# THE CITY OF NEW YORK OFFICE OF THE COMPTROLLER SCOTT M. STRINGER

March 7, 2019

Commissioner Polly Trottenberg New York City Department of Transportation 55 Water Street New York, NY 10041

Re: BQE

Dear Commissioner Trottenberg,

Thank you for meeting today to discuss the Department of Transportation's proposals for the rehabilitation of the triple-cantilevered section of the Brooklyn Queens Expressway (BQE), and to learn about some alternative ideas for the project that my office has developed. As we discussed, while my office fully agrees that the current structure is in disrepair and is in urgent need of reconstruction, we feel it is important that the Department of Transportation consider a broad range of options for a project of this scale, and we remain hopeful that the agency can view the BQE's deterioration not just as an engineering challenge, but as an opportunity to create something new and bold that both accommodates essential traffic *and* enhances surrounding neighborhoods.

As you are well aware, many respected voices have called for a complete teardown of the triple cantilever. Such a proposal is, in fact, not without precedent. From Portland to Paris and San Francisco to Seoul, freeways have been removed and replaced in recent years with parks and plazas, creating vibrant new corridors that have become destinations in their own right. However, nearly all of these highway teardowns have been *car-only* parkways – which is distinctly different than the BQE, which carries some 14,000 trucks *per day* and 1,100 *per hour* at peak volume. We can't redirect those trucks on to local streets, we don't have enough freight routes in the city, and this section of the BQE serves an *essential* manufacturing and warehouse corridor from Sunset Park and Red Hook to the Brooklyn Navy Yard and North Brooklyn.

#### Two-Mile Linear Park Proposal

Despite these constraints, we think there is a possible middle-ground that both responds to traffic needs while also dramatically improving local air quality, reducing noise pollution, and rebuilding neighborhoods that have long been divided by the BQE. That solution – which we are hereby asking the DOT to examine more closely – is to convert the triple cantilever *and* the Cobble Hill trench into a truck-only highway with a new, vibrant linear park on top, starting from under the Brooklyn Bridge in DUMBO and stretching nearly two miles to Hamilton Avenue in Carroll Gardens. Of course, as with any project of this complexity, this proposal needs

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to be subjected to detailed traffic, engineering, and environmental analyses to assess its overall worthiness, but I ask that the DOT include it among its list of options for repairing the BQE.

Under our proposal, during construction, trucks would run in both directions on the middle-level of the cantilever while the DOT reconstructs the bottom-level – negating the need for any temporary highways. Then, when that rehabilitation work is completed, truck traffic would be permanently moved to the bottom section, traveling in one lane in each direction. Given that trucks represent only 9 percent of traffic on this six-lane section of the BQE, we are confident that two lanes will be sufficient to accommodate their daily and hourly throughput – as well as the handful of express buses that would also have access to these lanes.

Meanwhile, with the potential savings from only reconstructing one level of the cantilevered structure, we believe that the City could build a new, linear park on the middle section of the cantilever that would extend all the way to a new deck over the Cobble Hill and Carroll Gardens trench. The value of decking over the BQE trench and introducing a vibrant linear park and boulevard cannot be overstated. The width of Hicks Street plus the trench offers a significant amount of area for playgrounds, dog parks, ball fields, and bike lanes—while also keeping the existing above-grade car lanes and parking lanes in place. Beyond these advantages, we believe that there could be sufficient savings inherent in this approach to enable considerable investments in improving local subway and bus service.

### Community and Inter-Agency Engagement

Of course, the entire park should be designed in close collaboration with local residents and in conformance with the Uniform Land Use Review Procedure (ULURP), to ensure that the final amenities are actually consistent with community needs. It is essential that the many diverse voices of the neighborhoods in this area are given a chance to weigh-in on this or any other option, as part of a sound, long-term planning process. ULURP is the best way to ensure such an outcome.

