T&E COMMITTEE #1
June 29, 2015

MEMORANDUM

June 25, 2015

TO: Transportation, Infrastructure, Energy and Environment (T&E) Committee

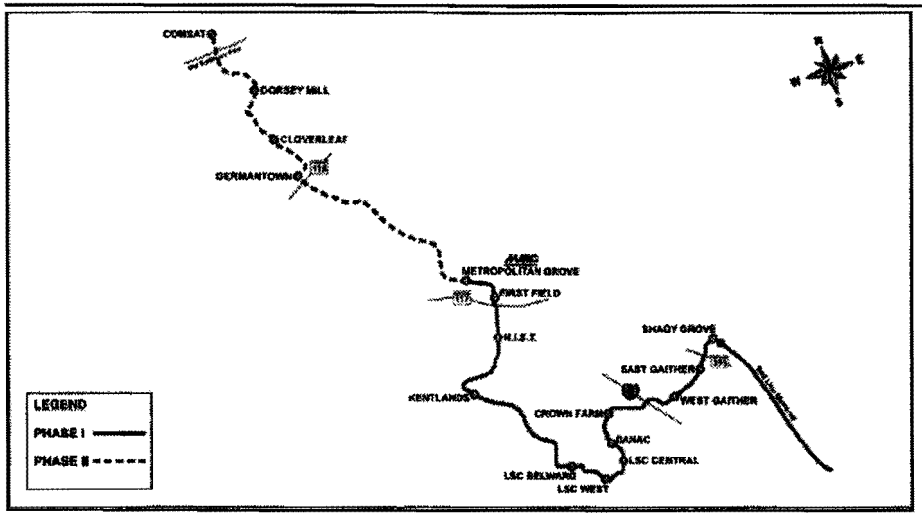
FROM: Glenn Orlin, Deputy Council Administrator

SUBJECT: Corridor Cities Transitway update

Over the last few years considerable of amount of work has been conducted to finalize the design of the Corridor Cities Transitway (CCT) Phase I, a busway between the Shady Grove Metro Station and Metropolitan Grove. The CCT—including Phase II (from Metropolitan Grove to Clarksburg)—is the Council's and Executive's #2 State transportation construction priority. The Maryland Transit Administration (MTA) is completing a draft environmental assessment on the CCT and expects to release it in the fall, which will be followed by a public hearing.

The last official cost estimate was produced in 2012 and was $545 million (in 2012 dollars). However, the estimate now is in the $700-800 million range, which includes inflation to the years of construction, assuming construction in the latter part of this decade and into the next. A more precise estimate will be released when the draft environmental assessment is released. The Maryland Department of Transportation (MDOT) FY15-20 Consolidated Transportation Program (CTP) budgeted $40 million for detailed design and nearly $40 million for right-of-way acquisition between FY16-19. The CTP shows $145 million of State funding beyond the program period for construction; this is MDOT's current marker as to how much it would be willing to expend in State funds; the balance would come from Federal and local funds. The CTP's Project Information Form is on ©A.

Rick Kiegel, MTA's long-serving project manager for the CCT, will brief the Committee on the status of the project's design and schedule. Much of his presentation is on ©1-18. He will trace the design from Shady Grove to Metropolitan Grove, highlighting those segments that have received the most evaluation recently. The most attention has been on route through Belward Farm and along Muddy Branch Road, about which several nearby communities wrote to the Governor in April (©19-28). Mr. Kiegel will address these issues in his presentation.



PROJECT: Corridor Cities Transitway (CCT)

DESCRIPTION: The Corridor Cities Transitway (CCT) is a 16-mile bus rapid transit line between Shady Grove Metrorail Station and the former COMSAT facility in Montgomery County. The line would be constructed in two phases: from Shady Grove to Metropolitan Grove and from Metropolitan Grove to COMSAT. The project includes a grade separated busway, stations, rapid transit vehicles, and a maintenance facility.

PURPOSE & NEED SUMMARY STATEMENT: The CCT will provide faster, more direct transportation between residential and major employment areas in the I-270 corridor. It will enhance access to Shady Grove station and employment areas, increase capacity of congested roadways, support economic development consistent with local master plans, and reduce environmental impacts.

