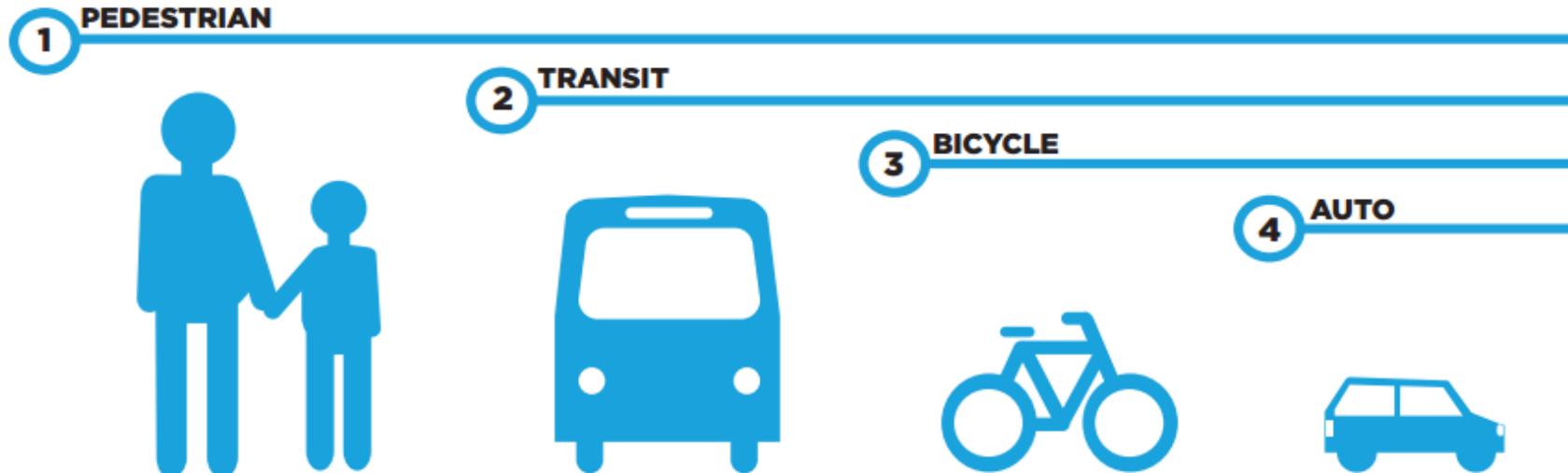


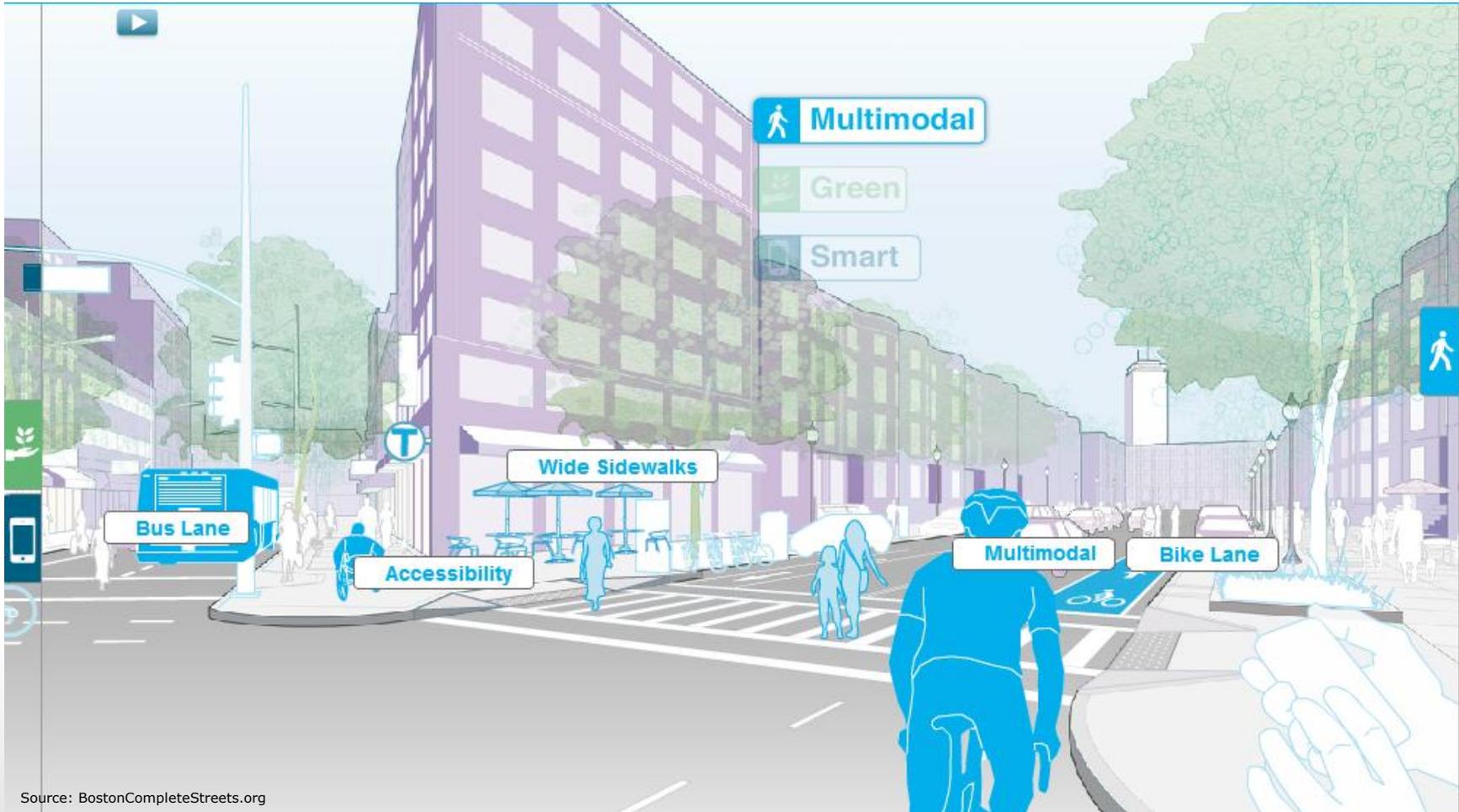
City of Alexandria Complete Streets Program

What are Complete Streets?

Complete Streets are streets designed for **people of all ages** and abilities, including children, older adults, and individuals with disabilities. These streets **ensure safe and convenient travel** for all users, including pedestrians, bicyclists, riders and drivers of public transportation, as well as drivers of other motor-vehicles.



