6 CURBSIDES

A bike corral and bike repair station at Custis Avenue and Mount Vernon Avenue

Alexandria's curbsides are a valuable commodity and are very much in demand. Many modes of access – pedestrians, parking, transit, bicycles, commercial and private vehicles– compete for curbside access to shops, restaurants, housing, offices and community facilities. As the City of Alexandria pursues its Transportation Demand Management program, it is encouraging the use of environmentally-friendly electric vehicles, bicycle and car-share systems and is accommodating the parking needs of these vehicles on its streets. Smart and efficient management of the curbside and the use of web-based, on-the-go information technology can help the city accommodate the diverse demands.

» ***T&ES regulates curbside uses along city-owned streets, while the Parking Enforcement Unit of the Alexandria Police Department enforces parking laws.***

Multimodal Parking

One of the most common uses of the curbside is for parking. Traditionally, curbside parking was understood to mean parking for private motor vehicles, but increasingly municipalities like Alexandria are locating parking for all types of vehicles at the curb including bike share, private bicycles, motor scooters and car share vehicles. This is not only more efficient but also frees up valuable sidewalk space and makes intermodal travel more convenient and efficient.

PARKING METERS

Parking meter in Old Town Alexandria

OVERVIEW

Parking meters permit payment for the use of curbside space. Traditional mechanical meters govern only a single space and accept only coin media as payment. Fortunately, parking meter technology has modernized in recent years. Alexandria, like many jurisdictions, is expanding the use of “smart meters.” These are single space or multi-space meters that are capable of accepting a range of payment types. More advanced meters can communicate payment and occupancy status to a control center, enabling real time information sharing and management. Multi-space meters use a single payment kiosk to manage payment for a number of spaces on that block or in the areas. The City of Alexandria has been working to install multi-space parking meters throughout the city.

Through its investment in multi-space meters, the City has significantly improved meter operability throughout the city’s metered parking zones. In addition, it has leveraged additional technology such as pay-by-phone services that were rolled out in January 2014.

PARKING METERS

USE

- Metered parking is generally implemented in commercial or mixed use districts where there is significant competition for curbside space.
- Multi-space meters typically govern roughly 10 parking spaces per kiosk. Multi-space meters in Alexandria are “pay and display” meters (as opposed to pay by space). Patrons must pay at the kiosk and return to their car to insert the proof of payment. For this reason, multi-space meters should be conveniently located to access all the spots they are intended to govern.
- Smart single-space meters govern only a single space and are mounted with no more than two meters per post. Single space meters are placed immediately to the front or rear of the spot they are to serve.
- All parking meters must be accessible to persons with disabilities. Street designers should provide a smooth level pathway of at least 36” in width to access the meter. Meters should be installed with payment slot roughly 40” high (from the surface of the sidewalk) and viewer at roughly 42”. At present, persons with disabilities whose vehicle displays a valid designation may park for free for up to 4 hours at any single or multi-space meter in Alexandria.
- Smart meters should be configured to allow payment through credit cards or mobile devices. They should transmit information wirelessly to Transportation and Environmental Services to facilitate real-time monitoring and maintenance.
- All meters should be located in the Amenity Zone at a minimum of 18” from the curb; meters may not be placed in the pedestrian zone. A clear path should provide access to and from parked cars to the pedestrian zone.

CONSIDERATIONS

- Parking meters are generally unnecessary and potentially inappropriate in areas where parking demand is low. Metering should only be in effect during hours of demand where curbside occupancy routinely exceeds 80%.
- If possible, meter rates should be adjusted appropriate to both time of day and location to respond to varying levels of demand.
- By providing many payment modes, smart meters make it easier for drivers to avoid parking tickets. At the same time, parking revenues are maintained due to the more efficient utilization of parking spaces by customers.
- Smart meters should be solar-powered. Such meters should be located to ensure reliable operation.
- Signage should indicate the location of multi-space meters, days, and hours of parking meter operation and any limitations on parking duration.
- Loading zones or other reserved curbside uses may be converted to metered parking spaces when they are not needed.

