

## **The Charles Street Trolley Frequently Asked Questions**

### **WHY NOW?**

Demographic shifts, lifestyle trends, and more recent spikes in energy costs are creating new demand for living in more walkable urban places. Demographic trends include smaller household size, greater numbers of people living alone, and the first wave of baby boomers downsizing and choosing to live in cities. Baltimore can begin to plan for this renewal with high quality transit options that permits more efficient use of existing, fixed street infrastructure, less auto use for local travel, and greater support for quality “placemaking” that results from less parking and more people on the sidewalk. A trolley in the Charles Street corridor is a proven solution to the need for a more environmentally appropriate and neighborhood friendly alternative to travel beyond the walk trip. It responds to desires up and down the corridor for greater economic stability and improved livability for residents.

Nearly seventy similar trolley initiatives are being developed in cities across the United States. Of the eight cities that have built new streetcar lines, most are planning or have implemented extensions. Many of these areas are experiencing unanticipated investment and record levels of market interest in real estate adjacent to the streetcar line.

### **WHERE WILL THE TROLLEY ROUTE BE LOCATED? WHY?**

Currently, the proposed route would start at the Inner Harbor Visitors Center on Light Street, and travel north on Calvert Street to Redwood Street, and then west on Redwood Street to Charles Street. The trolley would go north on Charles Street to University Parkway, with the northern turnaround at Bishops Lane. From University Parkway the trolley would travel south on St. Paul Street to Mt. Royal Avenue, where it would turn west to Maryland Avenue. The trolley would travel south on Maryland Avenue and continue as the road changes to become Cathedral Street, Liberty Street, Hopkins Place, and Sharp Street. The southern turnaround would be at Conway Street where the trolley would return north from Light Street. Modifications have been investigated and eliminated for various technical reasons. As the project makes its way through the design process some minor revisions may be required. (A map of the route is included.)

The alignment was established during a 2004 workshop that involved community, business and institutional representatives along the Charles Street Corridor. The route was selected to bring the energy and economic success of the Inner Harbor area north to the Corridor’s major employers, institutions and regional transportation links. These include the Mt Vernon Cultural District, Johns Hopkins University, Penn Station, the University of Baltimore, and commercial and entertainment districts in Mt Vernon, Station North, and Charles Village, Metro and Light Rail. The route connects Baltimore’s urban neighborhoods and to transportation to both regional and nationally recognized destinations.

### **WHY FIXED-RAIL INSTEAD OF RUBBER-TIRE?**

Fixed-rail transportation has the following key advantages over rubber-tire transit:

**Comfortable & Neighborhood Friendly**— For passengers, the ride on a rail-based vehicle is smoother and quieter than on a bus traveling over potholes and other roadway

imperfections. Modern rail vehicles also have a more open layout and lower floors, making them easier to access and use for those in wheelchairs, with strollers, or with mobility limitations. These qualities also make this mode of travel more compatible with residential living along the track. Streetcars lines have been located within neighborhoods and commercial centers in cities around the country and have been found to actually attract certain types of real estate investment including hotels, retailers and restaurants.

**User confidence** — One of the main reasons that users prefer rail to bus transit is related to understandability of the trip and the system. One clear advantage to the user is the permanent presence and visibility of trolley tracks in the street. For unfamiliar and infrequent riders this means knowing where the vehicle will take them and where it will return. Fixed rail transit system mapping is typically more easily understood than the more complicated and often circuitous bus system maps.

**Permanence** — The trolley represents a major capital investment. To be funded in the first place it will typically have an identified revenue stream to keep it in operation and, once built, the route is not likely to change other than for possible extensions. This provides a much higher degree of assurance to attract the investment of residents and developers. Because this investment is likely to be motivated in part by the existence of the line, studies from other cities are showing impressive reinvestment that support the line and create a market for extensions of streetcar service.

**Increased Transit Ridership** - Fixed-rail transportation has been found to attract greater numbers of new transit riders over rubber-tire transit, resulting in higher ridership. Bringing more people into the transit system creates the potential for lower parking requirements because residents or customers are more likely to use mass transit than other modes transportation, creating fewer traffic impacts with new development. This in turn creates a more vibrant street-life due to higher levels of pedestrian activity and the attraction of retail to areas with greater concentrations of households. Studies have shown that fixed-rail transit attracts 34 to 43 percent more transit ridership than rubber-tire transit.

New development is taking place in some sections of the Charles Street corridor. A trolley would help connect these projects, ensure that new development adds to the existing urban fabric with less parking impacts, and support market interest in existing buildings where vacancy and underutilization is slow to change.

