

OVERHEAD WIRES

Extracts from National Capitol Planning Commission Staff Recommendations

NCPC File No. 6686 Anacostia Line Segment (January 25, 2007)

Executive Director's Findings (page2):

The use of streetcars with overhead wires entails the installation of infrastructure to support the wires--including regularly spaced posts with support arms cantilevered over traffic lanes--that would change the historically open character and appearance of Washington's streets.

Since the late nineteenth century, there has been a legal prohibition against overhead wires within the City of Washington (L'Enfant city) and Georgetown, resulting in rights-of-way that are free of electric wires and that were free of overhead wires when streetcars were previously in use.

The Commission has a federal interest in retaining and protecting the nationally recognized and significant open vistas of the rights-of-way of the L'Enfant Plan, which is protected by listing in the National Register of Historic Places and in the D.C. Inventory of Historic Sites.

The recommended approval of the demonstration project does not connote the Commission's acceptance of a future streetcar system that uses an overhead contact system within the L'Enfant City and Georgetown.

DDOT should return to the Commission for review of every segment of a streetcar system.

Both the District of Columbia government and the National Capital Planning Commission share the goals of protecting the integrity of Washington's characteristic open streets and of meeting public transit service needs. These goals should be weighed together and a streetcar system should be considered as a whole before irrevocable decisions are made concerning one segment.

Staff Requests that DDOT (page 2):

Return to the Commission for review of the elements associated with a city-wide streetcar system, such as pylons, signs, and passenger shelters, prior to DDOT's making a final decision about the design of these elements.

With the collaboration of other relevant District of Columbia and federal agencies, including the Commission, continue to investigate transit alternatives to a streetcar system that uses overhead wires with supporting infrastructure before it proceeds with plans to expand the route beyond the Anacostia Initial Line Segment. Transit modes and technologies should meet the transit goals of both the District of Columbia government and the Commission, as well as our mutual mandates to protect Washington's historically open right-of-way vistas and to comply with federal laws.

Description of Proposal (pages 7-8)

DDOT's proposed streetcar system, as currently planned, includes infrastructure that supports overhead wires, which have been prohibited by federal law in the City of Washington and in Georgetown for over a century. The infrastructure that DDOT envisions includes poles with arms extending over traffic lanes to carry overhead wires and also includes installation on the sidewalks of a design suite of additional shelters and sign pylons distinct from those for other transit modes.

Staff believes that both the District of Columbia and the National Capital Planning Commission share in common the goals of protecting the integrity of Washington's characteristic open streets and meeting public transit service needs. These goals should be weighed together.

As a planning matter, NCPC advises DDOT against developing a streetcar system powered by overhead contact wires with related infrastructure for any part of the streetcar system within the L'Enfant City and Georgetown. Implementation would affect viewsheds that have been protected from such overhead elements since Washington was developed as a modern city in the nineteenth century. The anticipated infrastructure would introduce an element into streetscapes that has been intentionally avoided and prohibited for over a century. Although the implementation of streetcar routes with an overhead system could meet transit goals stated in the Federal and District elements of the Comprehensive Plan for the National Capital, it would also contradict mutually shared planning guidance to protect right-of-way viewsheds within the L'Enfant City that are also stated in the Federal and District elements of the Comprehensive Plan. Additionally, the L'Enfant Plan rights-of-way have protection through listing in the District of Columbia Inventory of Historic Sites and in the National Register of Historic Places.

Federal law supports this planning guidance. The statute specific to the prohibition of overhead contact rail wires is an 1889 statute that applies to "Washington City" and Georgetown. A series of federal statutes from the 1880s through the turn of the century continues this prohibition of overhead wires and can also be seen as part of more comprehensive planning direction, supported by Congress, to ensure that Washington remain a city of open vistas.

The staff is concerned that implementation might also disregard or preclude emerging streetcar technologies that might better suit Washington's unique natural, cultural and historic landscape. The technology to propel streetcars without overhead wires is available, although there are no applications in the United States. Several European cities, most notably Bordeaux, are protecting their views and street aesthetics around important historic areas by developing and installing surface technology.

