

City of San Jose Department of Transportation



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

Transportation and Environment Committee
February 5, 2018

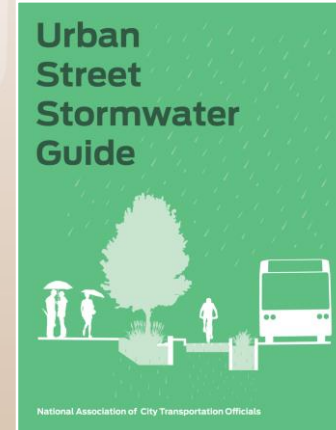
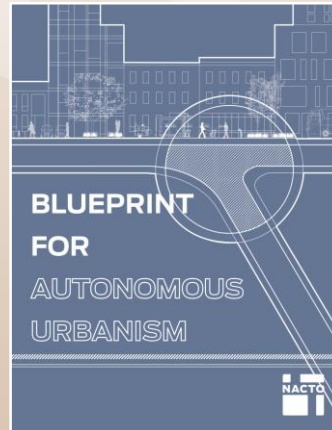
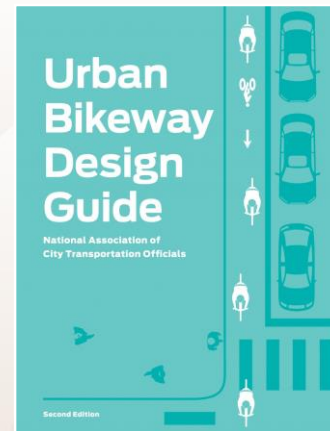
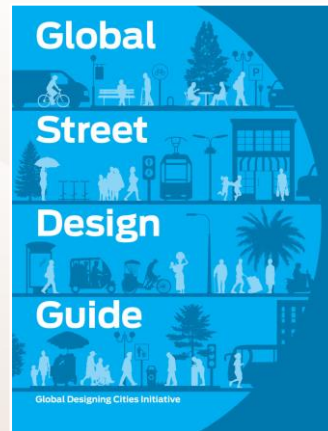
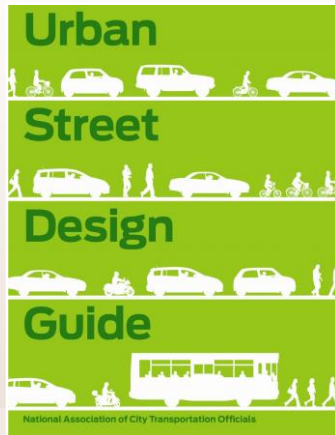
Purpose and Goals of Complete Streets Design Guidelines