ACCESSIBLE PARKING

Accessible parking

OVERVIEW

The City of Alexandria proactively facilitates full and equal participation in all aspects of life by persons with disabilities on city streets, including the provision of accessible parking. At present, parking for persons with disabilities (who display a valid designated license plate or hangtag) is free for up to 4 hours at single and multi-space meters in Alexandria. Persons with disabilities may park for up to twice the restricted time posted on signs in time restricted parking zones. Additionally, designated accessible parking spaces are located throughout the city. These spaces are designated by request and identified by specifically installed signs and markings.

» ***Accessible spaces are installed by request through T&ES and included in the City Code Section 5-8-117.***

ACCESSIBLE PARKING

DESIGN

- Accessible parking space surfaces must be smooth, stable, and slip resistant and not exceed a 2% slope in any direction. Accessible curbside spaces require accessible curb ramps at the head or foot of the space.
- Accessible parking should be located as close as possible to an accessible entrance.
- Accessible parking spaces should be marked by signs using the international symbol for accessibility.
- Signs should be located at the head of each parking space or no more than 10' away.
- Alexandria exempts vehicles with a valid disabled placard or plate from all public meter fees for up to four hours.
- In addition, individuals with a valid disabled placard or plate may park for twice the restricted time posted on signs in time restricted parking zones.

CONSIDERATIONS

- Accessible parking spaces are distributed throughout the city and provided adjacent to public facilities such as community health centers, senior housing, libraries and transit stations.
- Alexandria residents may apply for disabled parking on the street in front of their home. Businesses may request disabled parking on commercial streets as well.
- The City of Alexandria encourages people to report suspected misuse of disabled placards, plates, or accessible parking spaces.

LINKS

City Code Section 5-8-117

http://alexandriava.gov/uploadedFiles/tes/info/DisabilityParkingRequest.pdf

SCOOTER AND MOTORCYCLE PARKING

Jasha_Flickr

OVERVIEW

As in many U.S. cities, the use of motorcycles and scooters has increased in Alexandria. The issue of motorcycle and scooter parking: however, it has not been adequately addressed as popularity has grown. Typically, motorcycles have been permitted to park using a full curbside parking space, whereas scooters have parked on sidewalks where they often impede the pedestrian zone.

DESIGN

- The average 20' long parking space should be divided into four 5' spaces to create stalls for scooters and motorcycles. Users prefer spaces grouped at the end of a block or close to corners rather than in between two cars.
- Stalls can also be installed in pairs.
- Preferred locations include parking spaces that allow cars to maneuver easily without damaging motorcycles or scooters parked perpendicular to the curb, next to crosswalks, and curb extensions, or adjacent to the unoccupied, usable space in front of a fire hydrant. Hydrants require 10' of clearance.
- An appropriate number of spaces should be provided based on neighborhood demand. On average, two to four stalls should be provided for every 50 to 75 regular parking spaces.

CONSIDERATIONS

- Scooters parked on sidewalks also take up space that could be used for bicycle racks.
- Unless restrictions are enforced, people using motorcycles or scooters are likely to park on sidewalks or plazas where sufficient space exists because it is free. Additionally, pay and display multi-space meters are an issue for these types of vehicles since the receipt cannot be displayed securely and may be stolen.
- Consideration should be given to install hitches or rings installed in the asphalt or curb edge to make it easier to lock scooters and motorcycles.

ON-STREET BICYCLE PARKING

Bike corral in Old Town Alexandria

OVERVIEW

Convenient, secure, and ample bicycle parking is a necessity for encouraging bicycling in Alexandria. Bicycle parking is typically found on sidewalks; however, in some areas, sidewalk space may be insufficient to support the high demand of bicycle parking in popular destinations.

On-street bicycle parking is an efficient way to use valuable curbside real estate. When multiple bicycle racks are clustered together in a contained area, it is referred to as a bicycle corral. 10-14 bicycles may be parked in the space of a single on-street vehicle parking space, thus allowing more patrons to park immediately in front of businesses and residences.

Bicycle parking is installed through T&ES, mainly at the request of residents and businesses. In 2013, T&ES installed the city's first four bicycle parking corrals providing fifty new bicycle parking spaces.

