## COMPLETE STREETS PLAN OVERVIEW

#### COMPLETE STREETS PRINCIPLES

Complete Streets is a process of planning and designing streets that ensures access for people walking, biking, driving, and taking transit to destinations in every part of the community. The planning and design of Complete Streets includes considering the street's relationships with the transportation network and surrounding context, flexibility in design, and often balancing priorities. Compete Streets are not one-size-fits-all; however, they all share the same principles:

- >>> Complete Streets serve all users and modes.
- >>> Complete Streets emphasize safety for all users.
- >>> Complete Streets form connected multimodal networks.
- >>> Complete Streets are context-sensitive.

#### COMPLETE STREETS PLAN ELEMENTS

The City of Ames Complete Streets Plan is based on several major components:

- >>> Developing and adopting a Complete Streets policy.
- >>> Classifying the street network to reflect context characteristics and modal priorities.
- >>> Assessing and revising the City's street project delivery process.
- >>> Creating street typologies and design guidelines.
- >>> Developing tools to document decisions and evaluate performance.



## COMPLETE STREETS PLAN OVERVIEW

#### **PROCESS**

The Complete Streets Plan development is led by the Public Works Department with input from all other City departments. The City has hired a consultant with national Complete Streets experience to provide assistance. The plan is being developed with input from two committees:

- >>> Technical Advisory Committee: COA Public Works, COA Planning, Ames Area MPO, Iowa State University, CyRide
- >>> Community Advisory Committee: community advocacy organizations, the development community, ISU student representatives, business districts, schools, Story County, Iowa DOT

#### TIMELINE

The Complete Streets Plan will be developed over a one-year period with an anticipated completion date of August 2018. Major milestones include:

- >>> Background review and project startup: Late Summer 2017
- >>> Committee organization and public outreach: Fall 2017
- >>> Implementation guide and tools: Winter 2018
- Network classification and street typologies: Winter/Spring 2018
- >>> Plan development, review, and revisions: Spring/Summer 2018



# THE COMPLETE STREETS PROCESS

The process of designing a Complete Street is flexible and iterative. This flowchart depicts the typical process, which is guided by context and community goals.

# EXISTING AND FUTURE CONDITIONS

# Define Land Use Context

Character and density

Building type, scale, and setback

Infill opportunities

Plan/vision for the area

Zoning & other policies

# Define Transportation Context

Traffic volumes/speeds

Existing bike and pedestrian infrastructure

Bus routes and stops

Transportation plans

Relationship to the broader transportation network

# GOALS AND OBJECTIVES

# Describe Future Objectives

Who will use the street?

What should stay the same?

What should change?

## Identify Deficiencies

Bike network needs

Pedestrian accessibility issues (ADA)