Executive Director's Findings (pages 2-3)

The future use of streetcars with an overhead contact system would entail the installation of infrastructure to support the wires--including regularly spaced posts with support arms cantilevered over traffic lanes--that would change the historically open character and appearance of Washington's rights-of-way.

Since the late nineteenth century, there has been a legal prohibition against overhead wires within Washington City (the L'Enfant city) and Georgetown, resulting in rights-of-way that are free of electric wires and that were free of overhead wires when streetcars were previously in use.

The Commission has a federal interest in retaining and protecting the nationally recognized, characteristic, and significant open vistas of the rights-of-way within the L'Enfant Plan, which is protected by listing in the National Register of Historic Places and in the D.C. Inventory of Historic Sites.

The proposed installation of tracks in the H Street cartway, while not in itself a negative impact to the historically open character of a street within the L'Enfant Plan, might preclude alternative or emerging technologies for a future streetcar route on H Street, NE and elsewhere in the District of Columbia.

The recommended approval of the streetscape plan does not connote the Commission's acceptance of a future streetcar system that uses an overhead contact system.

DDOT should return to the Commission for review of every segment of a future streetcar system.

Both the District of Columbia government and the National Capital Planning Commission share the goals of protecting the integrity of Washington's characteristic open streets and of meeting public transit service needs. These goals should be weighed together and a streetcar system should be considered as a whole before irrevocable decisions are made concerning one segment.

Staff Requests that DDOT (page3):

Return to the Commission for review of the elements associated with a city-wide streetcar system, such as pylons, signs, and passenger shelters, prior to DDOT's making a final decision about the design of these elements.

With the collaboration of other relevant District of Columbia and federal agencies, including the Commission, continue to investigate transit alternatives to a streetcar system that uses overhead wires with supporting infrastructure. Transit modes and technologies should meet the transit goals of both the District of Columbia government and the Commission, as well as our mutual mandates to protect Washington's historically open right-of-way vistas and to comply with federal law.

PROJECT ANALYSIS (pages 6-7):

The proposed installation of tracks in the street cartway, while not in itself a negative impact on the historically open character of the streets within the L'Enfant City, might preclude alternative or emerging technologies that would not use overhead wires on a route on H Street and in other locations. DDOT intends at this time to use an overhead contact system if it proceeds with implementation of the streetcar system.

The staff advises that the recommended approval of the elements of the streetscape design does not connote acceptance of a future streetcar system within the L'Enfant city and Georgetown that would use an overhead wire system.

The H Street corridor is within “Washington City” – more commonly known today as the original extent of the city in the L'Enfant Plan. Streetcars were introduced to Washington during the Civil War. At first drawn by horses, streetcars propelled by electricity were introduced before the end of the nineteenth century. At that time, only two cities in the country used the new practice of placing their systems' trolley wires underground: New York City (Manhattan) and Washington (the City of Washington and Georgetown). The new and unique technology helped create a distinct, wireless character to the capital city, one that has been protected by federal legislation and in planning doctrine since that time. The use of an underground propulsion system allowed Washington's city streets to be clear of projecting infrastructure and wires, a standard that is also reflected in the absence of aboveground electric wires. In addition, traffic lights and street signs have been installed on posts at the curb rather than on cantilevered arms across traffic lanes, as in other cities.

DDOT's proposed streetcar system, as currently planned by DDOT, would have an overhead contact system, and would include infrastructure to support overhead wires, which have been prohibited by federal law in the City of Washington and in Georgetown for over a century. The infrastructure that DDOT envisions includes poles with arms extending over street lanes to carry overhead wires. It also includes installation on the sidewalks of a design suite of additional shelters and sign pylons distinct from those for other transit modes.

Staff believes that both the District of Columbia and the National Capital Planning Commission share in common the goals of protecting the integrity of Washington's characteristic open streets as well as meeting public transit service needs, and that these goals should be weighed together and that a streetcar system should be considered as a whole—as one system--before irrevocable decisions are made concerning one segment.

As a planning matter, NCPC advises DDOT against developing a streetcar system powered by overhead contact wires with related infrastructure for any part of the streetcar system within the L'Enfant City and Georgetown. Implementation would affect viewsheds that have been protected from such overhead elements since Washington was developed as a modern city in the nineteenth century. The anticipated infrastructure would introduce an element into streetscapes that has been intentionally avoided and prohibited for over a century.