MULTIMODAL: SAFE, COMFORTABLE AND ACCESSIBLE TO ALL USERS

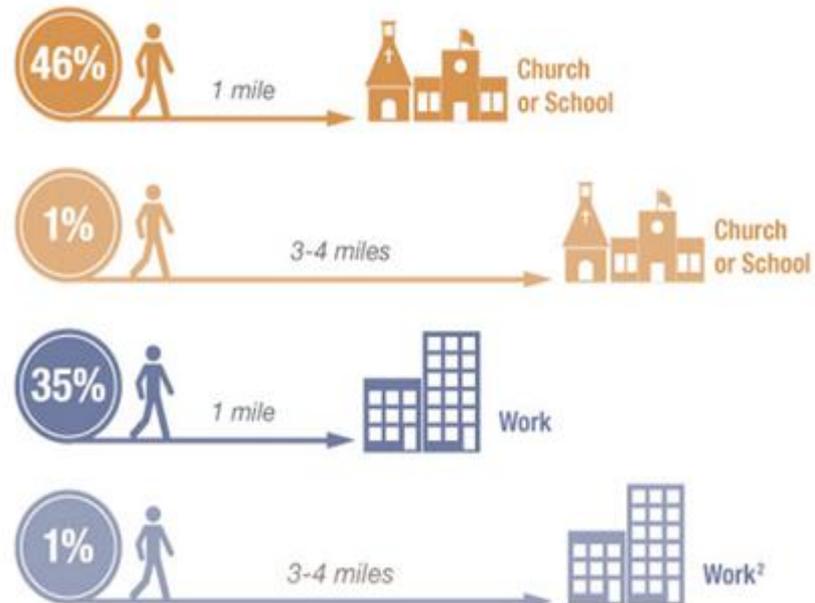


Source: BostonCompleteStreets.org

Benefits of Complete Streets

- Active Transportation
 - Walking, biking and taking transit
 - Improved public health

STUDIES SHOW PEOPLE WILL WALK TO DESTINATIONS:



Centers for Disease Control and Prevention 2012, newpublichealth.org

Obesity Rates in Adults Nationwide



Green Building Education Services

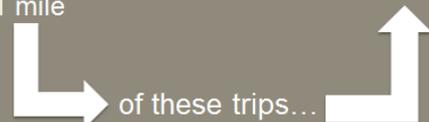
Of all trips:

39% **17%** **47%**

are less than 3 miles

are less than 1 mile

are driven



National Household Travel Survey 2009

Benefits of Complete Streets

- Active living
 - Walkable and bikeable communities
 - Safe and accessible meeting places



Benefits of Complete Streets

- Aging in Place
 - ADA Compliant street design
 - Mobility options
 - Wider sidewalks and shorter crossing distances
 - Accessible transit stops

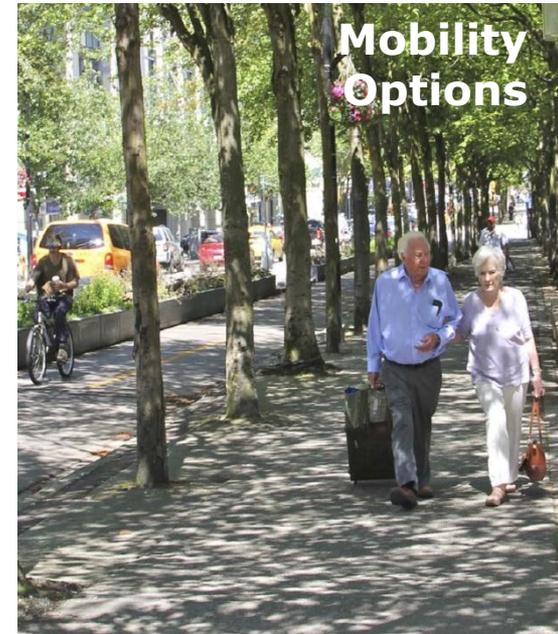
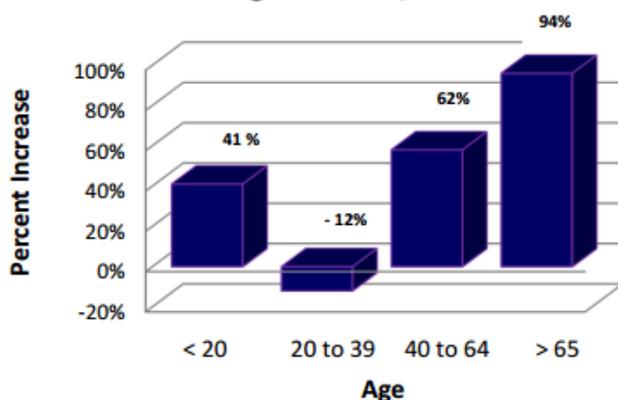


