

## 5: Complete Streets

### Introduction

With the acceptance and adoption of the *Mayor's Pedestrian, Bicycle and Trails Planning Commission Report* by the Richmond City Council in February 2011, the city took a first step toward accepting and encouraging bicycling and walking as important modes of transportation. The Commission's report goes beyond recommendations directly related to biking and walking and recommends that the city move forward to implement "complete streets". The National Complete Streets Coalition ([www.completestreets.org](http://www.completestreets.org)) gives the following overview of a complete street:

Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists, and public transportation users of all ages and abilities are able to safely move along and across a complete street. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations.

### Complete Streets Overview

Complete Streets principles aim to provide a balanced transportation system for all modes of travel. They should be safe, comfortable, and convenient for anyone to travel by foot, bicycle, transit, and automobile regardless of age or ability. Complete Streets offer a full range of travel choices and connect to a network that is accessible to all people, including children, seniors and people with disabilities. Taking a "Complete Streets" approach to public policy and planning for a community improves the quality of life for those living and working in the city.

#### Benefits of Complete Streets:

- *Economic*
- *Safety*
- *Transportation*
- *Health/Fitness*
- *Air Quality*

According to an America Bikes and Surface Transportation Policy Project poll, 52% of Americans want to bike more than they do now, 55% of Americans would prefer to drive less and walk more, and 54% of older Americans say that they would like to walk or bicycle more often. This, combined with the fact that one third of all Americans do not drive due to age, ability or economic status, reinforces the case of a Complete Streets approach to meeting the mobility needs of a community.

Complete Streets can offer many benefits in all types of communities. These benefits cover a wide range, including:

- **Economic** – Complete Streets can encourage economic growth by providing viable connections between places where people live and where they work, play, and shop.
- **Safety** – Complete Streets reduce crashes for people using all modes of transportation.
- **Transportation** – Complete Streets encourage walking and bicycling, increase travel choices, reduce congestion, and increase the overall capacity of the transportation network.
- **Health/Fitness** – Complete Streets create an environment where people can more easily meet their recommended activity levels. Physical activity and a sense of independence are particularly important for children.
- **Air Quality** – Complete Streets allow people to replace car trips with trips that do not generate carbon dioxide emissions.