As we both know, the construction of the BQE has a very troubling history. While Robert Moses would ultimately bend over backwards to appease Brooklyn Heights residents and build the Promenade, Cobble Hill was left with a noisy, polluting, gash running directly through the heart of the neighborhood. This proposal offers a rare opportunity to rectify that grave mistake and create not only a world-class green space, but also a direct connection to the Promenade and Brooklyn Bridge Park for pedestrians and cyclists. Ultimately, it would serve as both a new park and a transportation enhancement for local residents, weaving Cobble Hill and adjacent neighborhoods back together.

As with any project of this scale, of course, the New York State DOT, Metropolitan Transportation Authority, New York City Parks Department, and other stakeholders would need to be engaged in the planning process and environmental review.

#### **Important Precedents**

Furthermore, decking over the BQE trench is an attainable solution, as demonstrated by the success of similar projects around the nation, most notably Klyde Warren Park in Dallas. The

deck that was built for Klyde Warren was about half as long but twice as wide as the Cobble Hill trench, and cost a reasonable \$110 million. It was completed in 2014 and has inspired many imitators around the country.

Meanwhile, proposed designs for decking over the BQE trench in both Williamsburg and Cobble Hill have previously been assessed at approximately \$125 million. Importantly, depending on the cost savings that are realized, we think that the City could deck over both the Cobble Hill trench and the Williamsburg trench if we pursue the truck-only option for the triple cantilever. This, of course, would be transformative for much of Brooklyn.

### Mitigating Traffic Concerns

That said, closing the triple cantilever and the Cobble Hill trench to cars would have significant consequences, altering traffic patterns and potentially forcing cars onto surrounding neighborhood streets. We believe, however, that the Hugh Carey Tunnel, the Belt Parkway, carpooling, and, most importantly, public transit can collectively absorb nearly *all* of these automobile trips—though, of course, an in-depth traffic study will be necessary to evaluate this proposal.

As you are well aware, the triple cantilevered section currently carries approximately 72,000 cars in each direction. Over 80 percent of those trips are for intra-city travel and 35 percent are for intra-Brooklyn travel—which means that they can be supplemented by a wide range of local alternatives.

Additionally, existing traffic data shows that about 45% of current trips through the cantilevered section are *going to* or *coming from* the Brooklyn and Manhattan Bridges. Those are drivers who are seeking what are currently the most affordable City crossings but, if congestion pricing does pass, those same drivers could easily divert to the Hugh Carey Tunnel, where spare capacity exists.

Meanwhile, the Belt Parkway offers another viable traffic alternative, especially for trips to JFK International Airport, Jamaica, Canarsie, and other Queens and eastern Brooklyn locations. As you know, the Belt Parkway was considered by the DOT as an option for diverting traffic during the reconstruction of the triple cantilever, but that plan was ultimately shelved because the Belt is a car-only parkway and pedestrian bridges along the highway are too low for truck traffic. This, of course, would not be a concern under our proposal, as only *car traffic* would be diverted.

Beyond these questions of existing traffic and where it will be diverted, however, it is important to acknowledge that restricting access to the triple cantilever and the Cobble Hill trench will likely *reduce* car traffic. As we've seen time and again across the nation, highway traffic follows an iron rule: build more highways, get more cars; eliminate highways, get fewer cars. Ultimately, travelers want to get to where they are going as quickly as possible. If existing roads and highways offer the fastest trip from Point A to Point B, they'll drive. If not, they'll find other alternatives.

In New York City, of course, we have an extraordinarily dense public transit network—especially in this section of Brooklyn. And, given that 80 percent of car trips on the BQE triple cantilever are intra-city and about 35 percent are intra-Brooklyn, we are confident that with

increased frequencies on local trains and on local bus routes, many car trips can be diverted to public transit.

Moreover, given the MTA's commitment to comprehensively redesign Brooklyn bus routes in the next two years and the City's commitment to modernize traffic signals and expand the bus lane network, we believe the timing is right for this BQE proposal. With more bus lanes, higher frequency service, better designed bus routes, express bus access to the truck-only sections of the BQE, and greater City investment with the dollars saved from a scaled down triple-cantilever rebuild, the public transit system will be well positioned to absorb automobile trips. In fact, we believe the redesign of the BQE and construction of a two-mile linear park can serve as a catalyst for a comprehensive upgrade of our public transit system – as was the case with the removal of the Cheonggyecheon Freeway in Seoul, South Korea.