DESIGN

- Bicycle corrals and on-street bicycle parking are generally created by clustering typical bicycle hoops or racks in a compact space.
- Bicycle racks should be permanently affixed to a paved surface. Movable bicycle racks are only appropriate for temporary use.
- City code requires the provision of adequate bicycle parking as part of development projects. On-street bicycle parking may help achieve this requirement and improve bike-friendliness.
- All bicycle racks must follow T&ES standards and maintenance agreements. For specific details about bicycle racks, dimensions, and required setbacks and clearances see **Chapter 3: Bicycle Racks**.

CONSIDERATIONS

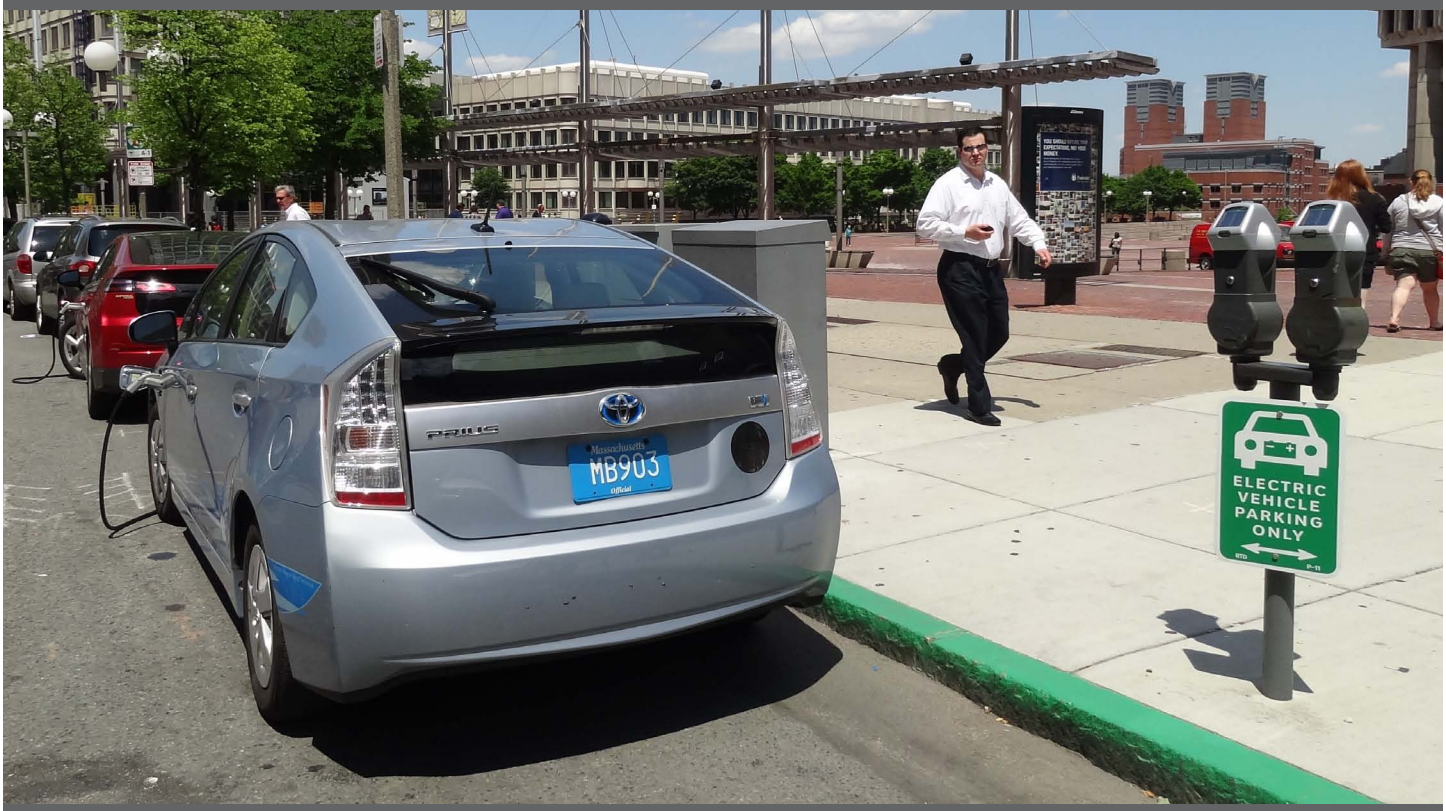
- On-street bicycle racks can be at the same grade as the sidewalk, as a parklet style bicycle corral, or at the same grade as the street.
- On-street bicycle racks should be considered where there is high demand for bicycle parking and there is not enough width on the sidewalk to satisfy that demand. Bicycles locked to street trees, parking meters, fences and other street furniture are an indicator of parking need.

