DRAFT Strategies - Alexandria Pedestrian and Bicycle Master Plan (revised 7/30/15)

NOTE: The strategies relate to issues identified through field work and observations, comments received from the public through in person and online means, comments during Ad Hoc Committee meetings, and input from the PMT, TAC and other stakeholders.

In the final Master Plan Chapters, the Strategies will be linked to the Goals and Objectives using colored icons or similar, to clearly show how the Strategies related to the Plan Vision.
### Pedestrian Engineering Strategies

1. **Apply the Complete Streets Design Guidelines for all new development and future capital improvement projects.**
   - a. Regularly utilize the Design Guidelines for direction regarding sidewalk width and materials, sidewalk buffers, street trees and other green features, wayfinding, street furnishings, methods for activating the pedestrian experience and other topics related to the pedestrian environment.
   - b. Incorporate the Design Guidelines into City policies (i.e. subdivision regulations) and development review process as required by 2011 Complete Streets policy.

2. **Close sidewalk gaps and improve sidewalks where needed.**
   - a. Implement the prioritized new sidewalk recommendations (see Appendix X), and increase the annual capital budget for new sidewalks to allow for construction of these sidewalks. Continue to address narrow sidewalks through redevelopment.
   - b. Use the Complete Street Design Guidelines or other applicable, adopted City plans to determine sidewalk width and design for all new and reconstructed sidewalks.
   - c. Ensure a clear pedestrian zone on sidewalks by inspecting and enforcing right-of-way encroachment. Promote the use of Call.Click.Connect for reporting maintenance issues on City property (e.g. vegetation management, sidewalk upheavals, etc.).
   - d. Develop a citizen petition process for new, citizen-requested sidewalks on neighborhood residential streets.

3. **Prioritize and standardize curb ramp upgrades and other ADA improvements.**
   - a. Provide ADA accessible curb ramps at every intersection and ensure that curb ramps align with crosswalks where feasible, in conjunction with reconstruction of streets, or development opportunities. See the Complete Streets Design Guidelines for more information on curb ramps.
   - b. Provide pedestrian pushbuttons at all actuated signals (signals that do not automatically provide a pedestrian phase). Pedestrian pushbuttons should be easily activated and conveniently located near each end of the crosswalk. Install accessible pedestrian signals (i.e. audible tones, speech messages, detectable arrow indications and/or vibrating surfaces) at all new pedestrian signals, as is the recommended Federal standard (see *Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way*).
   - c. Develop a phased approach for assessing ADA needs throughout the City, starting with areas near schools and transit stops and stations. Request dedicated and sufficient funding to implement the ADA upgrades identified through these studies.
   - d. Maintain a continuous, level and clearly delineated pedestrian path across driveways-prioritizing new sidewalks and areas of higher levels of pedestrian activity. Limit or consolidate the number and width of driveways where possible. See the Complete Streets Design Guidelines for more information on driveway design.
4. Improve safety and access through and across major barriers including freeways, waterways and rail corridors.
   a. In high-speed areas such as those near freeway interchanges, use enhanced design elements to improve:
      i. **Safety:** Provide high-visibility crosswalks, pedestrian-activated signals and ample crossing time for pedestrians at intersections. Crossing islands should be considered where the crossing distance is greater than 50’. Design features to slow vehicles should also be used, including narrower travel lanes and speed feedback signs. Preferred crossing locations should be highly apparent to pedestrians so that they are encouraged to use the safest locations.
      ii. **Comfort:** Wider sidewalks and buffers should be used.
      iii. **Pedestrian visibility:** Areas with poor visibility for pedestrians should be evaluated for possible street reconfiguration including narrowing turning radii, installing bulb outs, reorienting intersection geometry, strategic parking removal or other design changes.
   Partner with VDOT as needed for improvements in these areas. See Complete Streets Design Guidelines for more information about these strategies.
   b. Identify locations that need enhanced pedestrian connections over rail tracks, freeways, waterways and other barriers to connect key destinations/attractors (i.e. near existing and future Metrorail stations, mixed-use development sites or commercial districts).
   Encourage at-grade crossings whenever possible to support pedestrian activity at the street level. Partner with CSX, WMATA or others to ensure that connections are created. Ensure adequate lighting and ADA access on bridges and tunnels.
   c. Provide wayfinding to guide pedestrians to crossings of major barriers.

5. Improve crossing conditions, especially in areas with high pedestrian demand, for all new development and future capital improvement projects.
   a. Evaluate current signal timing practices and revise, as needed, to minimize pedestrian crossing delay while maintaining vehicle throughput.
   b. Prioritize select angled intersections with high crash rates and long crossing distances to reduce pedestrian exposure and increase visibility for and of pedestrians.
   c. Prioritize the installation of new/improved pedestrian-scale street lights in areas near schools, transit stops/stations, parks, senior centers and commercial districts. See Complete Streets Design Guidelines for more information about street lighting design, use and placement.
   d. Discourage slip ramps as part of new roadway or development projects. As opportunities arise through roadway improvements or development, improve or eliminate existing slip ramps.