#### Conclusion

In sum, by diverting cars to the Hugh Carey Tunnel, to the Belt Parkway, to public transit, and to carpooling, we believe that the impacts of closing two miles of the BQE to car traffic can be mitigated to a large degree and will, in fact, incentivize more sustainable transit. In the process, we have an opportunity to save valuable dollars on the cantilever reconstruction – dollars that could be put toward linear parks in one (and possibly two) sections of Brooklyn, massive investment in public transit, and more vibrant, sustainable, and healthier neighborhoods across our city. In the end, this project could be a rare opportunity to not just fix a dilapidated highway, but to reimagine a vital section of our city through an integrated, community-focused process that advances not just a better roadway, but a greener, more vibrant city.

We greatly appreciate your consideration of this proposal and hope that it can be included among the options in the upcoming environmental review process. I have attached a PowerPoint presentation that more fully sketches our proposal, but please don't hesitate to call my office if you have any questions or would like to talk through the proposal in greater detail.

Sincerely.

Scott M. Stringer

New York City Comptroller



## A New Vision for the BQE



# The BQE is in Desperate Need of Repair



# **Two Proposals from DOT**

1

Temporary six-lane road above Promenade 6 years, \$3.2 - \$3.6

2

Reconstruct roadway on lane-by-lane basis with frequent weekend closures

8 years, \$3.4 - \$4 billion

### Moving Beyond the Robert Moses Status Quo

### Many are calling for a complete tear down of the triple cantilever highway







# A complete tear down is not without precedent

### Georges Pompidou Expressway, Paris

### Before



### After



### **Embarcadero Freeway, San Francisco**

Before



After



# Cheonggyecheon Freeway in Seoul





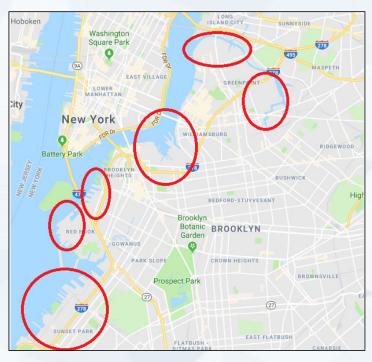
- Removed in 2008
- Served 168,000 cars per day
- Replaced with a 3.6-mile linear park (at a cost of \$385 million)
- Temperatures in the surrounding neighborhood fell by 6 degrees
- New, nine-mile Bus Rapid Transit corridor serves 120,000 riders/day
- Additional freeways removed in Seoul post-Cheonggyecheon

### However...

### The majority of major teardowns were car-only parkways

- On average, 14,000 trucks use this section of the BQE everyday.
- These trucks can weigh 5-times the average car and have 410-times the impact on pavement
- This section of BQE connects the important Sunset Park-Red Hook-Columbia Street-Navy Yard-North Brooklyn industrial corridor

