

Baltimore Regional Transportation Board
Bicycle and Pedestrian Advisory Group

Lessons Learned from Design and Construction of the Anacostia Riverwalk Trail, Kenilworth Segment

September 20, 2017



Today's Speakers

- Ravindra Ganvir, PE – Deputy Chief Engineer, DDOT Infrastructure Project Management Administration
- Michael Alvino – Bicycle Program Specialist – Trails, DDOT Planning and Sustainability Division
- Tom Ryburn – Anacostia Waterfront Initiative Program Manager
- Melany Alliston-Brick, PE – Toole Design Group

Agenda

- Project Overview
- Summary of Lessons Learned
 - Project Sponsorship
 - Funding
 - Long Lead Time Items
 - Legal
 - Environmental
 - Public Engagement
 - Design Phase
 - Bid Phase
 - Construction Phase
- Project Successes

The Anacostia Riverwalk Trail



- Backbone of the Anacostia Waterfront
- 19 of 28 planned miles of trail open
 - 5 miles in design
- From the tidal basin to the District's northeast and southeast borders with Maryland
- Seamless pedestrian and bicycle travel between popular destinations and 16 neighborhoods

Kenilworth Trail Segment



- Connects Benning Road in the District with Bladensburg Park in Maryland
- Missing link in 70-mile Regional Trail Network
- Opened on 10/31/2016
- \$23 million project investment
- Already approaching 20,000 trips per month

Key Project Features



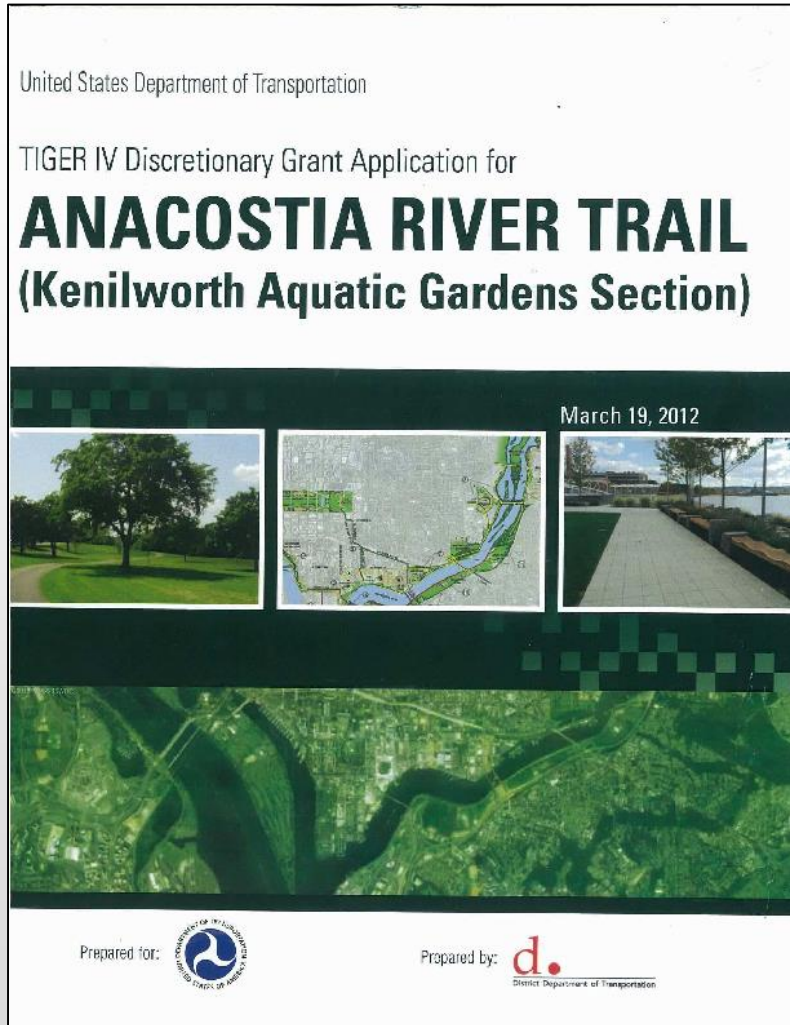
- 3.9 miles of asphalt-paved trail
 - 3.4 miles in the District
 - 0.5 miles in Maryland
- 5 Prefabricated bicycle/pedestrian bridges
- 1,250 feet of heavy-duty boardwalk
- 2.11 acres of soil restoration and reforestation in Maryland
- Work in Amtrak right-of-way

Lessons Learned - Project Sponsorship



- Requires strong project sponsor with:
 - Firm commitment to funding and implementation
 - Understanding of project scope and how to build it
- One agency lead
- Trail projects should not be taken lightly!

Lessons Learned - Funding



- Understand funding requirements and performance measures
- Plan for multiple funding sources
- Be prepared for higher match
- Reporting requirements can be extensive

Lessons Learned – Long Lead Time Items



- Identify early
- Coordinate from day 1
- Include staff time and consultant cost
- Environmental documentation
- Federal/State permits
- Interjurisdictional agreements
- Railroad coordination

Lessons Learned – Legal



- You may need a lawyer if:
 - Acquiring property
 - Working with utility companies or railroads
 - Project crosses multiple jurisdictions
- Legal agreements take time
- Identify stakeholders and get agreements in place early

Lessons Learned – Legal



- Working with the railroad requires:
 - Time
 - Money
 - Friends in high places

Lessons Learned – Environmental



- Identify type of document needed
- May need more than one
- Whole project at once
- Do it at the right time

Lessons Learned – Public Engagement



- Long breaks also require extra public engagement
- What is “required” may not be enough

Lessons Learned – Design Phase




- Avoid long breaks between design phases
- Document design decisions
- Avoid change in consulting teams

Lessons Learned – Bid Phase

GOVERNMENT OF THE DISTRICT OF COLUMBIA

DEPARTMENT OF
TRANSPORTATION

INFRASTRUCTURE PROJECT MANAGEMENT
ADMINISTRATION



BID FORMS AND PROPOSAL

INVITATION NO. DCKA-2013-B-0157

<p>PROJECT: ANACOSTIA RIVERWALK TRAIL KENILWORTH TRAIL SECTION</p> <p>Federal Aid Project Nos. DC CM-8888(431) MD888431</p>

Bids Will Be Publicly Opened By The Office Of Contracting and Procurement Bid Room
located at 55 M Street SE 4th Floor, Washington, D.C. 20003

Bids Will Be Opened On _____ At 2:00 P.M.

- Lack of clarity in construction documents
 - = risk
 - = higher bids and construction costs
- Consider the time required to prepare a complex bid

Lessons Learned – Bid Phase



- Provide as much information as possible on:
 - Limited site access
 - Site constraints
 - Environmental restrictions
 - Difficult working conditions
 - Potential subsurface conditions
- Include mitigating contract language

Lessons Learned – Construction Phase



- Quality subsurface investigations are invaluable
 - Geotechnical
 - Utility Survey
- 90% of construction claims are subterranean
- Allows transfer of risk from project sponsor to contractor

Lessons Learned – Construction Phase



- Beware of specialty construction
- Use locally available materials
- Plan for substitutions
- Overly prescriptive specifications can work against you

Lessons Learned – Construction Phase



- Time is \$\$\$
- Good construction management is essential for complex projects
- Document everything
- Know your recourse for nonperformance

Project Successes



- Opened on 10/31/2016
- \$23 million project investment
- Approaching 20,000 trips per month



Questions?