



OHIO DEPARTMENT OF TRANSPORTATION
CENTRAL OFFICE, P.O. BOX 899, COLUMBUS, OHIO 43216-0899

November 17, 2006

Mr. David Beach
Executive Director
Eco City Cleveland
3500 Lorain Avenue, Suite 301
Cleveland, Ohio 44113

Dear Mr. Beach:

Thank you for your letter of September 28th, restating your organization's interest in the accommodation of bicyclists and pedestrians on a new Central Viaduct bridge or rehabilitated structure.

We truly appreciate Eco City Cleveland's efforts to improve transportation and urban design in Cleveland, and promote bicycle accommodation in transportation projects. There is a great divide, however, between ODOT's concept of the highest and best use of limited transportation funds and the accommodation of bicycle facilities on this structure. As a point of departure, I would like to correct the assertion that "building a bike/pedestrian amenity on the Innerbelt Bridge is required by law." Relevant to this project, federal law¹ states:

(e) Bridges.--In any case where a highway bridge deck being replaced or rehabilitated with Federal financial participation is located on a highway on which bicycles are permitted to operate at each end of such bridge, and the Secretary determines that the safe accommodation of bicycles can be provided at reasonable cost as part of such replacement or rehabilitation, then such bridge shall be so replaced or rehabilitated as to provide such safe accommodations.

In implementing this law, the Federal Highway Administration (FHWA) further refines and clarifies its policy for accommodating pedestrians and bicyclists. Its policy² states:

The safe accommodation of pedestrians and bicyclists should be given full consideration during the development of Federal-aid highway projects, and during the construction of such projects. The special needs for the elderly and the handicapped shall be considered in all Federal-aid projects that include pedestrian facilities. Where current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort shall be made to minimize the detrimental effects on all highway users who share the facility. On highways without full control of

¹ 23 USC Section 217 serves as the basis for FHWA's Bicycle & Pedestrian Program as implemented in 23 CFR 652.

² 49 FR 10662, Mar. 22, 1984, § 652.5 "Policy"

access where a bridge deck is being replaced or rehabilitated, and where bicycles are permitted to operate at each end, the bridge shall be reconstructed so that bicycles can be safely accommodated when it can be done at a reasonable cost. Consultation with local groups of organized bicyclists is to be encouraged in the development of bicycle projects.

Federal law and policy, and ODOT policy, compels us to consider bicycle and pedestrian facilities on bridges, where they can be accommodated at a reasonable cost. As detailed below, accommodating a bicycle/pedestrian facility on the Central Viaduct is a very expensive proposition. Because alternatives exist, this course of action is not in the public's best interest. There are also other factors that play into this decision – including the existence of alternative travel routes, safety considerations, maintenance concerns, and new homeland security considerations – which further make this concept infeasible. I will address each of these factors below.

Cost of Accommodating Bicycles and Pedestrians on the New Central Viaduct Bridge

ODOT has requested literature from other state departments of transportation to ascertain the cost and design considerations of accommodating non-motorized transportation on the Central Viaduct. Simplistically, there are two options: either make the facility integral to the bridge deck itself, or suspend it from the bridge's piers or superstructure, apart from the bridge deck. For planning purposes we use a cost of \$350/sf for the integral design and \$300/sf for the suspended design, which is sufficient to meet AASHTO design standards.³

In addition to the cost of the facility on the bridge, there is a need for facilities at either end of the structure, to get bicycles and pedestrians from the level of the bridge to the appropriate surface street facility.

With a width of 15 feet, and a length of 4,300 feet for the integral design and 3,300 feet for the suspended design, the bike/pedestrian path on the bridge would cost between \$17 and \$20 million (2006 dollars). The approach ramps were estimated to cost between \$3 and \$4 million; combining these produces a total cost of between \$21 to \$23 million (2006 dollars). ODOT does not find this cost reasonable.

³ For these types of structures, AASHTO requires design to H-15 loading standards, sufficient to accommodate emergency vehicles.

Existence of Alternative Travel Routes for Bicycles and Pedestrians

A major factor in the consideration of a bicycle/pedestrian facility on the Central Viaduct is public need. ODOT does not believe there is a compelling public need to accommodate bicycles on the Central Viaduct, due to the existence of other bicycle/pedestrian facilities in the area.

Your letter points out wonderful examples of bicycle/pedestrian facilities on other freeway bridges in America. In the cases of the Golden Gate Bridge (San Francisco, California) and the Cooper River Bridge (Charleston, South Carolina) there is a fair argument that cyclists lack good alternate routes to these structures. The closest alternate to the Cooper River Bridge is approximately 20 miles away; the closest alternate to the Golden Gate Bridge is more than 40 miles.

These other freeway bridges are not analogous to the Central Viaduct. They represent the only water crossings for miles, with no reasonable alternatives for non motorized traffic. In San Francisco, any alternate to the Golden Gate Bridge adds at least 100 miles of circuitry to bicycle travel. Near Cleveland's Central Viaduct, two crossings – the Lorain Carnegie Bridge, and the Detroit-Superior Bridge, provide very good routes across the Cuyahoga River and valley. In addition the Lorain Carnegie Bridge route serves GCRTA's West 25th Street station, providing direct access to both bus and rail travel modes.

Winter Maintenance of Bicycle/Pedestrian Facility on the Innerbelt Bridge

As the entity which owns and maintains the Central Viaduct, ODOT considers winter maintenance of a bike/pedestrian structure to be problematic.