## **WILL THERE BE OVERHEAD WIRES?**

The vast majority of fixed-rail trolley systems are powered by overhead wires. However, trolley systems use less wire and infrastructure than for a light-rail systems such as Howard Street. The visual impact of overhead power wires can be minimized by using existing light poles and aesthetically pleasing supplemental power poles to the extent possible.

We have explored some alternative sources of power than overhead wires for the project and will continue to consider these throughout this process. Based on meetings with a number of parties we have determined that fuel-cells will not be a viable option for use in fixed-rail trolleys anytime

in the next decade or two. Bordeaux, France uses a third-rail system that is considerably more expensive than overhead wire and has also not been tested in environments with weather conditions similar to Baltimore. Other options could involve use of on-board batteries to hold a charge between sections without wires or for the entire trip.

## WHAT IS CURRENT FINANCING PLAN FOR THE TROLLEY? HOW MUCH WILL IT COST AND WHO WILL PAY FOR IT?

Charles Street Development's engineering consultant team estimates the capital cost to build the proposed system at \$156 million in 2008 dollars. Annual operating expenses are estimated to be \$4.5 million.

We are proposing five sources of operating funds:

Farebox	\$1,849,000	(mid-point of the ridership study)
City Contribution	\$1,500,000	(to replace Baltimore City Shuttle service on Charles Street)
Benefit Assessment	\$ 363,819	(from taxable properties, excluding owner occupied residences)
Non-Profit Contribution	\$ 337,181	(based on the non-profit share of the tax base)
<u>Advertising</u>	<u>\$ 450,000</u>	(estimated from other systems)
Total	\$4,500,000	

Proposed capital funding sources are:

Baltimore City – GO* Bond Proceeds	\$ 25,000,000
Baltimore City - Trolley Corridor TIF**	\$ 55,000,000
State of Maryland – GO* Bond Proceeds	\$ 50,000,000
State of Maryland - Sales Tax TIF**	\$ 6,000,000
<u>Federal agencies</u>	<u>\$ 20,000,000</u>
Total	<b>\$156,000,000</b>

\*GO=General Obligation

\*\*=Tax Increment Funding

Please note that none of these funding options/proposals include transportation funds from either the Maryland Department of Transportation or the US Department of Transportation.

## HOW MUCH WILL IT COST TO RIDE THE TROLLEY?

We expect that the trolley would use the same fare structure as the Maryland Transit Administration (MTA) and that MTA day, weekly, and monthly passes may be used for the Trolley. The current MTA fare for a one-way trip is \$1.60 and a day pass is \$3.50, and these fares will likely increase over time. The MTA does not have free transfers without a day, weekly, or monthly pass but does provide free bus service to riders with MARC weekly and monthly passes. We are working cooperatively with the MTA to design the system so it serves the various users of the corridor.

## **HOW WILL THE TROLLEY SPUR ECONOMIC DEVELOPMENT? WHERE WILL THIS HAPPEN?**

In the late 19<sup>th</sup> and early 20<sup>th</sup> century, streetcars became a major component of urban development in America's cities, until the mid-20<sup>th</sup> century with the decline of urban centers and the wholesale destruction of urban trolley systems. In recent years however, the streetcar has again become a catalyst for urban-scale growth in cities as varied as Memphis, Portland, Seattle, Tampa, Dallas, and Little Rock. Importantly, the permanence of fixed rail helps mitigate the risk for developers, allowing higher densities and lower parking requirements, thereby making development projects more viable. Redevelopment not only increases economic development in already stable neighborhoods, but dramatically improves neighborhoods that have been neglected or targeted for change. Property values will increase along the trolley line, encouraging new investment in these areas as well as filling vacant residences and storefronts, thereby increasing the tax-base in areas near the trolley. For instance, over \$2.28 billion has been invested in Portland within two blocks of the trolley's alignment, and since 1997, 55% of central business development has occurred within one block of the streetcar. A copy of the Portland Streetcar Development Oriented Transit report is attached. Development has been so significant in the McKinney Avenue area of Dallas (the area the streetcar was designed to promote) that property values there now exceed those of downtown Dallas. The 2.5-mile trolley line in Tampa, Florida has stimulated over \$600 million in public projects and \$700 million in private projects. Even a city as small as Kenosha, Wisconsin, a commuter suburb of Chicago, has seen major development since the advent of its trolley line - over \$100 million in development along only two miles of track. Parking needs are decreased by the existence of a trolley line, so new projects will be able to devote less of their valuable space to parking concerns and land that was previously used for parking lots may be redeveloped. This redevelopment will be particularly helpful to neighborhoods along the proposed Trolley route that are currently filled with parking lots, like Old Goucher and Charles North. One economist has estimated an \$11 million total annual fiscal impact of the Trolley in Baltimore City.