Safety issues

Traffic congestion

Transit operation issues

## DECISION-MAKING

# Define Street Type and Initial Cross Section

Context-based

Incorporate standards

Adjust for site conditions

#### **Assess Feasibility**

Describe tradeoffs

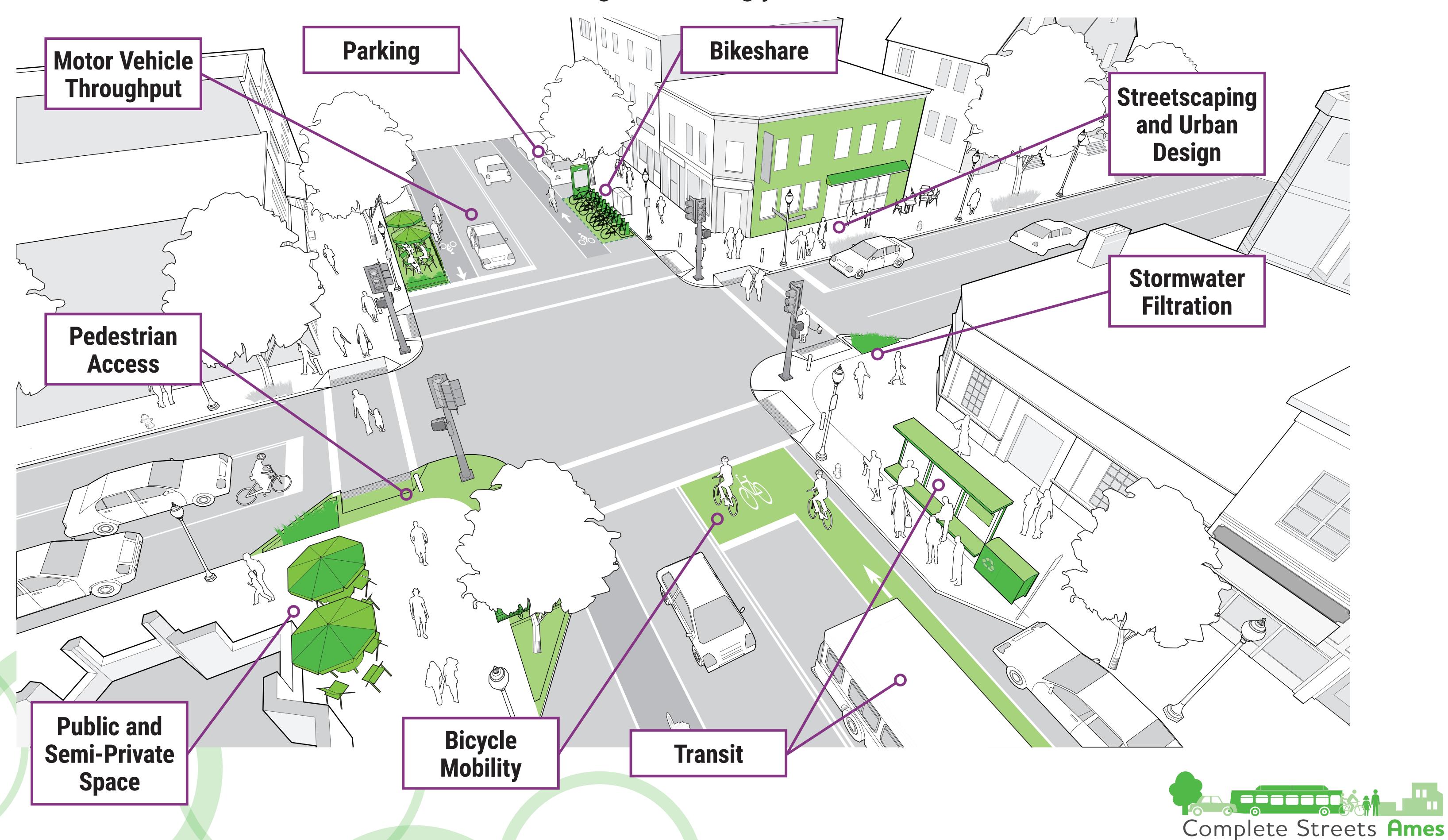
Refine cross section

Final Design / Engineering



# THE MANY ROLES OF STREETS

Some streets play many roles while others play only a few. The purpose of Complete Streets is to consider these context-based roles and design accordingly.



## EXAMPLES OF COMPLETE STREETS

Complete Streets do not all look the same or include the same elements. They are designed based on context to adequately accommodate the various types of users anticipated in the area.



IN URBAN CORRIDORS, streets often provide dedicated on-street space for biking and sometimes include painted or physical separation from motor vehicles.



ALONG SHOPPING STREETS, emphasis is often placed on pedestrians, encouraging them to move through, linger, and visit businesses.



IN SUBURBAN CORRIDORS where destinations are far apart, a street may only need a sidepath to accommodate people walking and biking.



**NEAR SCHOOLS**, streets typically emphasize pedestrian safety with planted buffers, sidewalks and highly-visible crosswalks.





THE STREET
I LIVE ON
SHOULD...





STREETS I
COMMUTE
ON SHOULD...





STREETS I
HANG OUT
ON SHOULD...





STREETS NEAR
SCHOOLS
SHOULD...



## COMPLETE STREETS ELEMENTS » PEDESTRIAN

Various treatments are available to enhance the pedestrian realm. Indicate your preference by placing sticker dots next to the treatments you would most like to see in Ames.