### **Industrial Corridor**

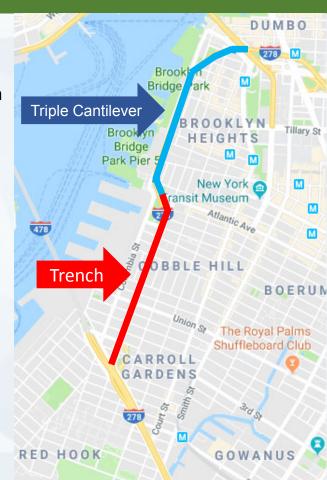


## The Proposal: Truck-Only Roadway

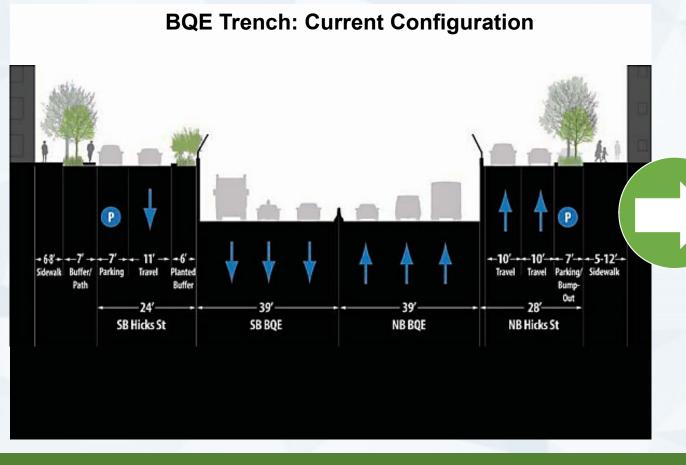


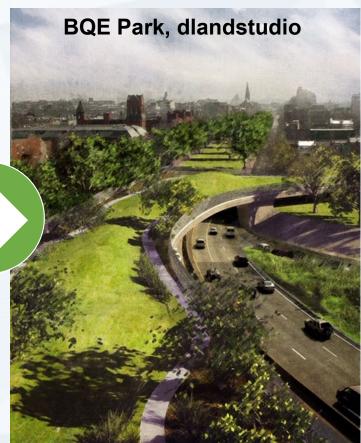
- Rehabilitate only one level of the highway
- Create a truck only roadway on the bottom level; one lane in each direction running from Brooklyn Bridge to Hamilton Avenue
- Cost savings devoted to:
  - Converting remaining roadway into a two-mile, linear park that extends from cantilever to Carroll Gardens
  - Long-term investment in local subway and bus routes





# **Decking over the BQE Trench**





## **Decking over the BQE Trench**

### Cobble Hill Linear Park would...

- Weave the neighborhood together
- Provide essential green space and park facilities
- Reduce noise and air pollution
- Provide a direct walking/cycling pathway to the Promenade and Brooklyn Bridge Park

