

City of San Jose Department of Transportation



Mayor and City Council
May 1, 2018

Complete Streets Design Standards and Guidelines

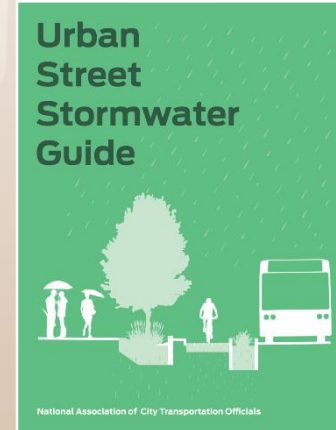
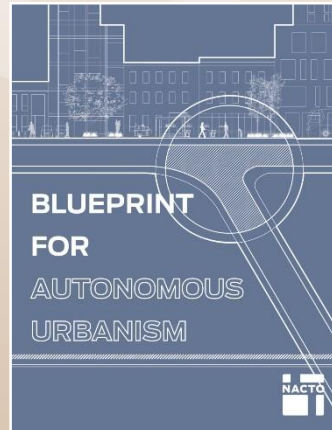
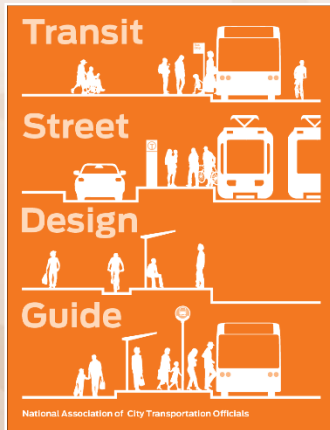
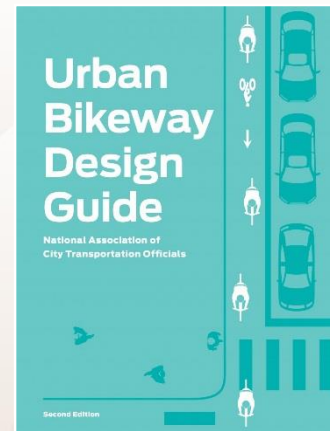
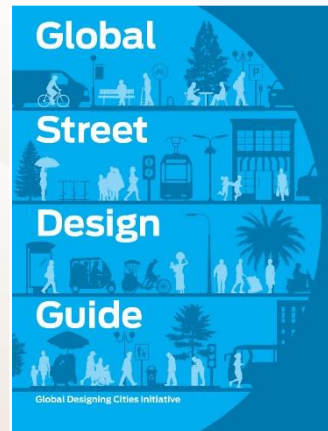
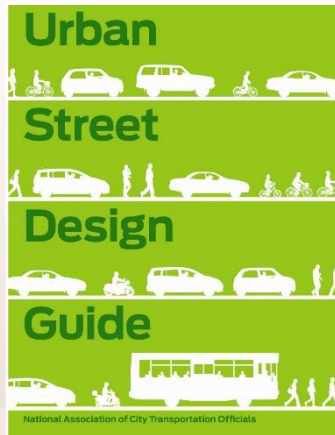
Purpose and Goals

1. Design streets to achieve General Plan mobility goals, Climate Smart San Jose GHG reductions, and Urban Village Plan street improvements
2. Promote safe, balanced transportation use supporting City policies and initiatives (Vision Zero, Vehicle Miles Traveled, Green Infrastructure)
3. Guide practitioners to exercise sound judgment in applying progressive, complete street designs for all modes of travel

Final Document



NACTO Design Guidelines



Complete Streets Design Standards and 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.

Complete Streets Create Safer Streets

- Complete Street design treatments can create order, clarity for all roadway users
- Complete Streets typically experience speed reductions, which over time will reduce crashes
- Branham Ln (Alm Ex - Vistapark): 40% fewer crashes in 2017 after roadway restriping
- Moorpark Av (Williams - Saratoga): 20% fewer crashes after roadway restriping



Standards, Guidelines & Options

Standard

Required, Mandatory.

Guideline

Intended practice in typical situations.

Deviations allowed if judgment or study indicates deviation to be appropriate. City will consider request/study and determine if design variance is reasonable and appropriate prior to making judgment and allowing deviation.

Option

Permissive condition. Carries no requirement or recommendation.