Cities with a high share of travel by transit are able to enjoy a more active street life translating into successful retail and entertainment districts and healthier urban neighborhoods. In the places where trolleys are operating, like Little Rock's River Market District, restaurants and retailers have enjoyed large increases in clientele, making the district the city's primary cultural, entertainment, retail, and residential neighborhood. Families and visitors fill the district by day, and crowds converge on the street in the evening to experience the variety of nightlife. The same substantial increase in development intensity has occurred in both Portland and Seattle. Mixed-use areas like Charles Street attract a wide variety of pedestrians whose patronage is highly appreciated by retailers, restaurants and entertainment venues. Increased development would serve not only to benefit already established retail centers at the Inner Harbor, but also developing areas like Mount Vernon, Charles Village, and the Station North Arts and Entertainment District. More residents along the corridor will also add synergy to neighborhood retail districts on Read Street, around Lexington Market and the Westside.

## **ARE OTHER CITIES CONSIDERING SIMILAR SYSTEMS?**

Roughly a dozen cities around the country have operating fixed-rail trolley lines and approximately 80 cities are considering creating new lines or adding extensions on to existing lines. More detail about the cities with or planning for trolleys can be found at:

- <http://www.heritagetrolley.org/ExistingSystems.htm>
- <http://www.heritagetrolley.org/PlannedSystems.htm>
- <http://www.lightrailnow.org/>

Photos from several cities around the country with streetcars can be found in the Other Cities section of this Website. Portland's streetcar has been a model for many around the country and more information about it can be found at <http://www.portlandstreetcar.org/>.

## **WHAT WILL THE TROLLEY VEHICLES LOOK LIKE?**

Trolley cars are different from light-rail vehicles in that the cars are much smaller and fit more appropriately in a tight urban environment. While trolley systems operate using single cars that are typically about 60 feet long and 8 feet wide, a light-rail system like the one on Howard Street uses a chain of linked vehicles, which can reach over 280 feet in length.

Currently, there are a few general vehicle types that have been considered for use on the line. The first type of trolley car is modern in appearance, similar to the streetcars used in Seattle and Portland. There are also modern replica vehicles that retain a historic aesthetic, which are used in Tampa, Florida. Dallas, Memphis, and New Orleans make use of restored vintage streetcars, which have an authentic nostalgic appeal. The streetcar system in Portland makes use of both modern and genuine historic vehicles. The City runs the modern car during the weekdays and the occasional restored vehicle along the line on the weekend when tourists are more likely to ride it.

The vehicle choice for Baltimore will be made through an informed and thorough process of public participation.

## **HOW WILL THE TRACKS AND OVERHEAD WIRES VISUALLY IMPACT THE NEIGHBORHOODS IN WHICH THEY ARE LOCATED?**

The Trolley is designed to enhance the character and prominence of Charles Street. Therefore, every effort has been made to minimize the visual impact of the Trolley, and to ensure that it will fit in with the unique historic context and character of with the Charles Street Corridor.

Catenary poles come in a variety of decorative styles that add to the streetscape and may be combined with street lights or traffic signals to reduce the number of poles along the route.

The wires are scaled to blend in with the streetscape and may be hidden from view by street trees planted along the route. They may also be strung between buildings in certain places to minimize the visual impact. Photographs of existing catenary wires in other cities are available at [www.charlesstreet.org/trolley](http://www.charlesstreet.org/trolley).

Historically, trolley tracks ran through many of the City's thoroughfares with limited visual impact. The tracks have been imbedded in cobblestone streets and grass medians. New systems in Europe and the unused tracks that still run through the cobblestones on Thames Street in Fells Point offer good examples. A photograph of these tracks is included.

## **HOW LONG WILL IT TAKE TO CONSTRUCT? HOW MUCH OF A PHYSICAL IMPACT WILL THE CONSTRUCTION PROCESS HAVE ON TRAFFIC AND STREET-LEVEL BUSINESS?**

Construction began on the Portland Streetcar system in 1999, and the trolley began operating in 2001. Using this and similar timelines from other cities as a basis for comparison, it is hoped that the Charles Street Trolley will take three to four years to construct. The building process would be staggered, with construction taking place on a block-by-block basis, so as to minimize the impact on traffic and businesses along the route.

