

# Complete Streets

# 2.0

## FACT SHEET



Since the NYSAMPO Complete Streets Fact Sheet was published in 2012, additional needs have been identified. They are addressed in this addendum.

The original Complete Streets Fact Sheet can be found at [www.nysmpo.org](http://www.nysmpo.org)

### MORE MUNICIPALITIES HAVE ADOPTED COMPLETE STREETS ORDINANCES AND POLICIES

A number of additional New York municipalities have officially recognized the importance of considering Complete Streets elements in street design and road improvement projects through the adoption of local ordinances or policies. Most use language that is similar in content to the New York State law.

Since any list is quickly outdated, readers are referred to the **New York State Department of Transportation's Complete Streets web page:**

<https://www.dot.ny.gov/programs/completestreets>

### HOW CAN COMPLETE STREETS BE IMPLEMENTED IN SIMPLIFIED PAVING PROJECTS?

A focus on managing infrastructure assets at a time of limited capital funding has resulted in many jurisdictions, from local to State, doing simplified or maintenance paving work. Such projects may entail a simple overlay, or mill and resurfacing, and is generally limited to “working between the curbs or shoulders”.

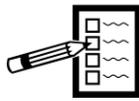
#### **Complete Streets necessarily reflect their location.**

An urban street that is curbed will require different treatments than a suburban or rural roadway that has paved shoulders but no sidewalks. There is no single approach to designing Complete Streets.

While this places limits on the range of Complete Streets elements that can be employed, there is still a great deal that can be done. Often changing pavement markings alone can improve the experience of all roadway users. There are other low cost improvements that may be outside the scope of simplified paving, but worthy of consideration.



## HOW CAN COMPLETE STREETS BE IMPLEMENTED IN SIMPLIFIED PAVING PROJECTS?



### Begin with a simple inventory.

- **Supply:** What is the pavement width? What is the pre-construction layout: number and width of lanes, on-street parking, bus stops, bike lanes, crosswalks?
- **Environment:** What comprises the adjacent land use? Is it a residential street, a neighborhood shopping area, a commercial strip? Is there a school or park on the street? Consider that Complete Streets should fit in the land use context.
- **Demand:** The context will relate to who uses the street and for what purposes. Are there generators of pedestrian activity? Is the street part of an established bicycle network, or a bus route?



### Understand the project context

- **Pavement.** Paving of uncurbed roadways is sometimes limited to the travel lanes. This can leave a drop-off at the shoulder that is unsafe for bicyclists, and a deteriorated shoulder surface that can be a hazard for both bicyclists and pedestrians. Roads should be paved to the full extent of the shoulder, and narrow shoulders widened where possible.
- **Drainage.** Drainage problems like low areas where ponding occurs should be addressed as a matter of course in paving projects. Bicycle friendly drainage grates should be installed.



### Consider what can be accomplished with pavement markings.

- **Road diet.** Is this a 4 lane street that can be reduced to 2 through lanes, a center two-way left turn lane, and bike lanes?
- **Bike lanes.** Even on a 2 lane street, there may be sufficient width to accommodate bike lanes. Sometimes space can be gained by limiting parking to one side of the street. When pavement width is not adequate, shared lane markings (“Sharrows”) or a bike boulevard designation can be considered.
- **High visibility crosswalks.** Can pedestrian safety be improved by making crosswalks more easily seen?
- **Curb extensions.** Where there is on-street parking, curb extensions (bulb-outs) can shorten the distance that pedestrians have to cross. While it is preferable that these be raised concrete, at-grade painted extensions have been used successfully.
- **Reverse angle parking.** Where there is sufficient pavement width, this technique improves safety for motorists and cyclists, because drivers exiting the parking space have a clear view of approaching traffic, including bicycles.



**Curb extensions:** Painted curb extension at Water and Broad street in New York City. (Above)

**Reverse angle parking:** Before and after photos of reverse angle parking on Hawley Street in downtown Binghamton. (Below)



### Consider additional low-cost improvements.

If there is community support for these changes, the municipality may be encouraged to invest some resources to make additional changes as part of the project.