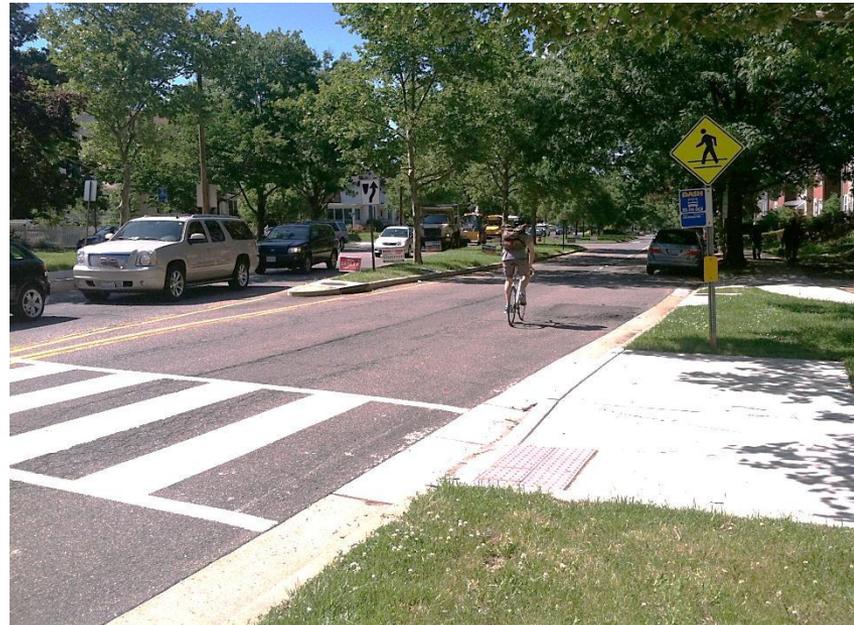
Photo courtesy of Green Building Educational Services

Population Projections by Age
Percentage Increase, 2010 - 2030



City of Alexandria Complete Streets Policy

- Complete Streets Policy adopted by City Council in 2011
- “The City shall incorporate, to the extent possible, Complete Streets infrastructure sufficient to **enable reasonably safe travel along and across the right-of-way for each category of users**”
- “The City shall incorporate Complete Streets infrastructure into existing public streets to **improve the safety and convenience of users and construct and enhance the transportation network for all users**”

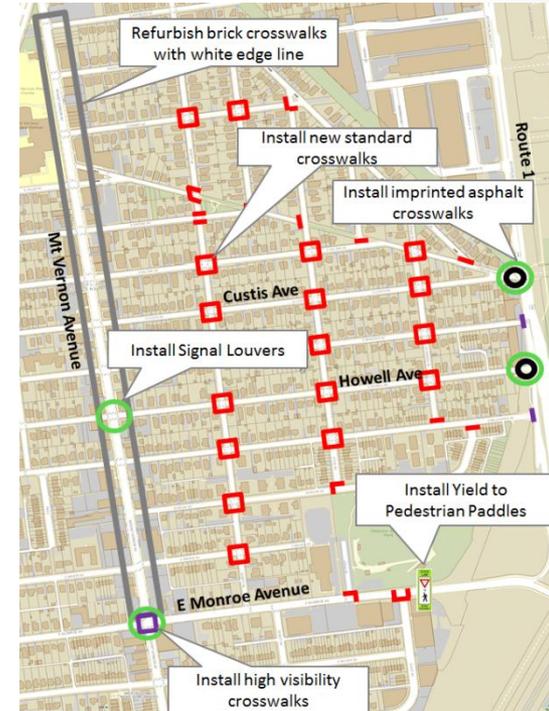


Complete Streets - Pedestrian

- Pedestrian safety upgrades
 - Upgraded and new crosswalks
 - New sidewalks & curb ramps
 - Leading pedestrian intervals
 - Rapid flashing beacons
 - HAWK signals
 - Signage



Del Ray Neighborhood Improvements



Rapid flash beacons



HAWK signal

Complete Streets - Bicycle

- Bicycle facilities
 - Bicycle parking
 - On-street bike facilities
 - Bicycle signage