**High Visibility Crosswalks** 



Raised Intersection



**Sidewalk Cafes and Street Furniture** 



Rapid Flashing Beacon



Wider Sidewalk



Sidewalk Buffers



Mid-block Crossing with Refuge Island



Pedestrian Hybrid Beacon (HAWK Signal)



Pedestrian Countdown Signal



# COMPLETE STREETS ELEMENTS » BICYCLE

Various treatments are available to enhance the transportation system for biking. Indicate your preference by placing sticker dots next to the treatments you would most like to see in Ames.











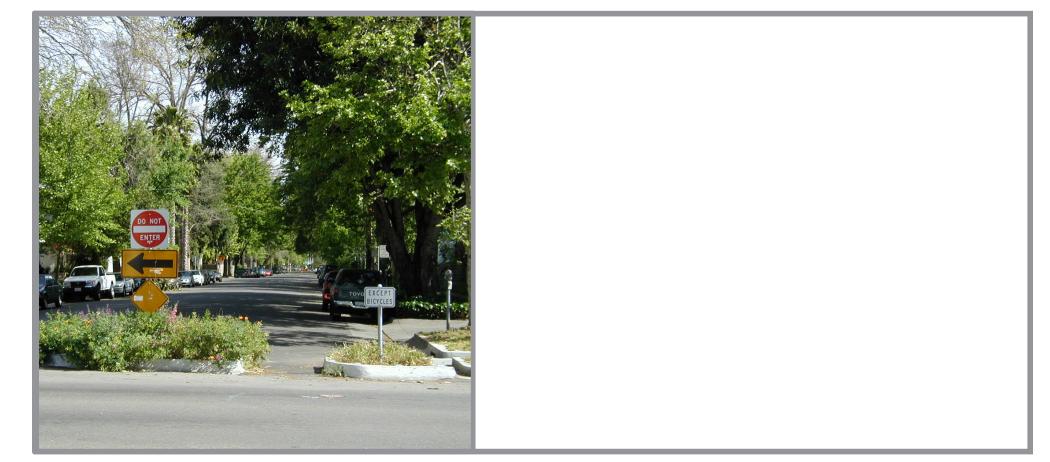
**Buffered Bike Lane** 



**Bike Box** 



Separated Bike Lane (One or Two Way)



Traffic Diverter on a Bicycle Boulevard



**Standard Bike Lane** 



**Left Turn Box** 



**Bicycle Traffic Signal** 



# COMPLETE STREETS ELEMENTS » TRANSIT

Various treatments are available to enhance the transportation system for transit. Indicate your preference by placing sticker dots next to the treatments you would most like to see in Ames.



Transit Wayfinding



**Transit Shelter** 



**Crosswalk at Bus Stop** 



**Bikeway Access to Transit** 



**Real Time Transit Information** 



**Transit Stop Bike Lane Bypass** 



**Curb Extension at Bus Stop** 



Bus Storage Rack



**Bicycle-Bus Shared Lane** 



# COMPLETE STREETS ELEMENTS » MULTIMODAL

People that travel, live, or work along streets benefit from treatments that reduce speeds, increase safety, enhance quality of life, manage stormwater and beautify streetcapes. Indicate your preference by placing sticker dots next to the treatments you would most like to see in Ames.



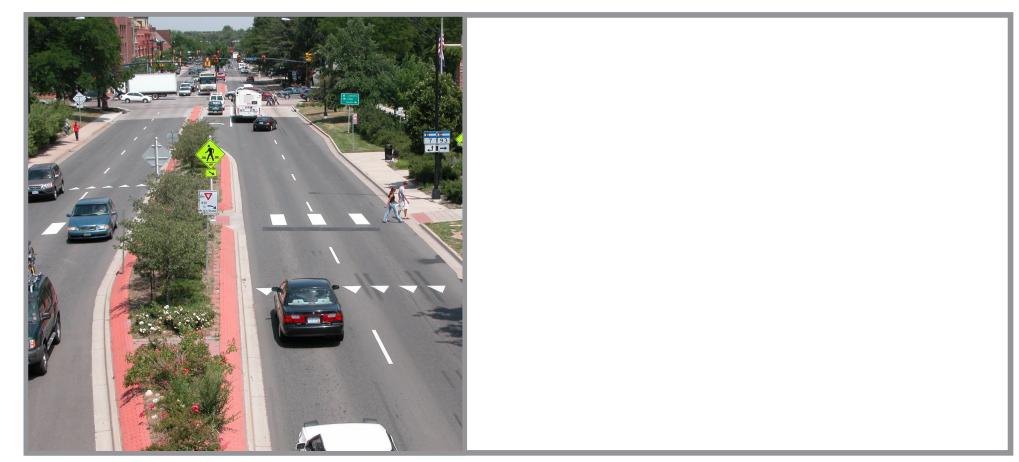
Road Reconfiguration (4 to 3 Lanes)



