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Bicycle Urbanism

Damian Pitt
Virginia Commonwealth University, dpitt@vcu.edu

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Bicycle Urbanism

Part of the Great VCU Bike Race Book Course

Bicycle Urbanism Faculty Reflection

The intent of the Bicycle Urbanism short course was to involve VCU students in a process of data gathering and reflection to explore the question of “what makes a city bicycle-friendly,” and to identify opportunities for improving bicycle infrastructure in Richmond.

The data gathering process included a mapping exercise, in which students explored designated parts of Richmond to observe bicycling conditions and document them using an online mapping application developed by the ALT Lab at VCU. The students also completed a survey of attendees at the Richmond 2015 UCI Road World Championships. Finally, they prepared individual blog entries to reflect on what they had learned and share their thoughts on the question of “what makes a city bicycle-friendly?”

The survey results provide some interesting perspectives, but should be taken with a grain of salt given that the survey sample is not representative of the overall population. For example, nearly 60% of the respondents were aged 16-25, and nearly 40% identified as VCU students. One notable preliminary result is that, of the 83 respondents who indicated that they live in the City of Richmond, just less than half characterized it as either somewhat or very bike-friendly. Further analysis will break the survey results into categories based on age and/or cycling experience, in order to judge how such distinctions affect respondents’ perceptions of bicycling conditions and bike safety concerns.

At a minimum, the survey process seemed to be informative for the students, as several mentioned the responses they had received during their final blog posts. For example, one student noted that:

About half of the people I surveyed said that they were not comfortable biking on higher volume streets such as Cary, Broad, or Main and the people
who said they were comfortable on the larger and faster roads acknowledged that riding down those streets was less common and more dangerous.

In the mapping exercise, students traveled around Richmond and identified locations that they considered to be either safe or unsafe for bicycling, or to have adequate or inadequate bicycle parking facilities. The mapping results, shown below, demonstrate some interesting patterns.
For example, one can see a large concentration of red dots, indicating unsafe bicycling conditions, in the West End area of Richmond. This upper-income area of the city is very auto-oriented and lacks bicycle infrastructure, with the exception of the Grove Avenue corridor where several green dots can be seen.

In the northeast part of town, a low-to-medium income area with a large African-American population, students found a mix of safe and unsafe bicycling conditions. Most notable in that area, however, was the large number of locations with inadequate bicycle parking. One student discussed the lack of bicycle parking on the north side, particularly at public recreation facilities, in her final blog entry:

I believe the lack of bicycle infrastructure and bicycle parking at the city parks and recreation centers give the message to the children who frequent those types of areas that bicycles are not an effective form of transportation. It indirectly discourages the children from learning the skill of bicycling and prevents the effective building of a bike culture in the city.

Conversely, students found ample bike parking in some locations of the city, particularly in Carytown, a dense, pedestrian-heavy strip of businesses and residents along W. Cary St., just east of I-195. Students also identified this area as having safe bicycle conditions, which is interesting given its lack of bike lanes or other bicycle infrastructure. Upon closer inspection, the student discussed the lack of bike parking at those locations, having seemingly selected the wrong option on the initial mapping entry page. Such instances demonstrate some of the limitations of this type of data collection, and the potential for technical glitches or user error to compromise the results.

Another particularly interesting set of mapping results is found on the south side of Richmond, which is littered with red dots indicating unsafe bicycling conditions. The students were particularly critical of bicycle conditions on and around the bridges linking the south side to the rest of the city. The city has made some recent improvements to bicycle infrastructure around the Lee Bridge (Belvidere Street), but substantial issues remain with the other bridges.

Overall, 46 of the 135 mapping entries indicated unsafe bicycling conditions. Of these, the most common concerns were “roadway width issues” (33%), “high speed or volume of traffic” (30%), and “poor roadway conditions” (20%), with much smaller percentages for “poor visibility” (4%) or “other” concerns (13%).
The students’ blog entries were generally very thoughtful, and they provided valuable insight on how different types of individuals, with varying levels of cycling skill and experience, can have unique perspectives on the concept of bicycle friendliness. For example, one student based her reflection on prior experience growing up in the very bike-friendly community of Arlington County, Virginia:

In Arlington, VA, where I’m from, there are bike paths on every street, the Capital Bikeshare is throughout the county and there are bike racks everywhere, even in parking garages.

Several students seemed to agree that “bike-friendliness” is about more than public bike infrastructure, and requires a broader cultural mindset that is supportive of biking, as captured in these quotes:

Having a bike friendly city must incorporate both a well maintained cycling infrastructure, and also a mentality aligning itself with community, bike safety, and a continual use of cycling as a method of transportation.

And:

This topic was a theme among the surveys conducted at the bike race; a mutual understanding of safety among drivers and bikers help both commuters feel more comfortable on the road. Bike culture not only refers to those on bikes, but also the attitudes towards bikers, especially from those in automobiles.

Similarly, some of the students’ recommendations focused on the need to develop a bike friendly culture within the city:
I believe this disconnect is an opportunity for planners, traffic engineers, bike advocates, local governments, and the general public to collaborate and eventually embrace commuting by bike or by walking as major modes of transportation and part of the urban lifestyle. Bikes are powerful tools, and people need to know they can transform lives for the better.

Others focused more on technical planning issues, providing detailed descriptions of the types of bicycle infrastructure needed in Richmond, such as protected bike lanes. More than one student criticized the city’s over reliance on shared lane markings, or “sharrows,” for its bicycle infrastructure:

I would caution the City of Richmond from utilizing to many sharrows on City streets to increase street bikeways since sharrows are not as safe as dedicated bike paths that are buffered from traffic with a dedicated lane and barrier for protection.

More detail on the students’ thoughts and observations about bicycle urbanism can be found in the individual blog entries linked to below:

- Ridin’ in da city, G.
- Parks and Parking: Bicycle Friendlessness in Urban Environments
- Bike-Friendliness
- Bike Friendly: A Mindset
- My Thoughts of What Would make Richmond a Bicycle Friendly City
- A Better Community: Urban Cooperation & Acceptance
- Bicycle Friendly City, What Does it Look Like?
- Bicycle Friendly City Blog
- A Bike Friendly City
- Blog
- The Base of a Bike Friendly City
- Thoughts on Biking in Major Cities