruz, Antonio</td>
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<td>5. Strand, Sarah</td>
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<td></td>
<td>6. Bernstein, Autumn</td>
</tr>
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<td></td>
<td>7. Wang, Qian</td>
</tr>
<tr>
<td></td>
<td>8. Isaac, Raphael</td>
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<td>9. Cackette, Laura</td>
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<td>10. Lee, Amy</td>
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<td>11. Pineda Blanco, Leticia</td>
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<td>12. Liang, Yanlong</td>
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<td>13. Heckathorn, Drew</td>
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<td>14. Fellahi, Mounir</td>
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<td></td>
<td>15. Cohen, Sharon</td>
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<td>16. Zhou, Hang</td>
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</table>
MPO Presentations

• Five minutes per presentation OR LESS
• Six slides:
  – Title slide
  – Issue
  – Framework
  – MPOs
  – Summary of results – Table
  – Conclusions
Assignment 3 Topics
sign up on Monday

<table>
<thead>
<tr>
<th>Pricing</th>
<th>Transit</th>
<th>Facility operations</th>
<th>Non-motorized</th>
<th>Land use management</th>
<th>Other demand management</th>
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</thead>
<tbody>
<tr>
<td>HO/T lanes</td>
<td>Light-Rail Transit</td>
<td>Freeway management systems</td>
<td>Pedestrian infrastructure and programs</td>
<td>Transit-oriented development</td>
<td>Voluntary trip reduction programs</td>
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<td>Congestion pricing</td>
<td>Commuter Rail Transit</td>
<td>Signal timing strategies</td>
<td>Bicycle infrastructure and programs</td>
<td>New Urbanism</td>
<td>Social marketing programs</td>
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<td>Parking pricing</td>
<td>Bus-Rapid Transit</td>
<td>Truck-lanes, other freight strategies</td>
<td>Bike-sharing programs</td>
<td>Smart Growth</td>
<td>E-activities</td>
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<tr>
<td>Transit fare strategies</td>
<td>Paratransit</td>
<td>Eco-driving</td>
<td>Traffic calming</td>
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<td>Safe-Routes-to-School</td>
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<tr>
<td>Car-sharing programs</td>
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<tr>
<td>Uber et al.</td>
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<tr>
<td>ITS applications</td>
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</tbody>
</table>
For Next Time

• Work on MPO papers!
• Read MPO critiques!
• Think about what strategy you want to pick!

Guest speakers
Gian-Claudia Sciara
Kacey Lizon - SACOG