1. 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

Complete Street Design



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

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

Typology

- 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



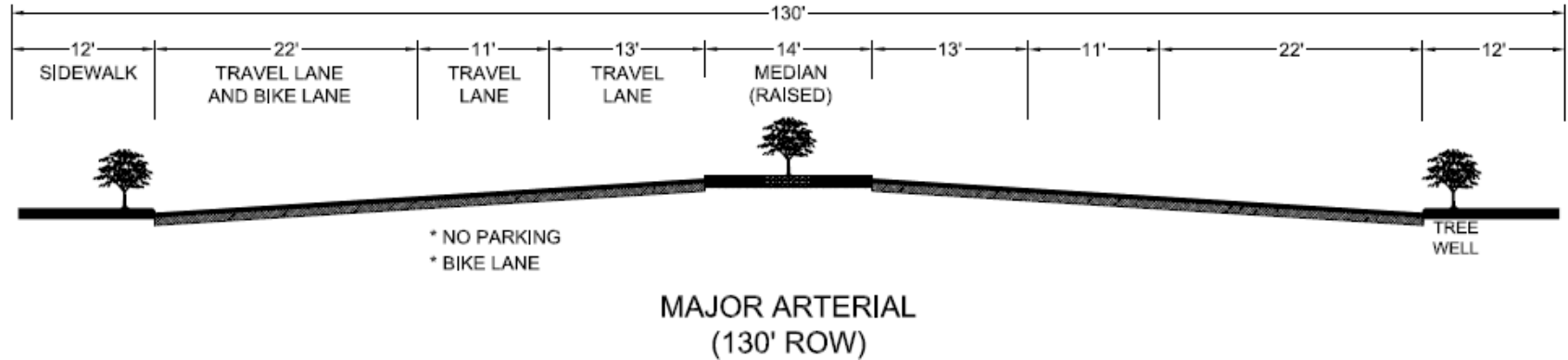
Local Connector Street



On-Street Primary Bikeways

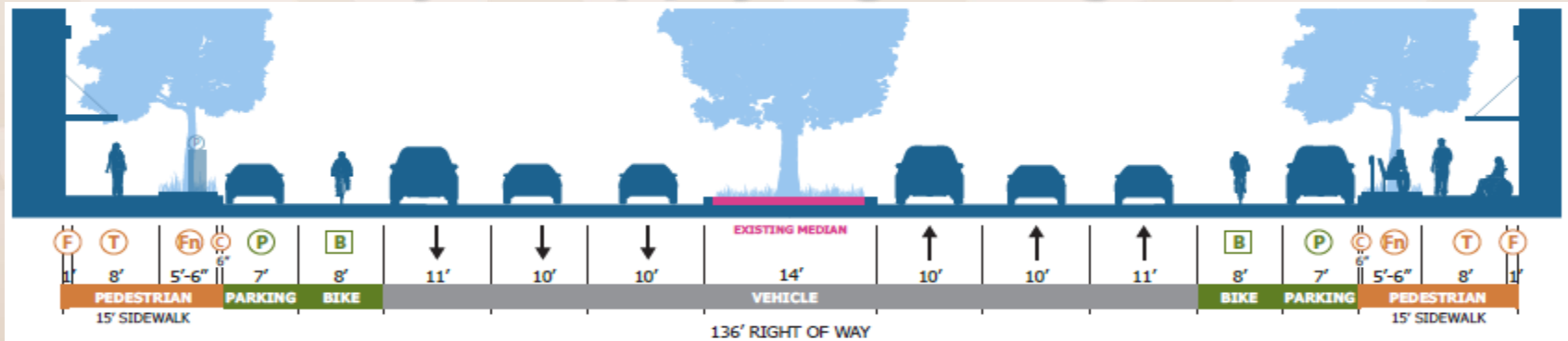


Fixed Parameters



Geometric Design Guidelines (2008)

Flexibility in applying design criteria



Example Grand Boulevard Cross Section

Complete Streets Design Guidelines (2018)

Design Speed vs Target Speed

1. 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

3. Monitor/Re-Post based on **85th Percentile Speed**

1. Identify Target Speed

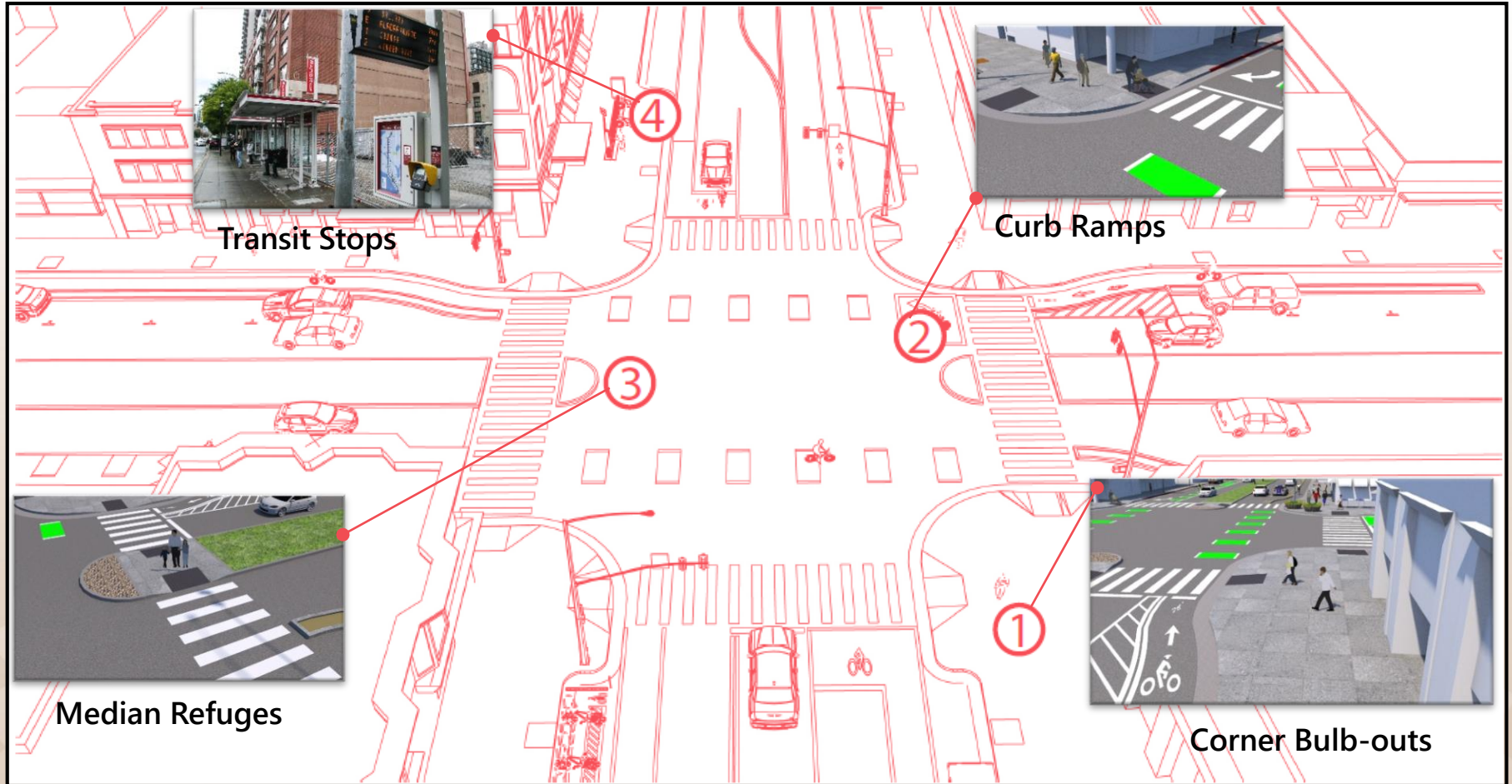
2. Select Elements

3. Design to Desired Speed

4. Speed Management/Monitor

$$\text{Target Speed} = \text{Posted Speed}$$

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



Image Credit: SF Streets Blog

Parklets



Street Trees



Green Street Design & Stormwater Management

Vegetated Swale



Green Gutters



Photo credit: Kevin Robert Perry

Stormwater Tree Wells



Source: City of Philadelphia

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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