SMART GROWTH STATUS: ☐ Project Not Location Specific ☐ Not Subject to PFA Law

- [X] Project Inside PFA
- [ ] Project Outside PFA
- [ ] PFA Status Yet to Be Determined

- [ ] Grandfathered
- [ ] Exception Will Be Required
- [ ] Exception Granted

STATE GOALS : **Maryland Transportation Plan (MTP) Goals/Selection Criteria:**

- [ ] Safety & Security
- [ ] System Preservation
- [X] Quality of Service
- [X] Environmental Stewardship
- [X] Community Vitality
- [X] Economic Prosperity

EXPLANATION: The CCT will serve a corridor with rapidly developing residential and employment sites, particularly in the Life Sciences Center in Rockville and Gaithersburg.

ASSOCIATED IMPROVEMENTS:
Montgomery County Local Bus Program - Line 27
SHA-M-1 - I-270/Watkins Mill Road Extended
SHA-F-8/M-13 - I-270 and US 15 Corridor Study (D&E)
SHA-F-9 - MD 85 (D&E)

STATUS: Preliminary engineering for Phase 1 scheduled to begin in FY 2015. Phase 2 activities include updates to natural resource inventories, station area planning, and development tracking.

SIGNIFICANT CHANGE FROM FY 2014 - 19 CTP: Total estimated cost increased $20.0M. Advancement to construction would require additional federal or regional funding.

POTENTIAL FUNDING SOURCE: [X] SPECIAL [X] FEDERAL [ ] GENERAL [ ] OTHER

PHASE	TOTAL ESTIMATED COST ($000)	EXPEND THRU 2014	CURRENT YEAR 2015	BUDGET YEAR 2016	PROJECTED CASH REQUIREMENTS FOR PLANNING PURPOSES ONLY ....2017....	....2018....	....2019....	....2020....	SIX YEAR TOTAL	BALANCE TO COMPLETE
Planning	36,071	23,309	7,900	4,862	0	0	0	0	12,762	0
Engineering	40,000	0	0	12,000	17,000	7,000	4,000	0	40,000	0
Right-of-way	39,740	0	0	2,000	18,000	19,740	0	0	39,740	0
Construction	145,000	0	0	0	0	0	0	0	0	145,000
Total	260,811	23,309	7,900	18,862	35,000	26,740	4,000	0	92,502	145,000
Federal-Aid	1,501	1,501	0	0	0	0	0	0	0	0

1108

CORRIDOR CITIES TRANSITWAY

Presented to:

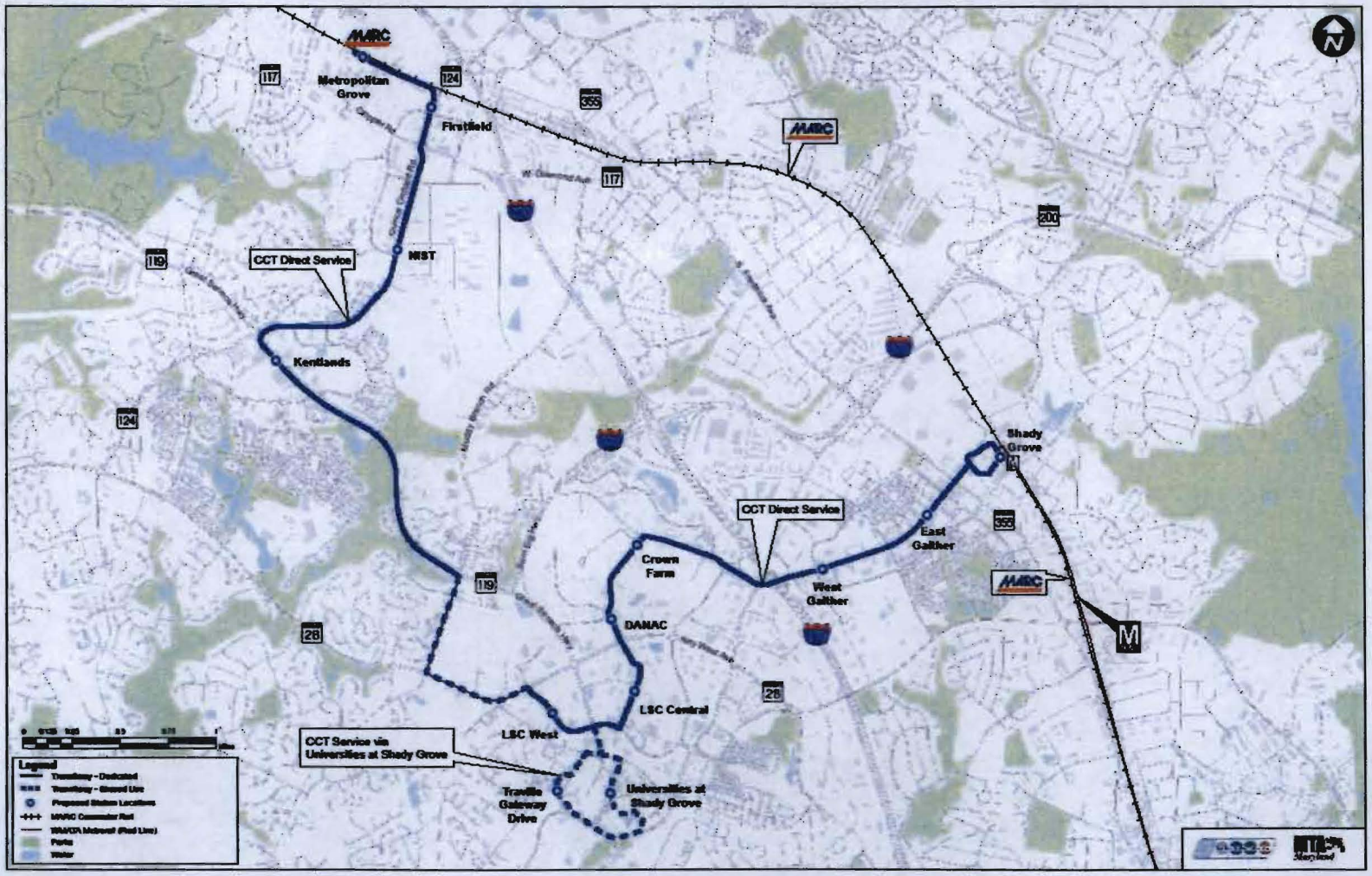
Montgomery County Council
T&E Committee

June 29, 2015

MTA Maryland
Maryland Department of Transportation

Corridor Cities Transitway

Phase I - Project Map



Project Progress

- 15% Plans completed August 2014
- Review and comments from local jurisdictions and agencies
- Regular coordination meetings with local jurisdictions and agencies
- NEPA documents and FTA review
- Design related to all disciplines
- Value Engineering

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Corridor Cities Transitway

Area Advisory Committees

- Three organized in Early 2014 (geographically)
- Kick-off Event and eight regular meetings
- Topics have included alignment, station locations and design, traffic and signalization, SWM, urban design, and operations planning
- AAC Process is completed.

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Stations

- Sizing (VE Study)
- Canopy Architecture
- Amenities – TVM, Benches, Wind Screens, Bike Racks
- Lighting
- Signage

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Side-Aligned Center

- Contextual Influence: Bioscience
- Helix as Generative Form
- Translucent Canopy
- Tree Structure
  - Concrete Column
  - Steel Pipe Frame

FIRSTFIELD STATION
SIDEWALK VIEW

FIRSTFIELD STATION
PLATFORM VIEW

Aerial

- Contextual Influence: Bioscience
- Helix as Generative Form
- Translucent Canopy
- Tree Structure
  - Concrete Column
  - Steel Pipe Frame
- Community Space
- Vertical Circulation

