

Inter Office Communication

Date: July 6, 2006

To: Craig Hebebrand, Project Manager, Cleveland Innerbelt Project

From: Howard Wood, Deputy Director of Planning

Re: Consideration of Bicycle/Pedestrian Facilities on the
Central Viaduct Bridge



Background

During project development for the Cleveland Innerbelt project, the concept of bicycle/pedestrian accommodation on the Central Viaduct Bridge alignment (e.g., regardless of the project being a new or rehabilitated structure) has been raised. The concept of accommodation might include bike/pedestrian lanes on an existing or new structure, or some appendage to an existing or new structure to carry bike/pedestrian lanes. Thus, the general footprint of the Central Viaduct Bridge would serve as a new right-of-way for bike/pedestrian traffic across the river and valley.

Public Input

There are two primary sources of public input which advocate the concept described above. First is a nonprofit organization called EcoCity Cleveland, which on an affiliated website, posed a question for discussion, in web log format, titled "Bike and Pedestrian Lane on Innerbelt Bridge?" This website entry advocated the above concept, and referenced similar concepts on other bridges in the US.

(See <http://www.gcbl.org/transportation/bikes/bike-lane-on-innerbelt-bridge> last accessed on June 29, 2006.)

The City of Cleveland also advocated the concept, in comments on the CIB Strategic Plan, and on a bicycle map of the city, where the Central Viaduct Bridge is designated as a bicycle/pedestrian "neighborhood connector." In comments on the CIB Strategic Plan, the city asserts that "people walk between the Tremont neighborhood and downtown using the emergency walkway along the Central Viaduct, and that any widening or replacement of the Central Viaduct must accommodate pedestrian/bike paths linking downtown and the Tremont neighborhood."

(See <http://www.innerbelt.org/Innerbelt/Documents/StrategicPlan.pdf>, the Cleveland Innerbelt Study Strategic Plan, July 2004. Specifically page 204, which is part of eight pages of comments by the City of Cleveland. Last accessed on June 30, 2006.)

(See also the City of Cleveland's Bicycle Map, at <http://planning.city.cleveland.oh.us/cwp/bikepath.htm> Last accessed on June 30, 2006.)

Context of Bicycle/Pedestrian Use across the Cuyahoga River Valley

In the area approximately within a mile west of the central business district, the Cuyahoga River Valley forms a natural geographic divide between Tremont and Ohio City neighborhoods on the west, and the central business district on the east. Roadways either cross the valley or run along the river valley at grade, with rather steep descent/ascent of the valley walls, or cross the valley on high-level structure, such as the Central Viaduct Bridge. For at least three months of the year, Cleveland's winter weather can be rather harsh and inhospitable to bicyclists and pedestrians. Nonetheless there are facilities which are designated bike routes and presumably receive use, though probably less in the winter than in the more temperate months.

Specific to the question of bicycle/pedestrian accommodation, it has been reported that some people use the Central Viaduct Bridge to traverse from Tremont to the downtown area. It is doubtful however that a significant number of people use that route, as it is not designated or designed for the general population, and the 1.3 mile trip is presumably uncomfortable due to the close proximity of high traffic volumes, noise, and vibration associated with urban Interstate facilities.

Alternately bicyclists and pedestrians could take other valley crossings which are designed for and designated as bike routes and/or pedestrian use. Proximate to the Central Viaduct Bridge, there are the following river/valley crossings:

- Just to the south, W. 3rd Street crosses the Cuyahoga River, near water level (as opposed to the high-level of the Central Viaduct above the valley), and actually under the eastern portion of the Viaduct. W. 3rd Street connects to the Tremont neighborhood via Jefferson Avenue and Literary Road. The Northeast Ohio area Coordinating Agency (NOACA) designates this road and bridge as a bike route.
- Approximately one-quarter mile north, the Lorain-Carnegie Avenue Bridge spans the river/valley at a level nearly even to the Central Viaduct, and its touchdown point on the eastern side of the valley is approximately one-eighth mile to the north of the Central Viaduct's touchdown point. NOACA designates this road and bridge as a bike route.
- Approximately one mile north of the Central Viaduct Bridge's western touchdown point, the Detroit-Superior Bridge spans the river/valley at a high level, and touches down about ½-mile to the north of the Central Viaduct's eastern touchdown point. In 2002-2003, local officials agreed to convert one of the outside lanes of the bridge to a designated "suspended park" for bicycle and pedestrian use. Because this route is designated as a federal truck route, ODOT's approval was needed for this conversion, and ODOT did indeed approve the concept. NOACA designates this road and bridge as a bike route.