Lane Diet (Narrowing Travel Lanes to Accommodate Bike Lanes)



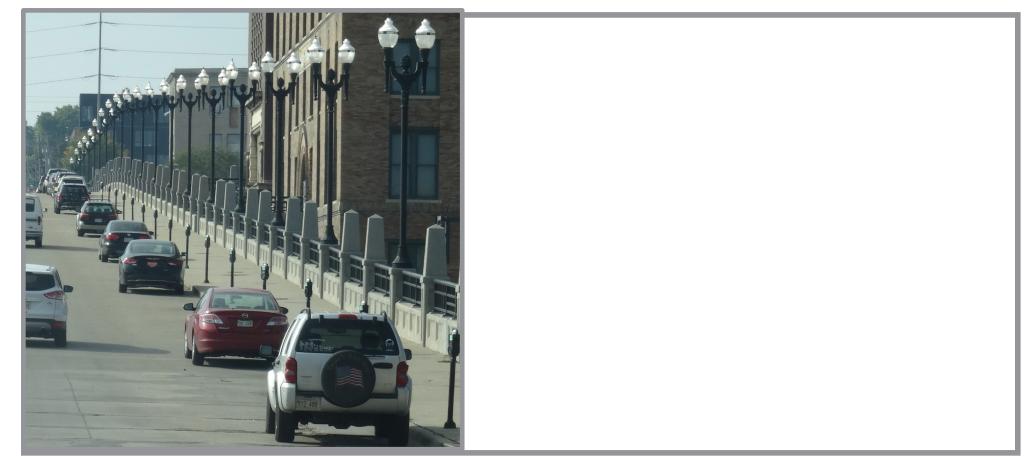
**Traffic Circles** 



Medians



**Driveway Consolidation** 



**Enhanced Street Lighting** 



**Speed Humps** 



Roundabouts



Stormwater Infiltration



# FACTORS AFFECTING STREET DESIGN

In street design, there are numerous considerations that determine the need for making tradeoffs.



#### BUDGET

The City of Ames has a limited budget for street projects in any given year. Tradeoffs must often be made when a project's budget cannot accommodate changes to the street's cross section.



#### LIMITED RIGHT-OF-WAY

Especially in the older parts of the city, right-of-way is finite. Tradeoffs must often be made due to a lack of space to include every desired street element (e.g., through lanes, turn lanes, bike lanes, wide sidewalks, landscaping, etc.)



#### MINIMUM STANDARDS

State and federal agencies have established minimum standards that require tradeoffs. For example, a street may not be wide enough to include standard-width bike lanes. Exceptions to minimum standards can be sought.



#### TRANSIT OPERATIONS

Transit can affect street design in several ways, for example: high-frequency transit routes may be less compatible with bike lanes, bus shelters may preclude sidewalk cafes, and turning bus routes may affect intersection geometry.



#### FUNCTIONAL CLASSIFICATION

State and federal agencies have specified functional classifications for streets in Ames, which partly determines factors such as lane widths, number of lanes, and design speed.



# BICYCLE AND PEDESTRIAN DEMAND

Bicycle and pedestrian needs, especially in high-demand areas like the Iowa State University campus and downtown, may require tradeoffs such as consolidating or disallowing driveways in order to reduce conflicts with people biking and walking.



# TRAFFIC VOLUMES

Current and forecasted traffic volumes may necessitate additional through lanes, thereby precluding the inclusion of other street elements. Historically, traffic volume has been the primary factor in street design. However, in the Complete Streets process it is considered alongside context and the needs of other modes.