KENTLANDS STATION
PLAZA LEVEL VIEW

KENTLANDS STATION
PLATFORM LEVEL VIEW

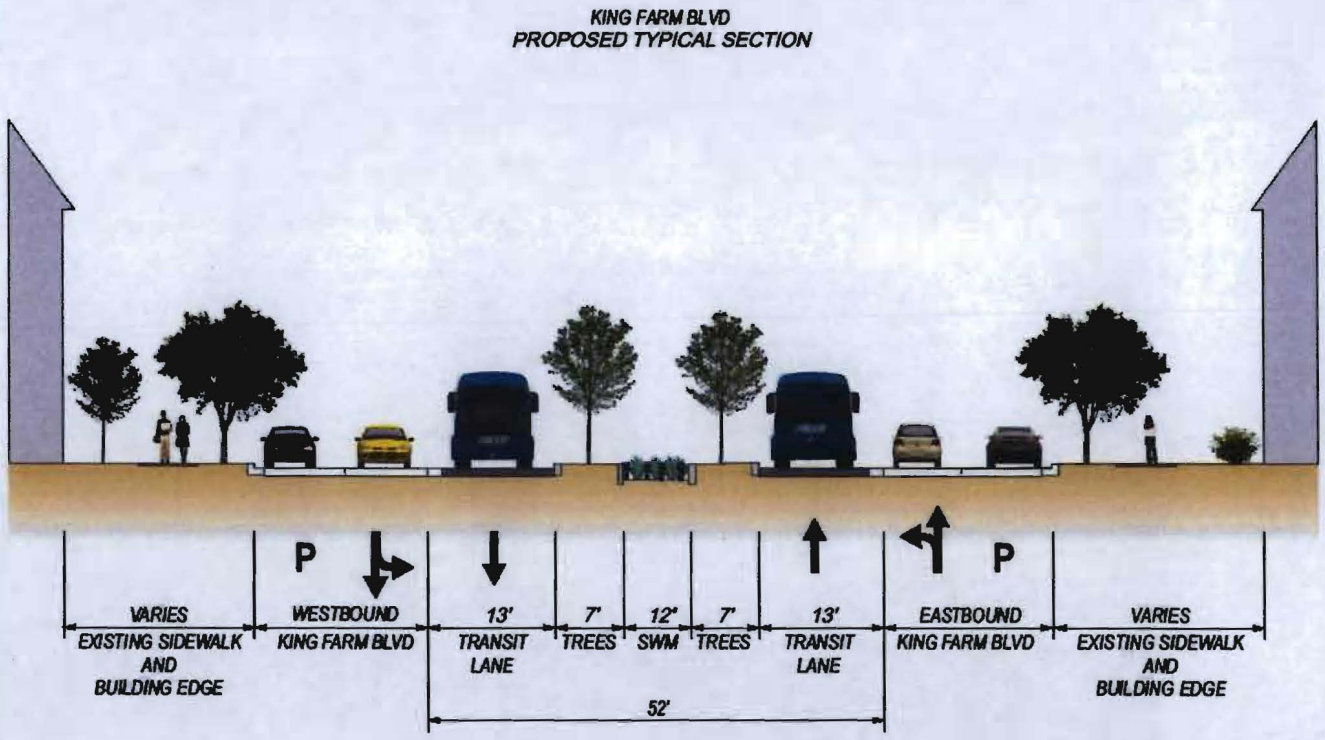
Shady Grove Metro

- Modified Bus Bays and Parking
- New Station Entrance
- Access/Circulation

Corridor Cities Transitway

King Farm

- AAC Three
- Typical Section
- Median Closures



Corridor Cities Transitway

I-270 Crossing

- Utility Impacts
- New Alignment
- Fields Road

Corridor Cities Transitway

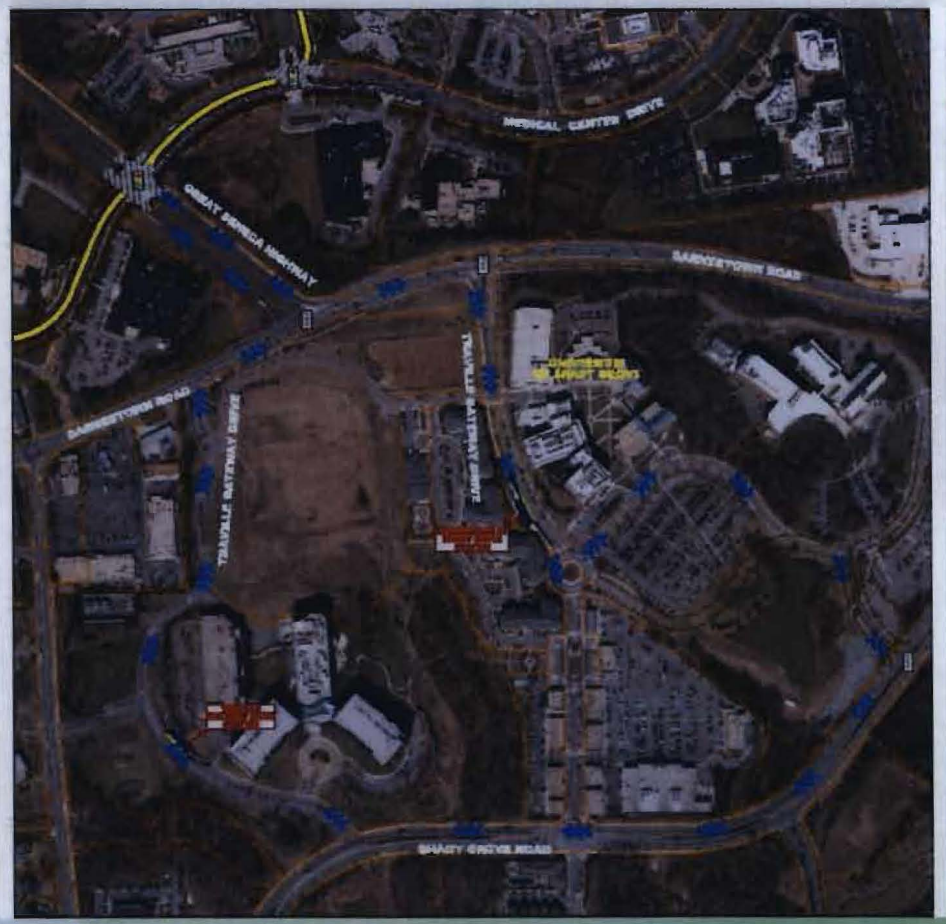