- **Traffic Signals.** Add pedestrian signals with countdown displays where there are none. Use accessible pedestrian signals that have audible and/or tactile indications where engineering judgment finds they would be warranted (refer to *Manual on Uniform Traffic Control Devices* §4E.09-13). Where there is vehicle detection, make sure bicycle detection is provided, including pavement markings to identify where bicyclists should position themselves to be detected.
- **Mid-Block Crosswalks.** If the distance between signalized intersections is long, and pedestrian conditions warrant it, consider a mid-block crosswalk with high visibility ladder markings and a pedestrian-actuated signal or pedestrian hybrid beacon (refer to *Manual on Uniform Traffic Control Devices* §4F). The latter is often referred to as a HAWK (High Intensity Activated Crosswalk) beacon.
- **Curb Extensions.** Construct concrete curb extensions. They are more effective in protecting pedestrians by making them more visible to drivers, which is not the case with at-grade painted extensions.

## HOW CAN COMPLETE STREETS ACCOMMODATE GOODS MOVEMENT?

When planners and engineers are considering how to make an existing thoroughfare into a Complete Street, they most often focus on improving accommodations for pedestrians, including those with vision or mobility impairments; cyclists; and transit users when the street is a current or future bus route. Those involved in goods movement



are often left out of the Complete Streets design conversation. But goods movement can be an important

component of Complete Streets, especially when one of the objectives of the new streetscape is to encourage economic development, which often occurs in the form of neighborhood-scale retail and commercial space. Restaurants and shops will require daily deliveries, and residences and offices may rely on parcel services, making truck traffic an unavoidable part of street life.

Planning for goods movement from the outset will help ensure a successful design that truly accommodates all users.

It is important to distinguish between different types of goods movement when looking at land use plans and urban design. Good planning can lead to the creation of a network of urban truck routes that can best accommodate trucks that are not providing local delivery service, whether they are traveling through the city or going from a factory or warehouse/distribution center to a freeway interchange. Once designated, these routes will be less desirable for Complete Street treatment. Local judgment is still important, as in a situation where a “Main Street” serves as a truck route, but must also accommodate all users. Local deliveries and services like garbage removal are the kind of goods movement that must be addressed in the Complete Streets context. Vehicles may

range in size from relatively small parcel service and delivery trucks to tractor-trailers.

While some of our cities were designed with mid-block alleys for rear delivery, most were not. Few neighborhood businesses have on-site loading docks. Most often delivery trucks must compete for curbside space.

Successful Complete Streets projects rely on stakeholder involvement. Outreach to current businesses must include discussion of their delivery needs, with the potential for meeting with their suppliers as well. Find out the type of trucks that are being used, and frequency, duration, and time of day of deliveries. Ask if deliveries can be made in off-hours, when the street is not

busy with people. Then consider loading zones. The City of Philadelphia has included loading zone requests in their Complete Streets program. Determine how much curb front is needed, the hours the loading zone will operate, and the duration of stay (typically no more than 30 minutes). Develop an enforcement plan, which is necessary to make loading zones work. Position loading zones so they will have a minimal impact on parking and bus stops. Local stakeholders can often be helpful in determining an acceptable trade-off in the competition for curb space.

Intersection design should be reviewed to ensure that pedestrian crossing distances are short, while still allowing for delivery truck turning movements.

Consider mountable curbs on medians and roundabouts, and marking stop bars further back to allow turning trucks to swing into the opposite lane.

It is important to plan ahead. If the land use objective is for mixed-use development or redevelopment, consider how the street will accommodate additional truck traffic, and work with economic development officials and developers to create off-street delivery areas.

Most importantly, be creative in accommodating goods movement in your Complete Streets designs as you consider the needs of all users. Ignoring goods movement may detract from the ultimate success of the project and its economic development potential.

## IMPLEMENTING COMPLETE STREETS

Implementing Complete Streets projects can be a challenge. The existence of a state law or local ordinance that requires consideration of the needs of all users in project design does not guarantee the creation of a Complete Street. It is the responsibility of transportation and urban planners to work with residents

and businesses on a street that is slated for construction to educate them about Complete Streets and encourage their input on design elements that will meet their needs. The street owner must be engaged early in the project development process as well, to understand the range of options they may be willing to consider. They will know about limitations of the

built infrastructure that are not otherwise apparent. Finding a champion can also be key in garnering support. Decision makers may be more willing to dedicate resources when they see that a Complete Street project is responding to the needs their constituents have identified, and are not perceived simply as a required response to a law.



**Before:** Raymond Avenue in Poughkeepsie, a four-lane road. (Above)

**After:** "Road diet" transformation from four lanes into a two-lane street with roundabouts, a median, and improved sidewalks and crosswalks. (Right)



The National Complete Streets Coalition is an excellent source of information on the design and benefits of Complete Streets.

<http://www.completestreets.org/complete-streets-fundamentals/Factsheets>



New York State Association of Metropolitan Planning Organizations

<http://www.nysmpos.org>