LINKS

Alexandria Bicycle Parking Requirements:

http://alexandriava.gov/uploadedFiles/localmotion/info/gettingaround/Alexandria%20Bicycle%20Parking%20Requirements.pdf

ELECTRIC VEHICLE CHARGING STATIONS



Electric vehicle charging station

OVERVIEW

All-electric and plug-in hybrid electric and other low emissions vehicles (EVs) are smart, clean, and more sustainable modes of transportation that are becoming increasingly prevalent. Encouraging the use of EVs is a key component of the City of Alexandria's Energy and Climate Change goal in the Environmental Action Plan goal to reduce GHGs by 20% of 2005 levels by 2020.

DESIGN

- All curbside electric vehicle charging stations ("charging stations") should be Society of Automotive Engineers (SAE) Standard J1772 alternating current (AC) Level 1 or Level 2 charging stations. Preference is given to Level 2 charging stations, which may provide a full charge in a shorter period of time. Charging stations should provide a SAE J1772-2009 connector as the standard method for fueling connection.
- Charging stations utilizing future AC and direct current (DC) charging levels may also be given consideration at such a time as SAE J1772 recognizes their standardization and zoning requirements permits. Such future charging levels will have the ability to charge depleted batteries at a much faster rate than currently available.
- Charging stations should be placed near utility feeder lines, clear from traffic, and away from flood zones.
- To the extent feasible, charging stations should directly incorporate renewable electricity sources (e.g. solar and wind) and be incorporated in "smart" electricity grids.
- Charging stations should be installed in the Amenity Zone directly on the sidewalk (similar to a bollard) or pole-mounted meter. They should be placed at a minimum of 18" from the curb and located at the center of each parking space to maximize access for different positioning of EV charging ports.

ELECTRIC VEHICLE CHARGING STATIONS

- Station should be protected from vehicles mounting the curb.
- Charging stations should be networked and equipped with “smart” features that allow users to track the location of their vehicle, real-time charging updates and the ability to reserve charging stations online, using a smart phones or via a mobile device.
- Payment should adhere to the National Institutes of Standards and Technologies’ Handbook 130 and be possible through a variety of means including transit fare cards, cell phone or mobile devices, or contactless media.
- Signs should designate EV-only parking, instructions for use, and time limits for charging. Signs should be positioned to meet all accessibility requirements and should note that non-EV vehicles utilizing the spot may be charged an additional fine.
- On-street EV charging stations should have a cord management system to ensure functionality in inclement weather and prevent any tripping or cord wrap issues.

CONSIDERATIONS

- Periodic testing of EV hardware and software should be conducted and parts should be replaced as necessary. Stations should be connected to an online network in order to allow for software maintenance and user inquiries to be conducted remotely by an operator.
- To the largest extent feasible, charging stations should directly incorporate renewable electricity sources (i.e. solar, wind, etc.) to supply electricity or be incorporated in a “smart” electricity grid that includes renewable electricity sources in some or all of its electricity generation supply. Charging units should incorporate renewable and sustainable energy sources, such as solar or wind power, to the largest extent feasible.
- Charging stations that provide ports for multiple vehicles may require additional or enhanced electrical service in coordination with the utility company.
- New technology should be considered to allow for wireless charging of EVs, such as through inductive capabilities using an electromagnetic field to transfer energy between the car and a charging pad.
- Programs to install charging stations on residential streets should be coordinated with neighborhood groups so that location, accessibility, and charging time requirements are geared toward local needs.