## **WHO WILL OPERATE AND MAINTAIN THE TROLLEY?**

Governance of the Charles Street Trolley is still being discussed by all those involved in the planning process. So far, three options for operation and governance are being considered and none of these include the Maryland Transit Administration. The current options for governance are:

1. The City of Baltimore, similar to local bus systems operated by jurisdictions throughout the State.
2. A private non-profit corporation.
3. An Authority that would be a combination of City and non-profit governance.

## **WHERE WOULD THE MAINTENANCE FACILITY BE LOCATED?**

Possible locations for the maintenance facility include, but are not necessarily limited to, the property adjacent to the Streetcar Museum on Falls Road, which is currently owned by the City, the Fifth Regiment Armory on Howard Street, and the existing North Avenue facility – or a future site related to the Red Line – operated by the Maryland Transit Administration.

## **HOW MUCH NOISE WILL THE TROLLEY MAKE?**

Electrically powered trolleys produce much less noise than most of Baltimore's current bus fleet, which runs on diesel. The only significant noise generally occurs in locations where the trolley makes turns. One of the major benefits of a smooth-travelling, electric trolley is that it does not produce the kind of noise or exhaust that can adversely affect environmental quality on urban streets. In Portland, for instance, the streetcar route is lined with many private residences, outdoor cafes and restaurants, and several parks.

## **WILL THE TROLLEY CONNECT TO OTHER MASS TRANSIT LINES?**

Yes. This project is expected to fully integrate with Baltimore's transit system. The trolley will extend the range of services currently provided by the MTA bus, light-rail, metro subway and the proposed Red Line extension by connecting them to in-town neighborhoods and attractions in the Charles Street corridor.

Potential trolley stops have been identified at or near high-volume bus stops to allow for easy transfers from one system to another. The current trolley alignment includes proposed stops within sight of light-rail and metro subway stops at the Convention Center, Charles Center, and

Penn Station. Current refinements in route planning may include adjustments to improve these connections. A map showing the proposed alignment, vehicle stops, and existing transit resources can be found in the Maps section of the Trolley Website at [www.charlesstreet.org/trolley](http://www.charlesstreet.org/trolley).

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## **WILL EXTENSIONS TO THE TROLLEY LINE BE POSSIBLE IN THE FUTURE?**

A goal of this project is to introduce a neighborhood friendly and high-quality transit service that will raise the standards for public transportation in Baltimore. Success of the Charles Street Trolley is expected to permit expansion to growing areas adjacent to downtown and the Inner Harbor with new connections and attractive alternatives to auto travel. In other cities, such as Portland and Tampa, extensions have been added seamlessly onto the existing line.

## **HOW WILL THE EXISTENCE OF THE TROLLEY LINE AFFECT AUTOMOBILE TRAFFIC? WHAT ABOUT PEDESTRIANS AND CYCLISTS?**

The Charles Street Trolley is intended to increase mobility in the Charles Street Corridor and provide users of the corridor with an additional transportation option. However, it is important that the Trolley not compete with or unnecessarily impact other modes of transportation in the corridor, such as automobiles, buses, bicycles, and walking. For example, the Trolley will share a lane with automobiles and share stops with buses.

## **HOW WILL THE TROLLEY AFFECT THE PARKING SITUATION?**

On-street parking is an important asset for both residents and businesses, and buffering from sidewalks helps to create a pleasant walking environment. It was for these reasons that the Charles Street Trolley Project has sought to maintain on-street parking and make restricted parking spaces full-time, where ever possible. Some parking at the Trolley stops may be lost to build curb extensions. Many of these will be in places where parking is already restricted for existing bus stops.

The City uses peak-hour parking restrictions to add an additional lane of capacity during peak commuter demand times. A part of the traffic analysis involved evaluating whether permanent on-street parking could be restored to the streets where the Trolley is planned without critically impacting traffic operations. The analysis shows that peak-hour parking restrictions on most segments of St. Paul Street and Charles Street where the Trolley is present can be eliminated. Peak-hour parking restrictions are appropriate on northbound Charles Street between Biddle Street and I-83 due to the higher traffic volumes present in that segment of the corridor. While there will be a slight reduction in parking overall, more of the parking spaces in the corridor will be available full-time. Overall, approximately 350 parking spaces that are restricted at certain times of the day will become permanent and 20 spaces will be eliminated, mostly due to curb extensions at stations.

In most cases, there will be one lane between the Trolley tracks and the curb, typically the right curb since the Trolley generally travels on the right side of the street. The curb will be extended

into this lane at stops, making it impassible for through vehicles. Adjacent to stops, the lane between the Trolley and the curb will be used for permanent parking. When possible, depending on traffic demand, a second lane of parking will be placed along the curb opposite the Trolley, generally the left curb.