6. Prioritize ongoing maintenance and repair of the pedestrian network.
   a. Improve snow removal and maintenance practices on streets and trails, prioritizing popular commuter trails. Work with the National Park Service to formalize a partnership related to maintenance and snow removal on the Mount Vernon Trail.
   b. Promote Call-Click-Connect as a means for residents to report maintenance and safety concerns. Address reported issues as part of routine staff activities, prioritizing areas near schools, transit stops/stations, parks and senior centers.
7. **Improve access and safety for all users on trails; particularly at entrance/exit points.**  
   a. Remove unnecessary bollards, signs or obstructions that create choke-points at trailheads.  
   b. Widen trail access points and segments that experience higher volumes of pedestrian and bicycle traffic. Use pavement markings in these areas to delineate separate spaces for each user group.  
   c. Use signage, pavement markings and surface treatments to create simple and obvious paths of travel for bicyclists entering and exiting trails.  
   d. Provide wayfinding at access points and key interior trail junctions/intersections to aid navigation.

8. **Reduce conflicts between bikes and pedestrians on sidewalks.**  
   a. Provide on-street bicycle facilities on roadways or parallel roadways where feasible and there are notable conflicts between bicycles and pedestrians.  
   b. In areas where there are nearby alternative routes for bicyclists, use engineering strategies such as raised intersections and speed tables to discourage bicyclists from traveling too fast on streets with high pedestrian volumes and/or frequent conflicts between bicycles and pedestrians.

9. **Improve walkability, connectivity and ADA access to transit.**  
   a. Prioritize pedestrian improvements such as new/widened sidewalks, curb ramp upgrades and high visibility crosswalks near transit stops/stations.  
   b. Encourage transit providers to locate transit stops close to signalized intersections. See Complete Streets Design Guidelines for more information about bus stop design, bus shelters and related features.

10. **Improve walkability, connectivity and ADA access near schools and parks.**  
    a. Prioritize pedestrian improvements such as new/widened sidewalks, curb ramp upgrades, sidewalk buffers and high-visibility crosswalks near these key destinations. Also employ traffic calming measures, based on assessments of need, in these areas.  
    b. Partner with ACPS and APD to conduct school zone audits. Dedicate adequate staffing and funding to complete school audits and implement identified improvements.  
    c. Partner with the Department of Recreation, Parks and Cultural Activities to evaluate access to parks.
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<tr>
<th>Pedestrian Program and Policy Strategies</th>
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<tbody>
<tr>
<td>1. Pursue funding to oversee education and outreach for pedestrian/multimodal transportation safety initiatives citywide.</td>
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<td>2. Regularly conduct construction inspections to ensure safe, convenient and accessible pedestrian accommodations are provided during all phases of construction.</td>
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<td>3. Develop an annual report card with information on the performance targets identified in this Plan, as well as those identified by the Office of Performance Accountability related to bicycling and walking.</td>
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<td>a. Make the report card available on the City website and promote through listserves, social media and local organizations.</td>
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<td>4. Explore a pilot Open Streets Event to encourage active transportation and lifestyles.</td>
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<td>a. Use the event to increase education about Complete Streets, health benefits, transportation options and programs in Alexandria, and innovative facility types.</td>
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<td>5. Evaluate the use of the employee alternative transportation benefits program, and expand promotion efforts related to the program.</td>
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<td>6. Pursue funding for high priority pedestrian projects.</td>
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<td>7. Partner with the Alexandria Health Department and ACPS to identify funding and prioritize programs related to active transportation and lifestyles.</td>
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<td>8. Continue to provide training for appropriate City staff on national ADA design standards, Complete Streets and other best practices.</td>
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<td>9. Partner with Local Motion and the Alexandria Police Department to build upon the Streets Smarts campaign and other similar efforts that promote bicycle safety, rights and responsibilities, as well as the benefits of active transportation.</td>
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<td>10. Continue to improve pedestrian access within and through large properties such as shopping centers and multifamily housing complexes through partnerships with developers/landowners, small area plans and the development review process.</td>
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<td>11. Conduct an evaluation of traffic fatalities and develop a Vision Zero program that outlines the framework, budget and staffing needed to work towards eliminating pedestrian and bicycle-related deaths in Alexandria.</td>
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<td>12. Strive for Gold designation in the <em>Walk Friendly Community</em> program of the Pedestrian and Bicycle Information Center through implementation of the pedestrian projects and strategies presented in this Plan.</td>
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<tr>
<td>Bicycle Engineering Strategies</td>
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<tr>
<td>1. <strong>Add new bicycle lanes, signed bicycle routes and shared lane markings to expand the on-street bicycle network.</strong></td>
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<td>a. Focus implementation efforts on the priority projects presented in this Plan and on opportunities related to repaving or redevelopment.</td>
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<td>2. <strong>Implement and evaluate separated bike lanes and neighborhood bikeways on City streets where appropriate.</strong></td>
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<td>a. Identify corridors in the 2015 Bicycle Network to serve as priority locations for separated bike lanes and neighborhood bikeway projects. Conduct public outreach, evaluate right-of-way, parking impacts and other design considerations as needed. Evaluate these new separated bike lanes and neighborhood bikeway projects in order to optimize the design, operations, maintenance, safety and usage. Use findings from the evaluation to expand and refine the Complete Streets Design Guidelines related to separated bike lanes and neighborhood greenways in Alexandria, and to inform the design of future projects. Share lessons learned with national partners to contribute to the emerging state of practice related to low-stress bicycle facility design.</td>
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| 3. **Improve access and safety for all users on trails, particularly at entrance/exit points.**
|   a. Remove unnecessary bollards, signs or obstructions that create choke-points at trailheads. |
|   b. Widen trail access points and segments that experience higher volumes of pedestrian and bicycle traffic. Use pavement markings in these areas to delineate separate spaces for each user group or direction of travel. |
|   c. Use signage, pavement markings and surface treatments to create simple and obvious paths of travel for bicyclists entering and exiting trails. |
|   d. Provide wayfinding at access points and key interior trail junctions/intersections to aid navigation. |
| 4. **Use innovative designs and bicycle-specific treatments at intersections to improve safety and provide a more continuous, low-stress experience for people biking.** |
5. Increase the availability of bicycle parking throughout Alexandria.
   a. Prioritize locations for installing bicycle parking racks in the public right-of-way with an emphasis on commercial areas, parks, libraries, schools, and transit stops/stations.
   b. Continue to install bike parking corraals in on-street parking spaces with the goal of installing new corraals each year.
   c. Ensure that all City-sponsored events have bicycle parking and increase the number of City events that provide bike valet services.
   d. Regularly review the City’s bicycle parking guidelines and revise as needed to reflect increasing bicycling or other changes.