Bike Parking



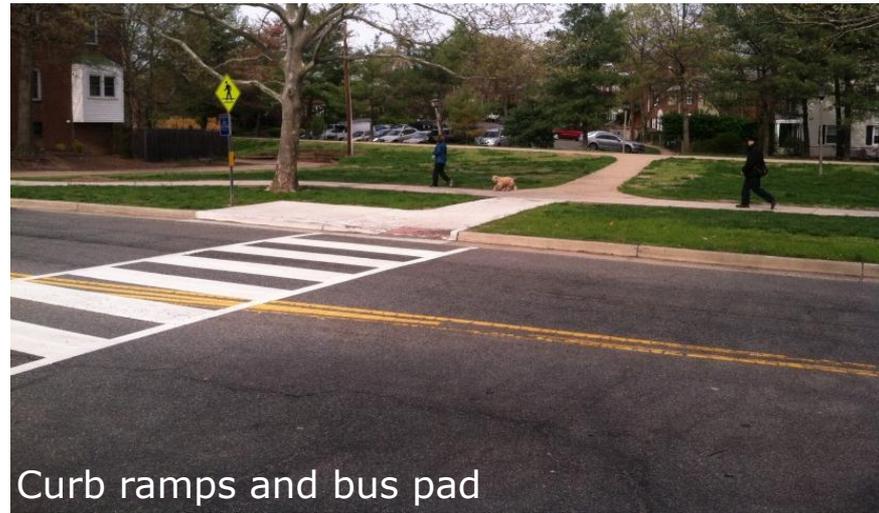
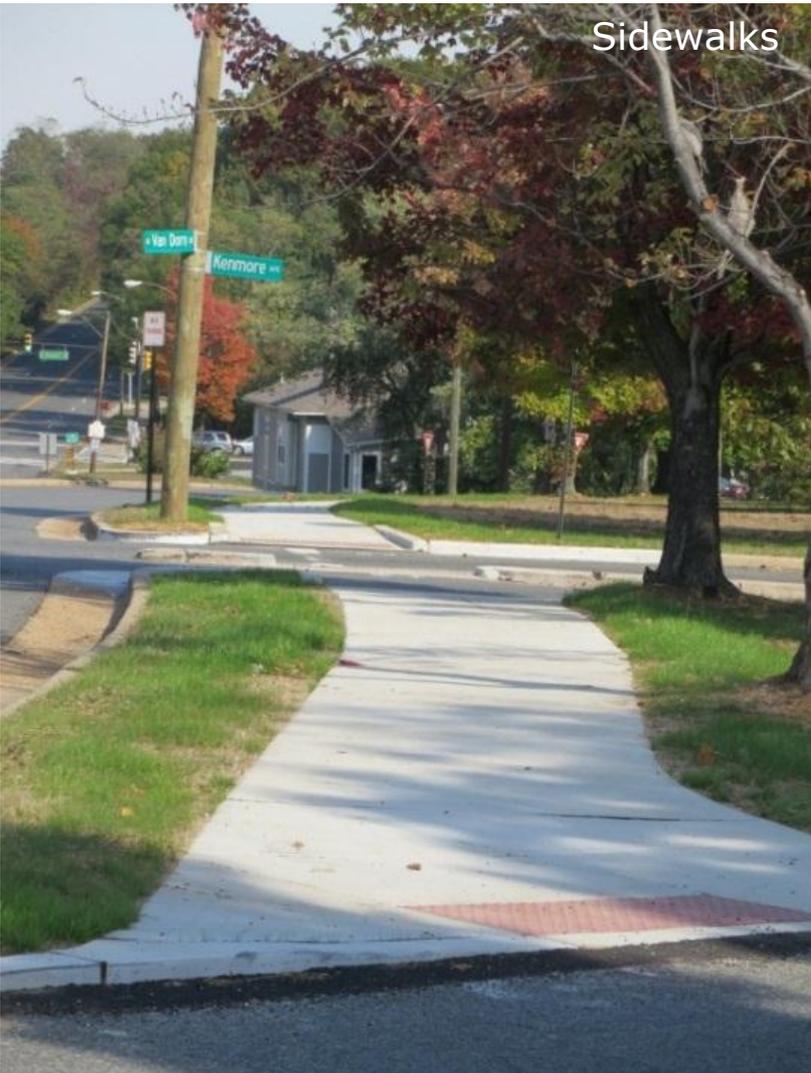
Bike Box