## **WHAT ARE THE PROPOSED HOURS OF SERVICE?**

Ideas for a variety of operating hours continue to be discussed, including a schedule that would operate from 6 AM to midnight on weekdays, and 6 AM until 2 AM on weekends.

## **HOW WILL THE TROLLEY AFFECT TRAFFIC ON CHARLES STREET?**

The calming effect that the rail system would have on the currently dense flow of traffic moving through the corridor would further enhance livability by allowing residents and visitors to leave their cars behind when navigating the north-south axis of the city. The presence of a smooth, high-quality alternative to private automobiles and the bus system would promote a vibrant pedestrian environment, since users of public transit are also pedestrians. Keeping in line with the Mayor's goal of a "cleaner, greener, healthier, and safer" Baltimore, walkability and transit ridership will decrease pollution and increase use of City institutions, as well as support entertainment venues and boost retail development. Streetcars are not like heavy or light rail, which are designed to carry many people over long distances at high speeds. Streetcars are smaller and travel at slower speeds. They are not like busses, in that they are easier to board and do not lurch in and out of traffic because they run on fixed rails. As a result, they are less threatening to pedestrians, quieter, and have no exhaust fumes.

## **WILL THE SYSTEM BE HANDICAP ACCESSIBLE?**

The Americans with Disabilities Act (ADA) requires the system to be accessible but this project is intended to go beyond those requirements. Low-floor vehicles are the standard for modern streetcar vehicles and they allow for easy boarding by all users. Use of low-floor vehicles will also help reduce the boarding time at stops, reducing the impact on vehicle traffic and the overall travel time, and minimize the size and impact of the proposed stations on the pedestrian realm.

## **HOW WILL THE TROLLEY AFFECT THE POSSIBILITY OF MAKING CHARLES STREET A TWO-WAY STREET?**

While the presence of the Charles Street Trolley will likely prevent the street from becoming two-way, the Trolley will produce many of the same traffic-calming effects that a two-way street might give.

Although Charles Street will not be able to operate as a two-way street and at the same time remain able to accommodate the Trolley, other streets in the Midtown area will still have the option of becoming two-way streets. This combination would likely ease the flow of traffic and decrease the current difficulties of rush-hour congestion.

## **HOW WILL THE TROLLEY IMPACT THE ENVIRONMENT?**

Impacts from the trolley are generally expected to be favorable, introducing a cleaner, quieter form of public transportation and reducing reliance on autos for corridor travel. Trolleys

powered directly by electricity do not produce the exhaust that cars, trucks, and busses do, leaving a far smaller carbon footprint on the City and reducing the pollutants to which residents are exposed. With gas prices hitting record highs and dependence on foreign oil being a major political issue at the federal level, it only makes sense for cities to embrace greener forms of transportation like the trolley. Additionally, shifting travel from automobiles to transit has significant environmental benefits, as does the attraction of residents from suburban, automobile-oriented locations to a more urban, transit-supported corridor.

## **WHAT EFFECTS WILL THE TROLLEY HAVE ON NEIGHBORHOOD CRIME AND SAFETY?**

Public transit increases the number of pedestrians, therefore putting more eyes on the street, which has been shown to be a major deterrent to street-level crime. There is the possibility that the Trolley itself could be monitored by Transit Police or some other form of security personnel to ensure the safety of its riders.

In addition to increasing the pedestrian presence in neighborhoods along the proposed Trolley route, the existence of a reliable, short-distance form of Mass Transit in the corridor will provide an easy transit alternative for people leaving restaurants and entertainment venues, which would likely decrease the number of drunk drivers in the corridor.

## **HOW WOULD THE TROLLEY ADVERTISE ITSELF TO RESIDENTS AND TOURISTS?**

There would be pamphlets advertising the trolley route and the attractions along it, which would most likely be available at the universities and cultural destinations, as well as at the Convention Center and the hotels around the Inner Harbor. Signs indicating the route and the most popular destinations would also be posted at each stop.

## **WHERE CAN I LEARN MORE? HOW CAN I HELP?**

More information on the project can be obtained at [www.charlesstreet.org/trolley](http://www.charlesstreet.org/trolley). Working Groups will be formed in the fall to allow community members to provide input and suggestions regarding the Trolley's design as we move forward with the planning process. Any further questions concerning the project should be sent to [trolley@charlesstreet.org](mailto:trolley@charlesstreet.org).

Anyone interested can join our Friends of the Trolley supporters list by e-mailing their contact information to [trolley@charlesstreet.org](mailto:trolley@charlesstreet.org).

Please tell your friends and neighbors about the initiative and have them contact us if they have any questions or wish to show their support. This project cannot become a reality without the help of community members like you.