Although the implementation of streetcar routes with an overhead system could meet transit goals stated in the Federal and District elements of the Comprehensive Plan for the National Capital, it would also contradict mutually shared planning guidance to protect right-of-way viewsheds within the L'Enfant City that are also stated in the Federal and District elements of the Comprehensive Plan. Additionally, the L'Enfant Plan rights-of-way have protection through listing in the District of Columbia Inventory of Historic Sites and in the National Register of Historic Places.

Federal law supports this planning guidance. The statute specific to the prohibition of overhead contact rail wires is an 1889 statute that applies to “Washington City” and

Georgetown. A series of federal statutes from the 1880s through the turn of the century continues this prohibition of overhead wires and can also be seen as part of more comprehensive planning direction, supported by Congress, to ensure that Washington remain a city of open vistas.

The staff is concerned that implementation might also disregard or preclude emerging streetcar technologies that might better suit Washington's unique natural, cultural and historic landscape. The technology to propel streetcars without overhead wires is available, although there are no applications in the United States. Several European cities, most notably Bordeaux, are protecting their views and street aesthetics around important historic areas by developing and installing surface technology. The concept is that electric energy is provided through a surface line where the center rail is electrified only as the streetcar passes over it, removing concerns about public access to an electrified at-grade rail.

Like many new technologies, there is limited experience with it to date and, according to those knowledgeable with the new technology, the system is more expensive to construct and operate. In addition, there are some differences between the Bordeaux and Washington environments and between the types of vehicles used.

At a time when other cities are considering the use of new surface contact streetcar systems and the removal of overhead wires and the related pole infrastructure in order to restore views in visually or historically sensitive areas, staff is concerned about the proposed introduction of an overhead contact system in Washington.

Staff requests that DDOT continue discussions with NCPC and involve other agencies, entities, and the public in seeking the best transit modes and technologies to meet the transit policies and goals of both the District of Columbia and the Commission, as well as mutual interests in and mandates to protect Washington's historic streets and vistas and to comply with federal law.

CONFORMANCE (pages 9-10)

Comprehensive Plan for the National Capital

The Federal Elements of the Comprehensive Plan for the National Capital contain policies that support the expansion of transit services as well as policies that protect the right-of-way viewsheds of the L'Enfant Plan.

Among the policies for Commuter Rail, Rail Transit, and Bus Transit in the Transportation Element, the federal government should support:

1. The design and implementation of new, expanded, and innovative transit services that supplement existing transit and fill unmet transit needs (e.g., Downtown Circulator, Busway, Bus Rapid Transit projects, light rail, trolley).
1. The development of intermodal transit centers that provide greater transit access and improved interconnectivity for federal commuters.

Among the policies for the Historic Plan of Washington, DC in the Preservation and Historic Features Element, the federal government should:

1. Promote continuity in the historic design framework of the nation's capital by protecting and enhancing the elements, views, and principles of the L'Enfant Plan. Both the federal and the District of Columbia governments should adhere to these principles in any improvements or alterations to the historic framework.

1. Protect and control the visual and functional qualities of L'Enfant rights-of-way.
1. Protect the open space of the L'Enfant streets. The exceptional width and openness of the street rights-of-way constitutes public space that helps to define the character of the city.

National Environmental Protection Act (NEPA)

NCPC does not have a separate NEPA obligation, since the project site is outside the Central Area. The Federal Highways Administration (FHWA) on May 24, 2005, found a "Categorical exclusion per 771.117(d)(1). H Street between North Capitol Street and 17th Street is a historic street. This project should be coordinated with the SHPO per Section 106 of the NHPA. The project does not include infrastructure for a trolley line."

National Historic Preservation Act (NHPA)

Both the DDOT and D.C. Historic Preservation Division staffs have informed NCPC that DDOT is initiating briefings with the D.C Historic Preservation Division staff on the project. DDOT has not submitted the project to the office for either Section 106 review or Historic Preservation Review Board review under the District's historic preservation ordinance.