Street Classification and Types

Previous GPs Functional Class

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

GP 2040 Typology

- 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



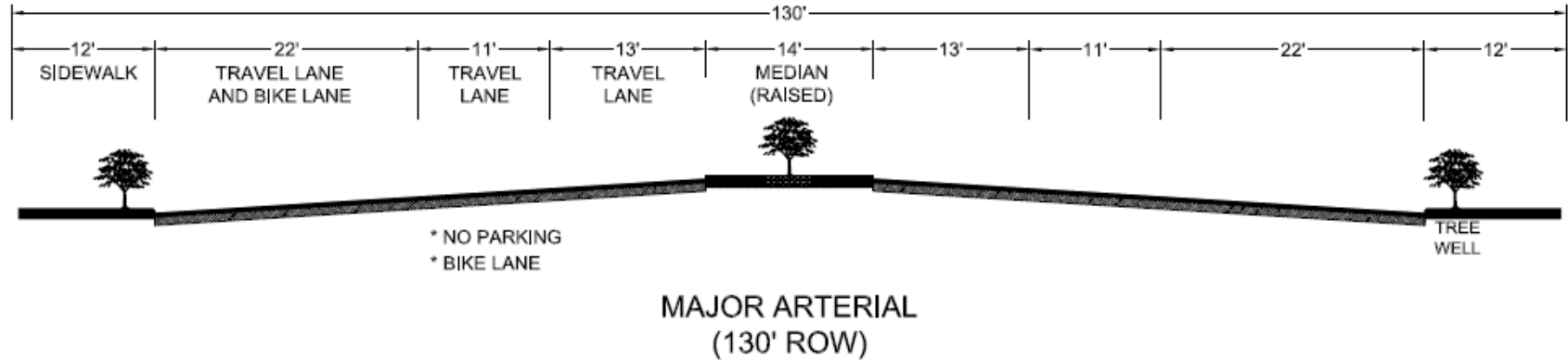
Local Connector Street



On-Street Primary Bikeways

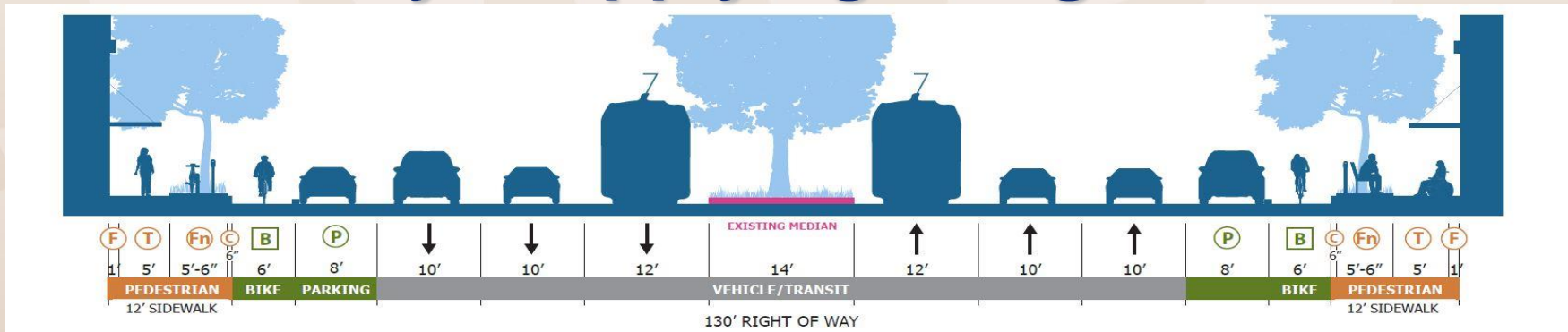


Fixed Parameters



Geometric Design Guidelines (2008)

Flexibility in applying design criteria



Example Grand Boulevard Cross Section

Complete Streets Design Standards and Guidelines (2018)