Bike Lanes

Complete Streets – Access to Parks

Sidewalks



Curb ramps and bus pad



High visibility crosswalk

Complete Streets – Access to Transit



Crosswalk and accessible bus stop



Bus shelters and bus bulb-out



Bike parking at bus stop



Bus pad and crosswalk

Complete Streets – Safe Routes to School



Pedestrian countdown signals



Flashing speed limit signs



Pedestrian signage



New and upgraded crosswalks



Safer intersections

Complete Streets Accomplishments 2013

- Achieved Silver level designation as a Bicycle Friendly Community
- Conducted Complete Streets training for city staff
- Awarded \$400,000 New Freedom Grant for pedestrian improvements at transit stops
- Developed a Complete Streets checklist to ensure Complete Streets compliance for all new development
- Updated Bicycle Parking Guidelines for new development
- Updated brick sidewalk policy to make more accessible sidewalks



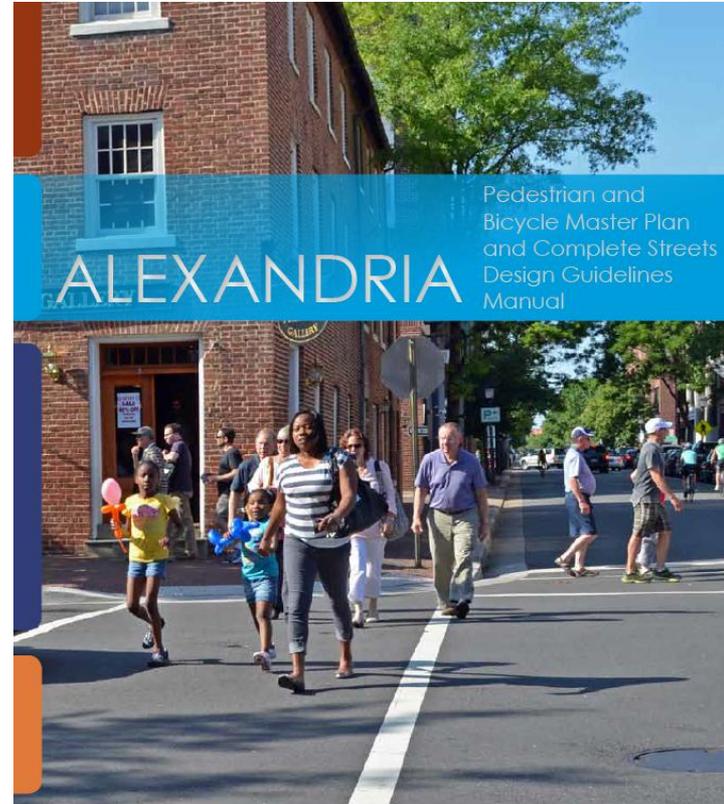


Complete Streets Accomplishments 2013

Project	Total Quantity	Completed	Designed
Redesigned streets through resurfacing projects	8 lane miles	✓	
New sidewalk	7,550 feet	1,300	6,250
New and upgraded crosswalks	140 crosswalks	✓	
New pedestrian countdown signals	6 intersections	✓	
Signal modifications for conflict free crossings	1 intersection	✓	
Access to transit pedestrian improvements	5 bus stops	✓	
Rapid flashing beacons for uncontrolled crossings	3 crossings		✓
HAWK Signal for safer pedestrian crossing	1 crossing		✓
15MPH Flashing School Zone signs	6 schools	1	5
Intersection redesign for pedestrian safety	3 locations		3
On street bicycle facility design	20 lane miles	12	8
Bicycle Box	1 intersection	✓	
New bicycle parking spaces	100 spaces	✓	

Upcoming Initiatives

- Bicycle and Pedestrian Master Plan Update
- Development of Complete Streets Guidelines



Boston's Complete Streets

Bus Lines and Transit Prioritization at intersections improve the reliability of routes with high passenger volumes. Shields with cameras and real bus information improve convenience for passengers.