# **Decking over the BQE Trench**

### Klyde Warren Park, Dallas



Cost: \$110 million

# dlandstudio Proposal: Williamsburg BQE Trench

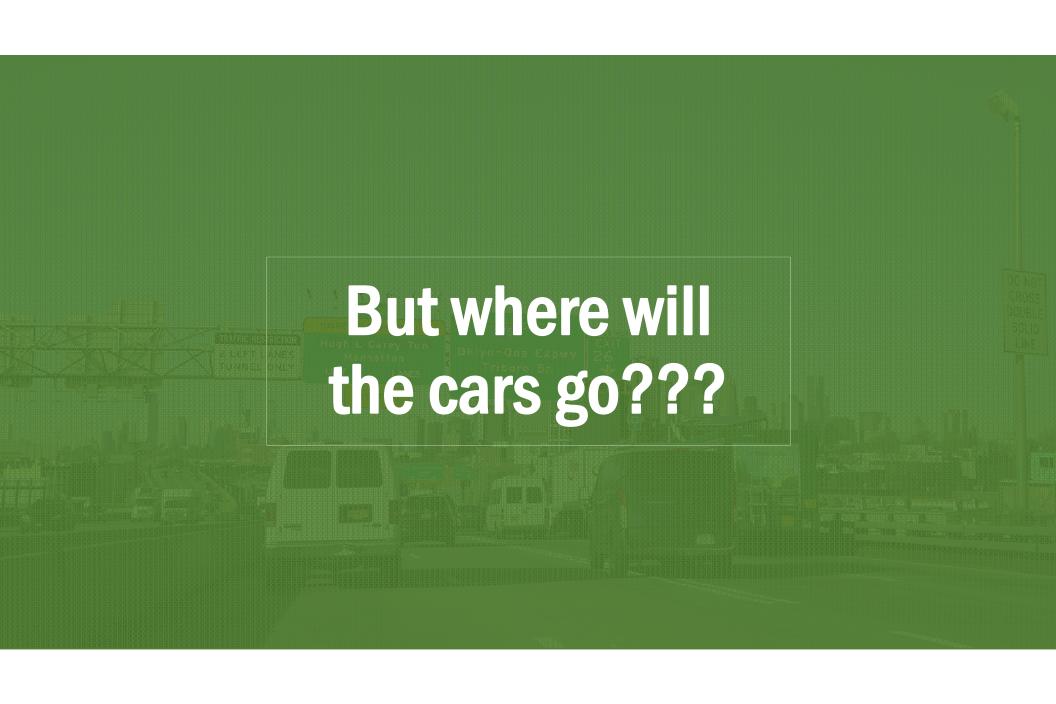


Projected Cost: ~\$125 million

# Proposal from EDC in 2011: Cobble Hill BQE Trench



Projected Cost: ~\$100 million



# Overview: where will the cars go?

- 1. Hugh Carey Tunnel
- 2. Belt Parkway
- 3. Increased carpooling
- 4. Enhanced subway and bus service

### **Current Traffic Patterns on the Triple Cantilever**

### **Eastbound Traffic**

- 68,000 automobile trips per day
- 80% are intra-NYC trips
- ~50% are traveling across the Brooklyn and Manhattan Bridges

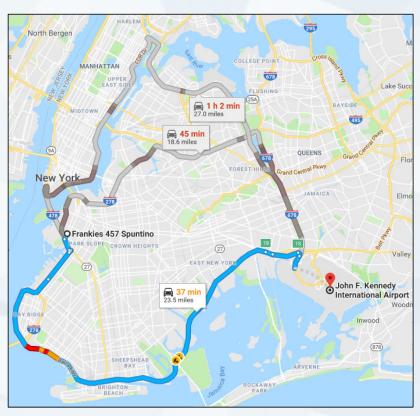
### **Westbound Traffic**

- 76,000 automobile trips per day
- 82% are intra-NYC trips
- ~40% are traveling from the Brooklyn and Manhattan Bridges

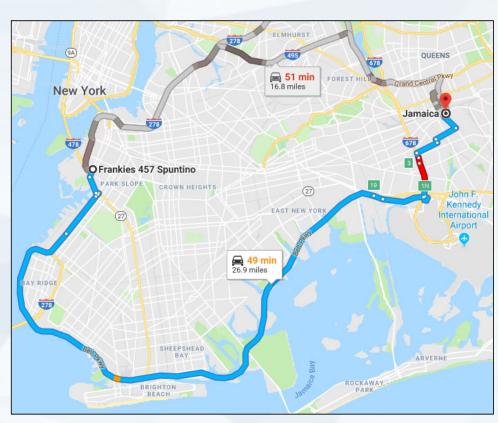
# Huge drop in Hugh Carey crossings in the last decade

Year	Henry Hudson Bridge	Hugh L. Carey Tunnel (Brooklyn- Battery Tunnel)	Queens- Midtown Tunnel	Robert F. Kennedy Memorial Bridge Manh. Plz. (Triborough Bridge)	Manhattan Totals
1996	58,759	57,091	72,285	92,981	281,116
1997	59,660	54,690	78.023	91,313	283,686
1998	59,339	61,091	79,697	93,863	293,990
1999	61,165	63 307	80,941	98,553	303,966
2000	66,304	63,242	80,879	103,079	313,504
2001	69,087	13,762	72,864	102,224	257,937
2002	70,731	56,976	82,834	94,759	305,300
2003	72,209	56,271	85,377	93,177	307,034
2004	73,114	54,488	86,599	97,958	312,159
2005	70,407	49,043	86,063	91.898	297,411
2006	71,761	57,436	89,972	98,582	317,751
2007	70,094	56,539	88,379	97,241	312,253
2008	69,101	55,037	86,709	95,146	305,993
2009	66,607	50,674	85,144	91,731	294,156
2010	69,641	54,187	88,014	93,455	305,297
2011	63,433	54,481	87,662	88,717	294,293
2012	63,434	54,299	87,937	90,956	296,626
2013	59,087	55,145	86,737	91,386	292,355
2014	58,809	54,007	86,081	91,509	290,406
2015	62,554	57 299	86,217	91,724	297,794
2016	62,648	54,076	73,470	95,552	285,746