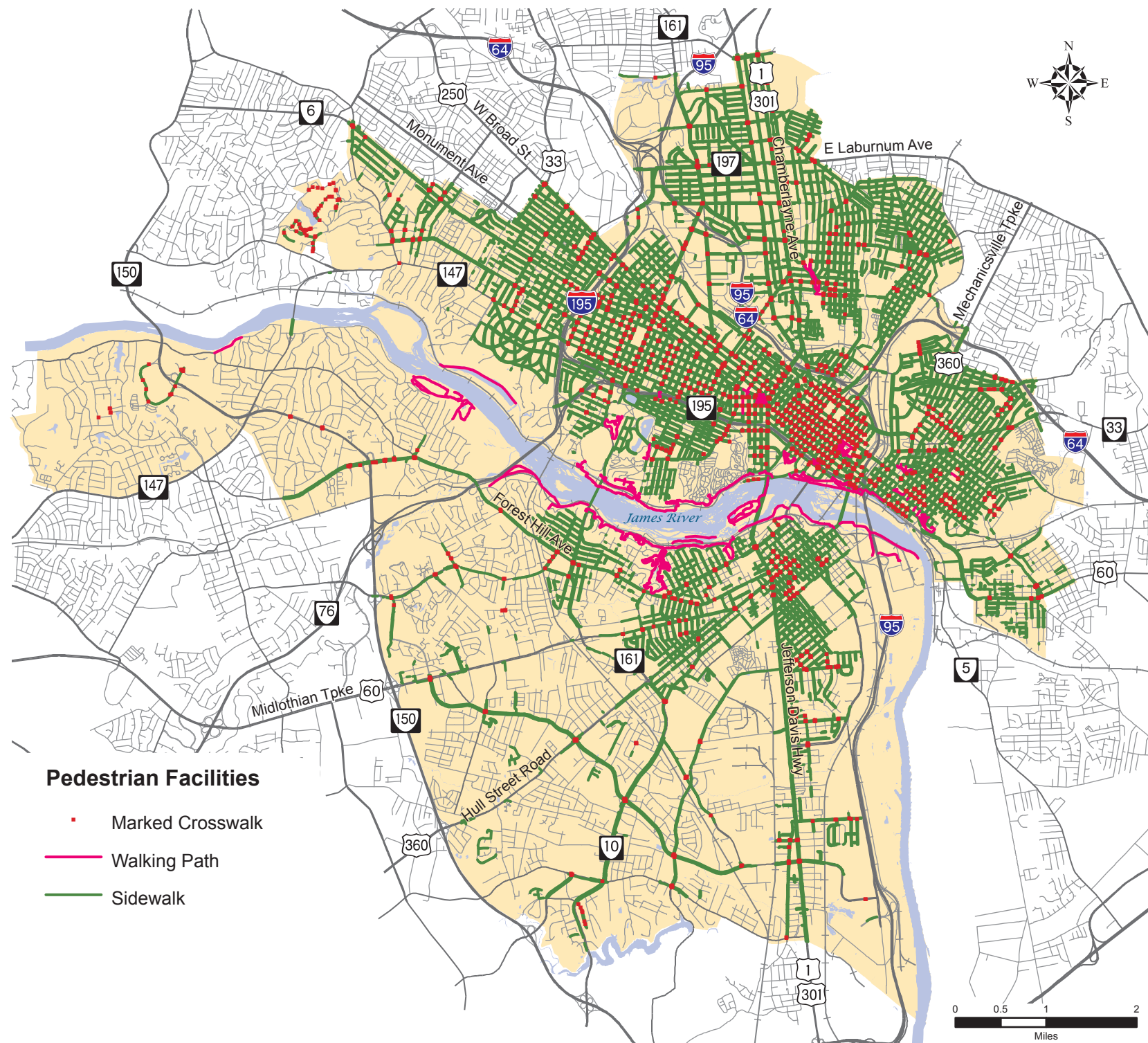


Cary Street at Belmont Avenue, Carytown



Hillsborough Street in Raleigh, Photo Courtesy of Payton Chung

Figure 13: Richmond Pedestrian Facilities



### Existing Pedestrian and Bicycle Conditions

Complete streets or near complete streets already exist in many areas of Richmond. Downtown, the Fan, Carytown and other older parts of the city were developed prior to the dominance of the automobile and include a grid pattern of relatively narrow streets that include sidewalks. As illustrated in Figure 13, older areas of the city north and east of the James River contain streets with existing sidewalks and are the areas of the city with higher levels of walking. Neighborhoods to the west and south of the James River have developed more recently, and have a more suburban development pattern. This pattern lacks sidewalks and street connectivity and poses problems for connecting bicycle and pedestrian networks across jurisdictions. The Richmond Regional Bicycle and Pedestrian Plan includes recommendations to improve connections across the region.

Overall, the city has approximately 760 miles of five-foot equivalent width sidewalk. Many sections of those sidewalks are very old and have been pushed up by tree roots or otherwise succumbed to maintenance problems. Currently, there are about 490 outstanding citizen requests for sidewalk repair or maintenance through the Sidewalk Improvements Program, with an approximate cost of \$15 million. The recently adopted Capital Improvement Plan includes only about \$600,000 to \$750,000 a year to address this backlog, which will repair about two to three miles of sidewalk per year. At that rate, addressing the existing backlog of repair requests would take at least 20 years. Additionally, the city has a New Sidewalk Program to address areas where no sidewalks currently exist. There are 164 citizen requests, totaling approximately \$12 million, for new sidewalk. City staff prioritize the citizen requests based on various technical criteria. The city has not and does not plan to provide funding for the New Sidewalk Program. In previous years, state funding had provided up to \$1.3 million to address this backlog, but those funds are no longer available.



Grace Street at Shafer Street, typical of older, pedestrian-friendly streets.

With regard to bicycle facilities, the city has a system of designated roadways for bicycling but the majority of the streets in this system are designated as shared roadways. As such, they do not have bike lanes, shared lane markings, commonly referred to as sharrows, or even bike route signs. As illustrated in Figure 14, there are only two streets with existing bike lanes in the city and none of the James River bridges have dedicated bicycle facilities (considered to be a crucial aspect of a city's bikeway system). United States Bike Route 1 does cross through the city and the route signing was updated by VDOT staff within the past four years. Additionally, many of the paths along the James River and in Forest Hill Park shown in Figure 13 are used for recreation by off-road cyclists. GRTC does provide bicycle racks on all its buses, with space for two bicycles per bus. Bicycle parking facilities are fairly sporadic around downtown Richmond, but VCU has provided substantial bicycle parking in many areas around its Monroe Park and MCV campuses.

*Richmond has higher than average bike to work rates, but lower than average walk to work rates.*

Bicycle and pedestrian infrastructure is also critical for other forms of alternative transportation such as scooters, segways and other personal mobility systems that fall between full sized motor vehicles and bicycles in their size, speed and range. VCU has recently expanded the availability of scooter parking on both its campuses but additional consideration needs to be given to these modes in the future.

Data regarding the levels of walking and biking in Richmond are not very comprehensive, as is the case in most American cities. According to the 2007-2009 American Community Survey results, 1.5% of Richmond residents biked to work and 3.9% walked. These numbers compare to a national average of 0.5% for biking and 2.9% for walking. Safety data is also available, but the raw numbers do not adequately portray the relative safety of walking and biking. More analysis of the actual location of type of crash will be needed to develop recommendations for countermeasures to reduce crashes. According to the *Mayor's Pedestrian, Bicycle, and Trails Planning Commission Report*, there were 196 bicycle/vehicle crashes and 518 pedestrian/vehicle crashes on Richmond streets between 2004 and 2010. The report identified the high crash rates for pedestrians and bicyclists in the following corridors;

- W. Broad Street
- W. Cary Street
- Midlothian Turnpike
- E. Broad Street
- Grove Avenue
- Hull Street



Complete street with bicycle facilities in Charlotte, NC

Figure 14: Richmond Bike Facilities