LINKS

NIST Handbook 130

Uniform Laws and Regulations in the Areas of Legal Metrology and Engine Fuel Quality Part IV. Uniform Regulations, Subpart B. Uniform Regulation for the Method of Sale of Commodities, Section 2. Non-food Products (2014 or most current)

PARKLETS

OVERVIEW

A parklet is the conversion of one or more on-street parking spaces into a temporary or permanent extension of the sidewalk. Parklet features can include benches, tables, chairs, plantings, or bicycle parking. When public art is included as an amenity, it should reflect the character of the location.

These retrofitted pedestrian spaces are required to be open to the public but are typically maintained by adjacent businesses. The reclaimed space can be used seasonally and converted back into parking or used for snow storage in the winter.

PARKLETS

DESIGN

- Parklet platforms should be safe, practical, and flush with the adjoining sidewalk. They must also be accessible and meet all ADA requirements.
- Parklets cannot occupy space beyond the dimensions of the existing parking space(s). Parklet designs should not extend beyond the width of the adjacent parking lane, which is a minimum of 8'. Also, designs must provide a 4' wide buffer on either end of the parklet from the adjacent parked cars; buffers may include planters, wheel-stops, barricades or temporary bollards.
- Parklets should not be located in front of fire hydrants, over manholes or over utility access points.
- Parklets are not appropriate for every street and will be approved on a case-by-case basis.
- Parklet platform installation should be sponsored by and coordinated with neighborhood groups and adjacent businesses. The selected applicant is typically responsible for deconstructing and storing materials in the off-season.

CONSIDERATIONS

- Parklets should be located where the street has minimal slopes, platforms are not obstructing curbside drainage, and access to below ground utilities is maintained.
- Parklets should be considered in areas with moderate to high pedestrian traffic and where existing sidewalk widths do not provide space for amenities such as seating, bicycle parking, or sidewalk cafés. Suggested locations include retail districts and restaurants with takeout food service. Parklets are well-suited on Main Streets and Avenue street types.
- Maintenance agreements with area businesses and community groups are key to the long-term viability of parklets.
- When sidewalk cafés are considered for parklets, designs must adhere to the guidelines found in Chapter 2: Sidewalk Outdoor Dining. Note that serving food and alcohol is not permitted across public sidewalks; however, seating and tables are encouraged in parklets to allow patrons to enjoy take-out service.

Alexandria's Mobile Art Lab uses several curbside parking spaces.

POP-UP USES AND MOBILE VENDING

OVERVIEW

Food trucks, mobile vending and sidewalk vending can generate private economic activity while concurrently animating the street environment. Such uses are generally temporary and episodic in nature. Properly located, mobile and pop-up vending uses can create positive, dynamic and creative energy adding to an overall sense of place and liveliness in Alexandria. Careful management is required to ensure that such uses are properly located, effectively governed and enforced, and managed in such a way so as to not adversely affect bricks and mortar businesses or the safe and efficient operation of the street.

» ***Beyond food trucks, other pop-up type uses include newspaper vendors and Alexandria's mobile pop-up art truck. All vendors must obtain a permit from T&ES. Vendors with proper permits can sell food, print material, or goods and clothing.***

» ***Food trucks must adhere to City Code Section 9-15-15.***

LINKS

Food Truck Pilot Program
http://www.alexandriava.gov/FoodTrucks

USE

- In Alexandria, a "Mobile Food Truck" is a mobile food establishment as defined in section 11-2-4 of City Code, but limited to food establishments located in a motor vehicle licensed to operate by a department of motor vehicles.
- Pop-up uses and mobile vending is most welcome on Commercial Connectors, Main Streets, Mixed Use Boulevards, and Shared Streets but may occur virtually anywhere with the exception of Parkways and Residential street types.
- Mobile vendors should not hinder the operation of multimodal networks or adversely affect safety. Mobile vending may not block any vehicular, bicycle, or pedestrian travelways including: ramps, crosswalks, transit zones, and sightlines necessary for safe operation and use of these facilities.
- Mobile vending and pop-up uses generally make use of public waste receptacles. Adequate waste disposal is necessary to minimize litter or other negative effects.
- Consider public seating to serve patrons of mobile vending or pop-up uses.

The City of Alexandria is committed to compliance with the Americans with Disabilities Act, as amended. To request a reasonable accommodation or an alternative format, e-mail geralyn.taylor@alexandriava.gov or call 703.746.4084, Virginia Relay 711.