# Trips to Queens are often faster on the Belt Parkway

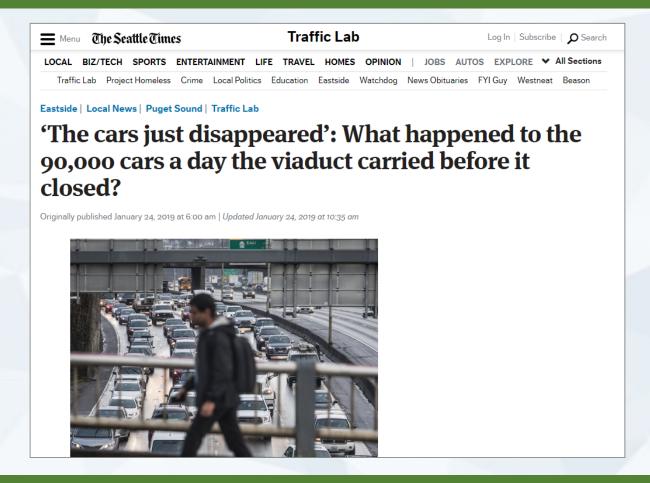


Carroll Gardens to JFK



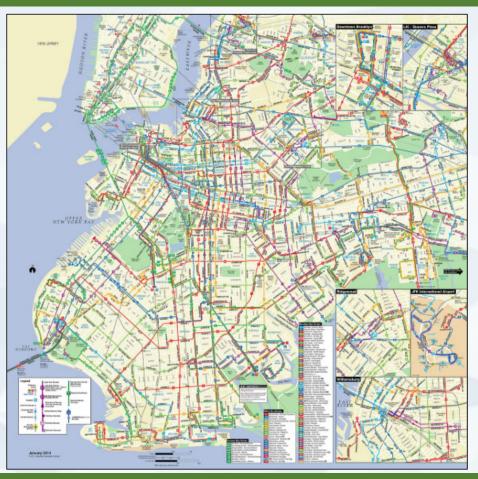
Carroll Gardens to Jamaica

# More highways, more cars. Fewer highways, fewer cars.



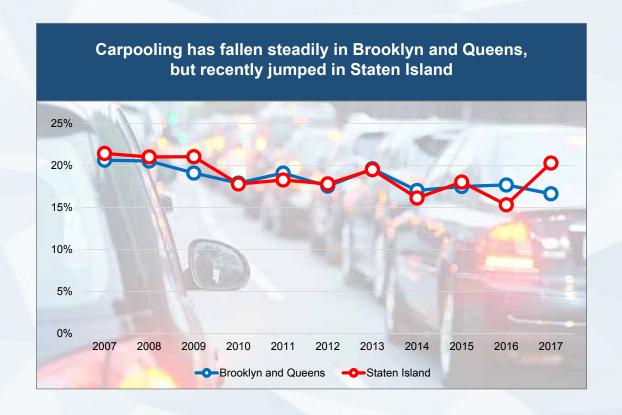
# Robust Public Transit Options





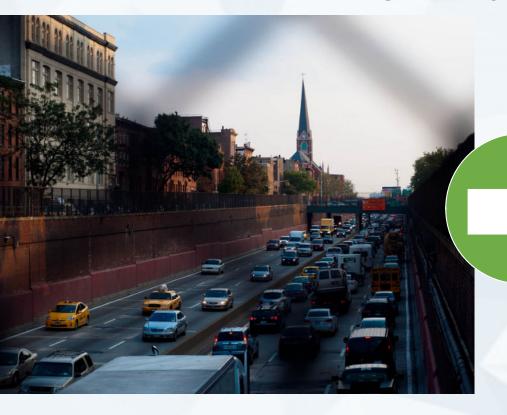
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# **Recent Trends in Carpooling**



# Truck only roadway

### A new greenway for New York City...





### **Next Steps**

- 1. Meet with community stakeholders
- 2. Request that DOT consider plan as part of its environmental review process
- 3. Bring relevant State agencies to the table
- 4. If pursued, planning would go through ULURP process

