# City of San Jose Department of Transportation



Jim Ortbal, Director John Ristow, Deputy Director Zahi Khattab, Principal Engineer





### Purpose and Goals of Complete Streets Design Guidelines

- Design streets to achieve the City's Envision
   2040 General Plan mobility goals
- 2. Promote safe, multimodal street design
- 3. Guide practitioners to exercise sound judgment in design of streets with "Complete Streets" elements

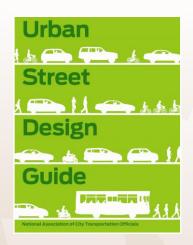


#### Final Draft January 25, 2018

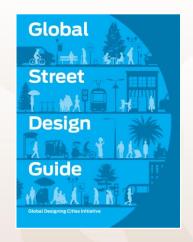




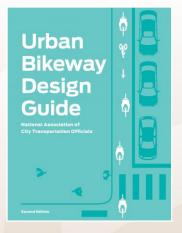
#### **NACTO Design Guidelines**

















### Complete Streets Design Guidelines Document Organization

- 1. Vision
- 2. San Jose Street Types
- 3. Elements of Complete Streets
- 4. Complete Intersections
- 5. Sidewalks and Walking
- 6. Bicycle Design



#### **Vision**



#### Design Emphasis





**Safety** - A design element emphasizes safety for one or more modes of travel.



**Pedestrians -** A design element emphasizes pedestrians as a mode of travel.



**Bicycles -** A design element emphasizes bicyclists or bicycling as a mode of travel.



**Transit** - A design element that is focused on or applicable to transit. Transit refers to buses and light rail if not specifically stated.



Automotive - A design element is applicable to automobiles.



**New Technology -** A design element that may make use of new or emerging technology.



# Street Classification and Types Functional Class Typology

- Previous GPs, State, FHWA
- Arterials/Collectors
- Design focus driven by operational characteristics of motor vehicles; volume & speed

- GP 2040
- Grand Blvd/ Main Street/ City
   Connector/ Local Connector/
   On Street Primary Bikeways
- Design Focus driven by adjacent land uses, functions for other users, pedestrians, and bicycles.

**Grand Boulevard** 

Main Street

**City Connector Street** 

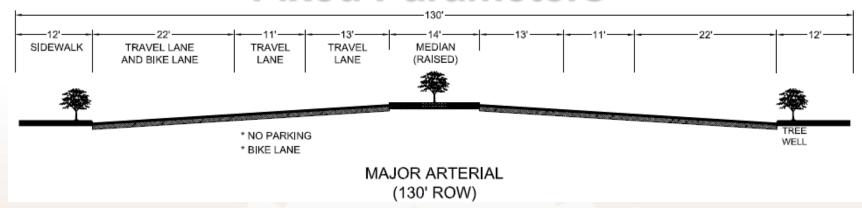
**Local Connector Street** 

**On-Street Primary Bikeways** 



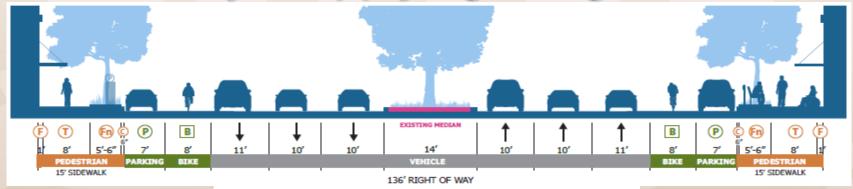


#### **Fixed Parameters**



**Geometric Design Guidelines (2008)** 

#### Flexibility in applying design criteria



**Example Grand Boulevard Cross Section** 

**Complete Streets Design Guidelines (2018)** 



#### Design Speed vs Target Speed

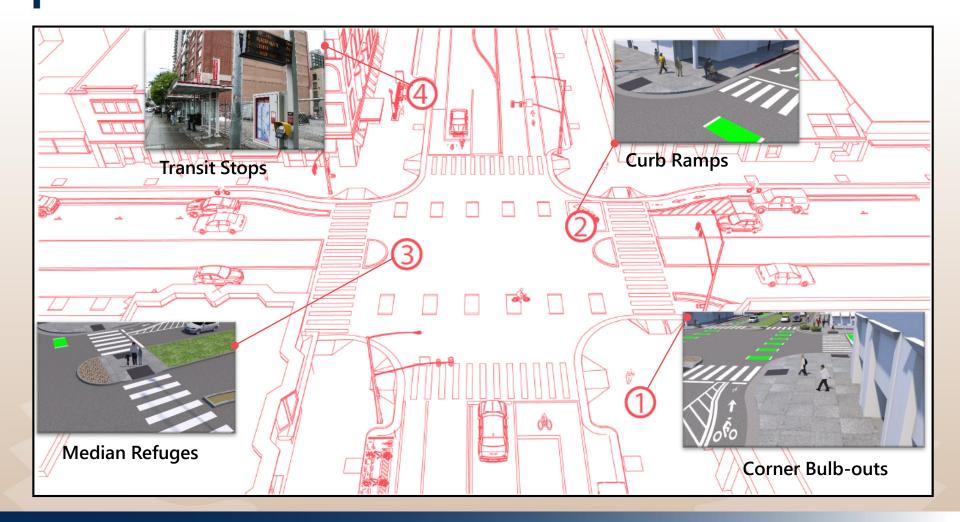
- Identify anticipated Operational Speed based on functional class
- 2. Passive design approach:
- Existing Facility: Design for 85th
   percentile of Posted Speed Limit
- Proposed Facility: Design for 5 to 10
   MPH greater than Anticipated Speed
   Limit based on road geometrics
   allowance
- Monitor/Re-Post based on 85<sup>th</sup> Percentile Speed

- 1. Identify Target Speed
- 2. Select Elements
- 3. Design to Desired Speed
- 4. Speed Management/Monitor

Target = Posted Speed



#### **Complete Intersection Example**





### Bicycle Design Protected Bikeways/Cycle Tracks

**In-Street** 

**One-Way** 

Raised

Two-Way











#### Sidewalks and Walking

Public Seating/Café and Restaurant Tables





Bicycle Racks/ Utilities/Public Art





**Transit Stops** 



Paint & Planter Bulb-out



**Parklets** 



**Street Trees** 





### **Green Street Design & Stormwater Management**

Vegetated Swale





**Green Gutters** 





Stormwater Tree Wells





Infiltration & Flow Through Planters





Rain Gardens





Permeable Paving







#### Coordination





#### Recommendations to the City Council

- Adopt the San José Complete Streets Design Guidelines
- Adopt Complete Streets principles required by VTA to receive Measure B funding
- Endorsement of the National Association of City Transportation Officials (NACTO)'s Design Guidance



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