Design Speed vs Target Speed

Traditional Method

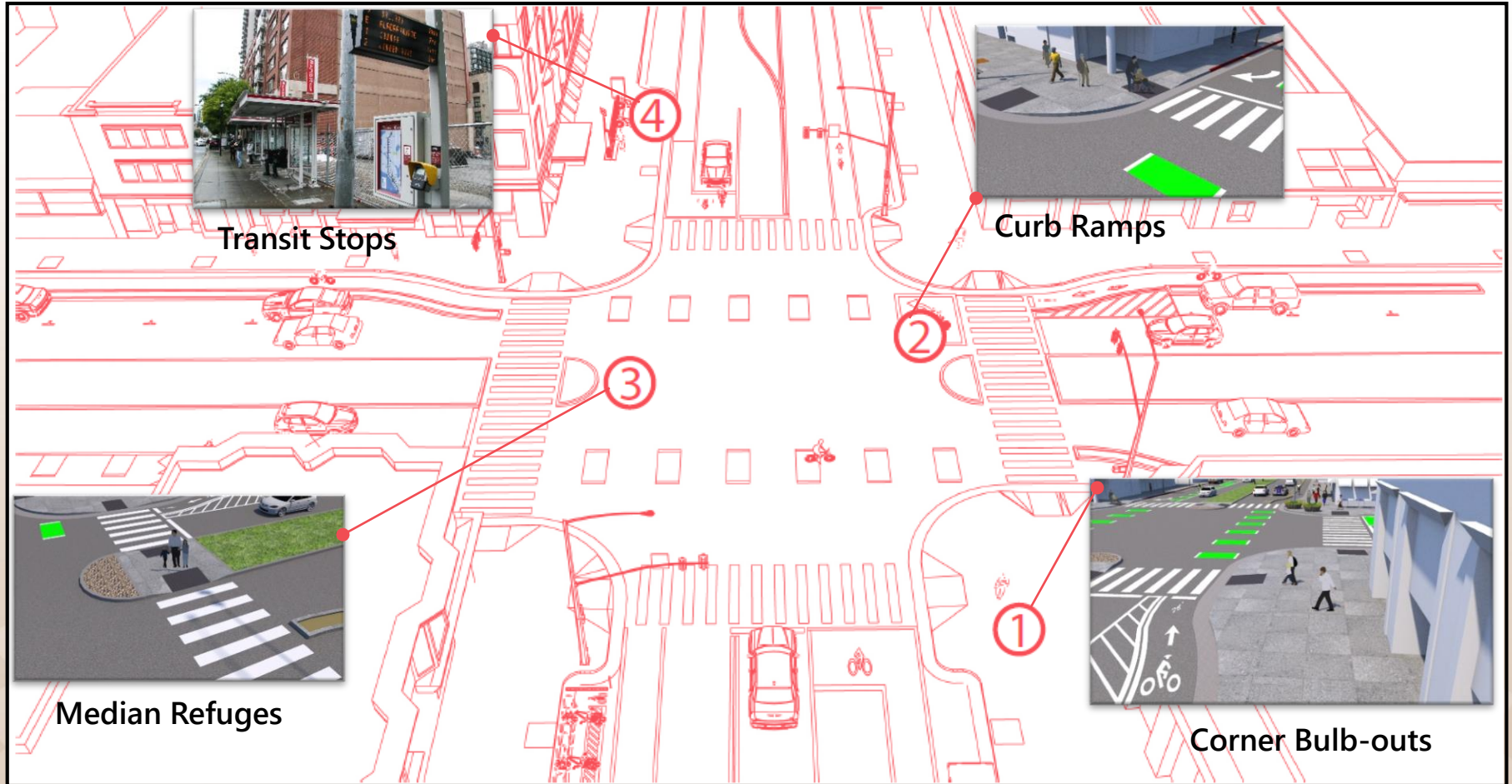
1. Identify anticipated Operational Speed based on functional class
2. Passive design approach:
 - Existing Facility: Design for **85th percentile** of Posted Speed Limit
 - Proposed Facility: Design for 5 to 10 MPH greater than Anticipated Speed Limit based on road geometrics allowance
3. Monitor/Re-Post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

Current Method

1. Identify Target Speed
2. Select Design 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



Cottle Road



St. John Street



Berryessa Station Way



Story/Sunset

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

Bioretention in Sidewalk



Green Gutters



Photo credit: Kevin Robert Perry

Stormwater Tree Wells



Source: City of Philadelphia

Infiltration & Flow Through Planters



Rain Gardens



Coordination



Recommendations to the City Council

- Adopt the **San José Complete Streets Design Standards and 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
- Adopt an ordinance amending the San Jose Municipal Code Titles 9, 11, 13, 17 and 19 to align with the above actions

Councilmember Memorandum

Pedestrian Only Zones

- Add Supplement Section into Complete Streets Standards and Guidelines
- San Pedro Street Closure Pilot Project
 - Pilot tested numerous times, it works
 - Cost for Design, Construction and Oversight

Councilmember Memorandum

Enhanced Sidewalk Surfaces

- Proposed Guidelines Allow

Decorative Pavement

- Federal guidance significantly limits decorative pavement treatments

City of San Jose Department of Transportation



Mayor and City Council
May 1, 2018