See the next page for a map of bike routes proximate to the Central Viaduct Bridge.



ODOT Bicycle/Pedestrian Accommodation Policy

In 2005 ODOT issued its policy on “Accommodating Bicycle and Pedestrian Travel on ODOT Owned or Maintained Facilities.” This policy was developed in cooperation with and approved by the Federal Highway Administration, and as such, it complies with federal policy.

In brief, ODOT policy is to consider and analyze the appropriateness of bicycle/pedestrian accommodation as part of the project development process. As part of the analysis, safety, feasibility (which includes cost vs. potential users) and local desire and need are factored into the consideration. The policy states that bicycle and pedestrian accommodation is considered in new construction and reconstruction projects in an urbanized area, unless one or more of the following conditions are met:

- bicyclists and pedestrians are prohibited by law from using the roadway; or
- The cost of establishing the bicycle and pedestrian facility would be excessively disproportionate to the need or probable use; or,
- Lack of population or other factors indicate an absence of need.

ODOT Policy Decision Regarding the Bicycle/Pedestrian Accommodation on the Central Viaduct Bridge

After due consideration of the issue, and in keeping with its policy on bicycle/pedestrian accommodation, the concept of accommodating bicycle/pedestrian traffic on a new or reconstructed bridge is not warranted. The reasons are discussed below.

Public Safety

Notably, accommodation is not warranted when the law prohibits bicyclists and pedestrians from using the roadway. The Central Viaduct Bridge is a federally designated Interstate route, and under Ohio law non-motorized vehicles and pedestrians are prohibited from using the bridge and freeway.

Beyond a narrow interpretation of the Ohio Revised Code or ODOT policy, it is a prima facie argument that freeway facilities are not appropriate for bicyclists and pedestrians. Freeways carry free flow, high speed, and high volume auto and truck traffic; bicyclists and pedestrians move at two to ten miles per hour. While such disparate uses can be accommodated on a single structure, greater separation or segregation of these types of travel is preferable for public health and safety. Furthermore a 1.3 mile separated bicycle and pedestrian facility, which would more than likely be divided by a caged barrier, creates a public safety hazard due to length and lack of access points. This would also be extremely difficult to properly maintain during the snow and ice season.

Lack of Public Need

The lack of accommodation of bicyclists and pedestrians on the Central Viaduct does not inconvenience the public, because there are a number of equal or superior facilities proximate to the Central Viaduct to accommodate bicycle/pedestrian travel demand. For the Tremont and Ohio City areas of Cleveland, these facilities include West 3rd Street, the Lorain-Carnegie Bridge, and the Detroit-Superior Bridge, all of which are designated by NOACA as NOACA bike routes. ODOT has taken action in support of these bike routes, most notably in its approval of converting a vehicular traffic lane of the Detroit-Superior Bridge to dedicated bicycle/pedestrian use.

These designated routes form an enviable network for bicycle/pedestrian traffic, even without the Central Viaduct Bridge.

For illustration, consider a bicyclist located near the western abutment of the Central Viaduct Bridge, whose destination is downtown. In lieu of the Central Viaduct, the bicyclist has the option of pedaling approximately one-quarter mile north to the Carnegie Avenue Bridge, and then over the over the bridge to the downtown area at a point just a few hundred feet from the Central Viaduct touchdown point. Assuming a travel speed of 10 mph, the extra one-quarter mile to the Carnegie Avenue Bridge would mean an extra 1.5 minutes to our fictional cyclist.

In reality, the trip origins of bicycle and pedestrian traffic across the Cuyahoga Valley are quite dispersed, so the vast majority of the public has no travel time penalty associated with the prohibition against bicycle/pedestrian use of the Central Viaduct.

Summary

In planning for the replacement/rehabilitation of the Cleveland Innerbelt Central Viaduct Bridge, there is some public discussion and desire for accommodating bicycle/pedestrian traffic on a new or rebuilt bridge. ODOT has considered this concept, and as a result has determined there is no purpose and need for adding a bicycle and pedestrian facility to the Interstate bridge due to the public safety hazard it creates, the close proximity of appropriate bicycle and pedestrian alternatives and the subsequent cost to the public of adding such a facility when better than or equal alternatives already exist.