# THE END

# **Appendix**

# **Current Traffic Patterns on the Triple Cantilever**

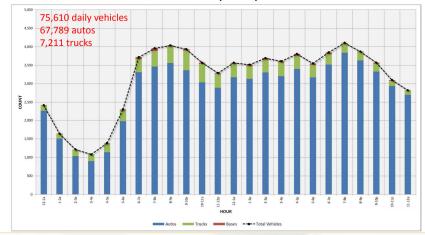
### **EASTBOUND**



### Where are they going to in the morning?

- ~50% are traveling across the BK and MN Bridge shopping for free crossings rather than entering through the Hugh Carey Tunnel
- ~20% are traveling into Queens and beyond
- ~30% are traveling to North Brooklyn

### • Eastbound count from NYSDOT (2011)



A New Vision for Brooklyn, A New Vision for the BQE

# **Current Traffic Patterns on the Triple Cantilever**

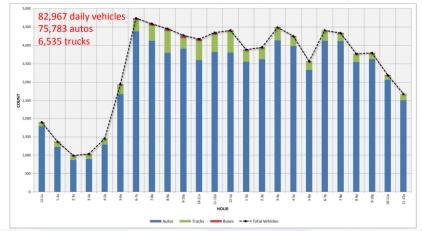
### **WESTBOUND**



### Where are they coming from in the morning?

- ~40% are traveling from the BK and MN Bridge toll shopping for free crossings
- ~15% are traveling into Queens and beyond
- ~45% are traveling to North Brooklyn

• Westbound count from NYSDOT (2011) – 82,967 daily vehicles

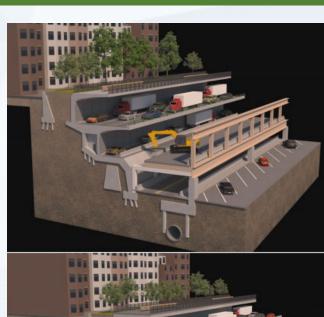


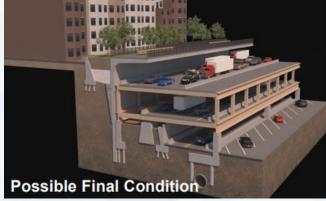
A New Vision for Brooklyn, A New Vision for the BQE

# One DOT proposal for rebuilding the triple cantilever









# Cost Estimate: Decked Park in Williamsburg

	UNIT				
ITEM	COST	UNIT	AMOUNT	COST	
Redesigned Parks			\$12,404,520		
New Trees	\$800	EA	343	\$240,000	
Bank Plantings	\$50	SF	27,645	\$1,382,250	
Traffic Calming	\$25	SF	24,413	\$610,325	
Decking	\$570	SF	69,530	\$39,632,100	
Pile Foundations		\$1,585,284			
Spread Footing Foundations				\$3,170,568	
Soundwalls	\$70	SF	1,133	\$79,310	
BQE Pavement Reconstruction	\$200	SY	3,500	\$700,000	
Earthwork (Backfill)	\$50	CY	5,685	\$284,250	
Tunnel Finishes And Lighting		LS		\$500,000	
Fire/Life Safety And Drainage		LS		\$1,000,000	
CONSTRUCTION SUBTOTAL				\$60,896,733	
Environmental Mitigation (noise, bust, & vibration)	1.0%		\$602	2,064	
Maintenance and Protection of Traffic (MPT)				\$4,000,000	
Geotechnical (compaction, pile load tests, etc)		0.5%		\$301,032	
CONSTRUCTION SUBTOTAL W/PROJECT WIDE COST				\$65,109,452	
Mobilization		4%		\$2,604,378	
CONSTRUCTION COST				\$67,713,830	
Contingency		20%		\$13,542,766	
CONSTRUCTION COST WITH CONTINGENCY				\$81,256,597	
Project Management		3%		\$2,437,698	
Engineering Design		10%		\$8,125,660	
Construction Management		3%		\$2,437,698	
Construction Inspection		12%		\$9,750,792	
Construction Support Services		4%		\$3,250,264	
Escalation (5+ years estimate)		20%		\$16,251,319	
TOTAL ESCALATED COST				\$123,510,027	
Community Center				\$20,000,000	
TOTAL ESCALATED COST WITH COMMUNITY CENTER				\$143,510,027	