Key West Avenue at Diamondback/Broschart

- Alignment Options
- Utility Impacts

Corridor Cities Transitway

CCT Service via USG

- Requested service to the campus
- Mixed traffic operations (BRT flexibility)
- Operations Plan
- Reduced station size



Corridor Cities Transitway

Muddy Branch Road

- Alignment Options
- MCDOT and MTA Agreement
- Master Plan considerations
- Planned Typical Section

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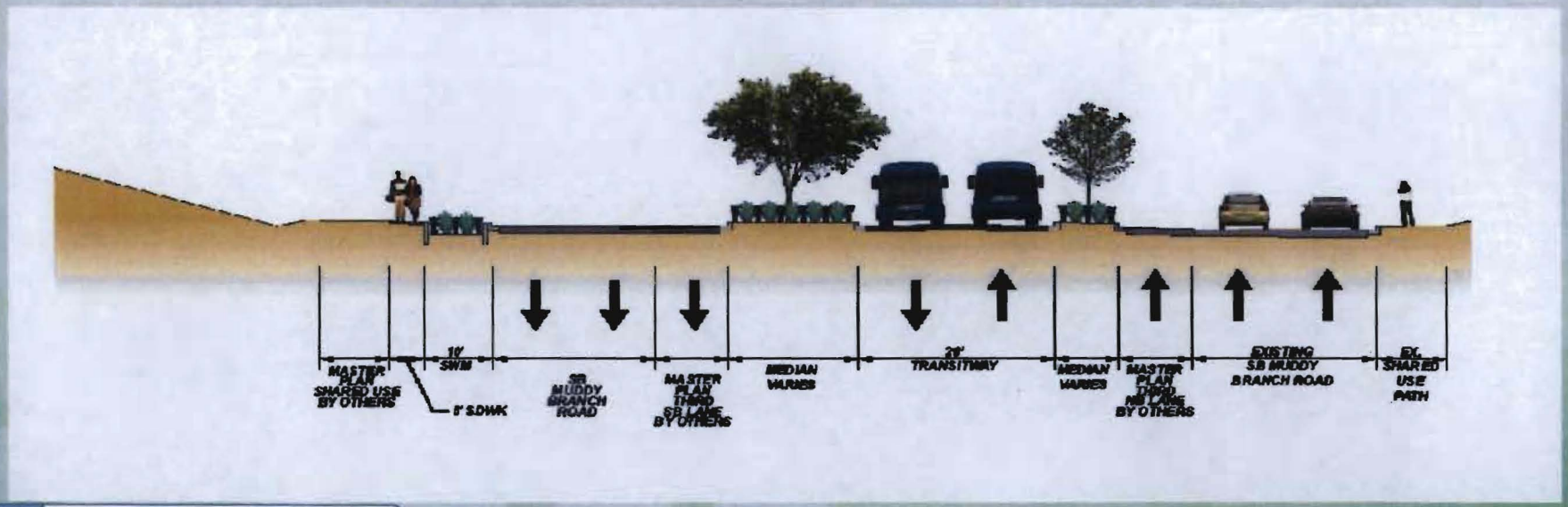