The first maintenance concern involves the bike/pedestrian facility itself. ODOT does not have the equipment or staffing level to apply deicing materials, or to shovel or plow, a bicycle/pedestrian lane on the Central Viaduct.

Other maintenance concerns arise if the bicycle/pedestrian facility were to be integral to the I-90 bridge deck. In this case, our snow plowing activities would pose a distinct danger to bicyclists and pedestrians, who would be in the path snow and ice thrown from snowplow blades. This danger would be mitigated only minimally by the required vandal fencing, which would still allow smaller particles of ice through to the bike/pedestrian pathway.

As these maintenance concerns suggest, the Central Viaduct would be an inhospitable environment for non-motorized transportation during winter months. This provides an additional reason to believe that these facilities will not receive a significant amount of

use for some months of the year, and thus further erodes justification for public investment.

Police Patrol and Emergency Medical Service Concerns

Another category of concern regards policing and emergency medical service provisions. The Central Viaduct is a long structure, and the addition of bicycle/pedestrian accommodation creates a facility with only its touchdown points for ingress and egress. It would be very difficult to provide police protection for individuals crossing the facility, who would be in a somewhat vulnerable and isolated place. Likewise, it would be difficult to protect traffic on the bridge from vandals who might be enticed onto the bridge by the existence of the bicycle/pedestrian lane.

The isolated nature of a Central Viaduct bicycle/pedestrian facility also creates concerns for the provision of emergency medical services. It would be difficult for emergency medical or fire and rescue agencies to be notified of an emergency on the bicycle/pedestrian lanes and respond to it in a timely manner. If the facility was integral to the bridge deck and freeway travel lanes, vandal fencing would inhibit access by emergency services personnel, and there are troublesome matters of ingress and egress on both ends of the structure for similar emergency access. These matters equate to a less-than-safe condition for bicyclists and pedestrians to be in, given the alternatives available to them.

Homeland Security Considerations

Since the Sept. 11, 2001 terrorist attacks on the United States, federal agencies such as FHWA have been directed to evaluate and minimize risk to critical parts of the nation's infrastructure which might be vulnerable to attack. The Central Viaduct is just such a structure, and the issue of terrorist protection becomes all the more important with its redesign as a "signature" or "iconic" structure. On other large bridge structures in Ohio, U.S. Department of Homeland Security officials have advised ODOT to minimize the access of people in and around the piers, abutments and superstructure of bridges. The position of a bicycle/pedestrian facility on this structure is in almost direct contradiction to this guidance, especially in lieu of adequate police patrolling, as indicated above.

ODOT Assistance to other Cleveland-area Bicycle and Pedestrian Facilities

While we do not believe there is a need for bicycle accommodation on the Central Viaduct, it should be noted that ODOT has been very supportive of other bicycle and pedestrian projects in the region. A few examples include:

- The Detroit-Superior Bridge Promenade Project reduced the bridge's motor vehicle capacity to four lanes, and will create a unique "suspended park" above the river valley;

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- The Euclid Corridor project was specifically planned with bicycle accommodation as a design criterion;
- The Lakefront West project was designed in part to calm West Shoreway traffic and make the facility more friendly to bicycles and pedestrians, while relocating the Lakefront Bikeway;
- The Towpath Trail extension into downtown is made possible in part by elements of the Innerbelt projects (i.e., Quigley multi-purpose connector, and slope design under the new Innerbelt Bridge).

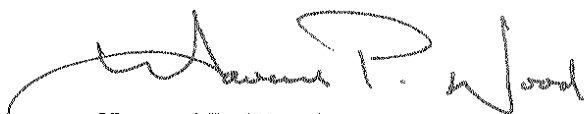
The foregoing examples are not intended to be a special pleading of ODOT's enthusiasm for bicycle and pedestrian projects. Rather, they are concrete examples of ODOT supporting such projects where there is a strong purpose and need for them. There are many good bicycle/pedestrian projects in the greater Cleveland area, and by and large ODOT has been supportive of local bicycle priorities. We will continue this support, but do not find the Central Viaduct proposal forwarded by Eco City Cleveland to be worthy of public funding.

Summary

ODOT believes that the concept of incorporating bicycle/pedestrian lanes on a new or rehabilitated Central Viaduct bridge is overly expensive and not a public necessity due to alternative bicycle/pedestrian routes. We emphasize the significant maintenance and safety concerns associated with the concept. In their totality, cost, degree of public use, maintenance issues, and public safety concerns combine to make this a poor alternative for public investment, and thus, one we decline to pursue.

We are aware that our position is disappointing to Eco City Cleveland and its efforts to make the city more livable and friendly to bicyclists and pedestrians. While we remain steadfast in our position, we are supportive of other bicycle/pedestrian projects such as the towpath trail. The construction of the new Central Viaduct will include substantial earthwork on the west bank of the Cuyahoga River, and ODOT is including grading and construction of the Towpath Trail under the Central Viaduct, as an early part of the Innerbelt Plan. Facilities such as the Towpath Trail, combined with existing bicycle and pedestrian routes in Cleveland, will substantially improve the conditions for non-motorized transportation in the region.

Respectfully,



Howard P. Wood
Deputy Director of Planning

cc: Robert Brown, Director, City of Cleveland Planning Commission