   a. Improve snow removal and maintenance practices on streets and trails, prioritizing popular commuter routes. Work with the National Park Service to formalize a partnership related to maintenance and snow removal on the Mount Vernon Trail.
   b. Promote Call-Click-Connect as a means for residents to report maintenance and safety concerns. Address reported issues as part of routine staff activities, prioritizing areas near schools, transit stops/stations, parks and senior centers.

7. Improve bicycle access to transit.
   a. When building out the citywide bicycle network, prioritize facility improvements that create continuous, low-stress connections to bus, Metroway and rail stations in Alexandria. Continue partnering with WMATA and DASH to implement access improvements near transit facilities.
   b. Incorporate bicycle access and bicycle parking near stations as critical elements of design plans for future transitway corridors and stations.

8. Improve signage and wayfinding for people biking.
   a. Develop a citywide system for installing bicycle wayfinding on signed bike routes, near transit and in activity centers.
   b. Review streets for potential applications of regulatory and advisory signs at intersections and along existing and new bicycle facilities. Possible sign types may include “Bicycles May Use Full Lane,” “Cross Traffic Does Not Stop,” and “Right turning traffic Yield to Bikes.”

9. Continue to expand the citywide Capital Bikeshare system using the phasing strategy presented in this Plan as well as other opportunities that arise related to redevelopment. Seek additional funding opportunities to support maintenance, operations and system expansion.
Bicycle Program and Policy Strategies

2. Regularly conduct construction inspections to ensure safe, convenient and accessible bicycle accommodations are provided during all phases of construction.

3. Conduct post-construction development inspections to ensure that new bicycle facilities, including bike parking, is installed and appropriately designed.

4. Develop an annual report card with information on the performance targets identified in this Plan, as well as those identified by the Office of Performance Accountability related to bicycling and walking.
   a. Make the report card available on the City website and promote through listserves, social media and local organizations.

5. Incorporate key bicycle commuting routes into the existing map that shows the current status of maintenance and snow removal on City streets/facilities.

6. Explore a pilot Open Streets Event to encourage active transportation and lifestyles.
   a. Use the event to increase education about Complete Streets, health benefits, transportation options and programs in Alexandria.

7. Evaluate the use of the employee alternative transportation benefits program, and expand promotion efforts related to the program.

8. Pursue funding for high priority bicycle projects.

9. Conduct a biennial citywide survey to learn more about the non-commute transportation habits of Alexandria residents and employees.

10. Partner with the Alexandria Health Department and Alexandria City Public Schools to identify funding and prioritize programs related to active transportation and lifestyles.

11. Continue to provide staff training on Complete Streets Design Guidelines and other bicycle-related topics as needed.

12. Partner with Local Motion and the Alexandria Police Department to build upon the Streets Smarts campaign and other similar efforts that promote bicycle safety, rights and responsibilities, as well as the benefits of active transportation.

13. Partner with local bicycle groups to support bicycle education, outreach and promotion amongst underrepresented groups including women and non-English speaking communities.

14. Recognize the City’s existing Bicycle Friendly Businesses (from the League of American Bicyclists’ program) on the Local Motion website, in order to promote and support businesses that provide bike parking and take others steps to support bicycling.


16. Strive for Gold designation in the League of American Bicyclists Bicycle Friendly Community program through implementation of the bicycle network and other strategies presented in this Plan.*