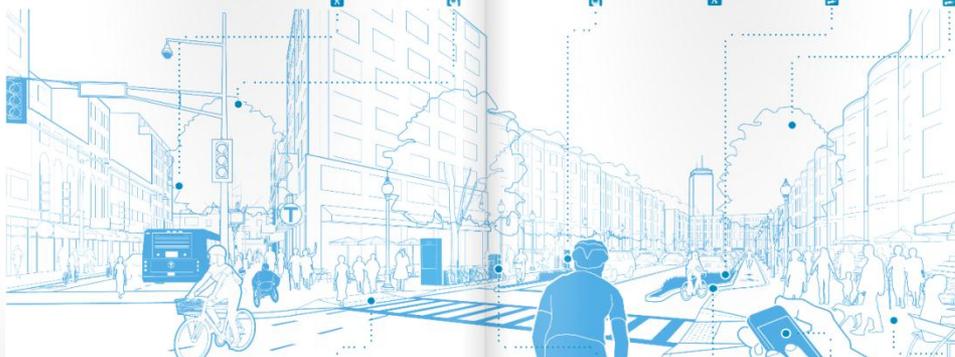
Intelligent Signals and Traffic Cameras manage traffic flow in real-time. They facilitate vehicle progression and reduce wait times, improving fuel efficiency and reducing GHG emissions.

Bicycle and Car Share Stations provide the convenience of personal transportation, low costs, and energy savings without the need for car ownership.

Minimum Lane Widths assist in the accommodation of pedestrians and bicycles when the available public right-of-way is limited in width. Narrower roadways also result in safer vehicle speeds.

Rain Gardens and other green-space elements at key locations divert stormwater directly to the soil. Sustainable rain gardens can filter pollutants, improve air quality, and provide greenery on the street.

Street Trees with sufficient rooting volume to thrive provide shade and beauty, support wildlife habitat and reduce air pollution, and energy consumption.



Electric Vehicle Charging Stations support the adoption of a new generation of clean-fuel vehicles. Linked to smart electric grids that use alternative energy sources such as solar and wind, they will help reduce dependence on fossil fuels and combat climate change.

Ease of Maintenance informs the design of roadways and sidewalks, favoring durable materials and maintenance agreements for special features to enhance the life and upkeep of Boston's streets.

Accessible Surfaces with smooth, slip-resistant materials for sidewalks and crosswalks create comfortable walking environments that make streets welcoming for people of all ages and abilities.

Permeable Surfaces for roadways and sidewalks help reduce flooding and erosion and preserve capacity in storm drains and combined sewers.

Smart Meters not accept prepaid cards, payed by mobile phones, and allow for dynamic pricing facilitate more efficient use of limited outside space.

Bicycle Lanes and Cycle Tracks create a citywide network that increases safety and encourages more people to bicycle.

Digital Tags and Information Panels integrated with street furniture and building facades enable wayfinding, community bulletin boards, site planning, and place-based social networking.

Wide Sidewalks with unobstructed accessible pathways encourage walking. When combined with proper lighting, street trees, and vibrant street walls they are inviting, safer, and contribute to placemaking.



For More Information

- Visit: <http://alexandriava.gov/49868>
- City of Alexandria Call.Click.Connect
"Complete Streets"
- Hillary.Poole@AlexandriaVA.gov
703-746-4017