Corridor Cities Transitway

FTA Comments on Section 4(f)

- Belward Farm – Historic Eligible
- Feasible and Prudent Alternative
- Avoidance of the farm – no Belward Station
- Mixed Traffic Operations on MBR and Darnestown/KWA

Great Seneca Highway

- Impacts on Washingtonian Woods
- Other options evaluated
- Alignment Shift and Narrowed Transitway (VE Study)
- Retaining Wall and Noise Wall

GRAPHIC COMING

Alignment at CSX

- Do not cross CSX in Phase I (remain on SW side)
- Station parking at existing MARC lot (expandable as needed)
- Pedestrian bridge over CSX to Watkins Mill development
- First Field Station

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Schedule

- August 2014 – Draft EA and 15% Design Submittal
- Fall 2015 – EA Public Hearing
- Fall 2015 – 30% Design Submittal
- Winter 2015/2016 – FONSI
- Winter 2015/2016 – Initiate design activities
- Winter 2016/2017 – Begin Right-of Way Acquisition/ Permitting/ Agreements
- Spring 2018 – Begin Construction
- 2021 – Begin Service

Funding

- FY 2016
  - Planning - $4.9M
  - Engineering - $3.0M
  - R/W - $2.0M
- FY 2017
  - Engineering - $10.0M
  - R/W - $18.0M
- FY 2018
  - Engineering - $14.0M
  - R/W - $19.7M
- FY 2019
  - Engineering - $13.0M
- FY 2020
  - Construction - $0
- FY 2021
  - Construction - $0
- BTC
  - Construction - $145.0M

Estimated Construction Cost

$545.0M (2012)

Corridor Cities Transitway

The Honorable Lawrence Hogan
Governor of Maryland
100 State Circle
Annapolis, MD 21401

April 20, 2015
Dear Governor Hogan,

Congratulations on your election to governor of the wonderful state of Maryland.

The undersigned communities of Montgomery County write today seeking fairness and resolution to the unwelcome and avoidable consequences of a flawed state transit project that has enraged thousands of residents in Gaithersburg, North Potomac, Rockville, Darnestown and beyond.

The project is the Cities Corridor Transitway (CCT).

After years of civic action, public meeting attendance, committee volunteering, and numerous FOIA requests and meetings with politicians (in our homes, their offices, at coffee shops), no measures have been taken to reduce the negative impacts posed to homes, health and the environment.

In brief, the CCT project will bisect the suburban/rural upper Montgomery County landscape with an urban two-lane dedicated BRT system that is:

A.) Aligned aggressively close to residential properties and neighborhood egresses,
B.) Redundant with existing Ride On routes (See Attachment A), which currently operate well below capacity.

To whom have we spoken? Former Governor O'Malley and Anthony Brown, former Transportation Secretary Smith, Henry Kay and Rick Kiegel at the Maryland Transit Authority (MTA), Congressman Delaney, the Mayors of Gaithersburg and Rockville, Gaithersburg City Councilmembers, District 15 and 17 Maryland State Delegates, the State Highway Administration (SHA), Maryland-National Capital Parks and Planning Commission, the Montgomery County Planning Board, Maryland's Secretary of Transportation (Pete Rahn and Don Halligan), Montgomery County Department of Transportation (both past and present Directors), and the Montgomery County Executive's Office and County Council.

THE ISSUES:

1. Decisions about the CCT are made regardless of its effects on the community. The alignment, for example, goes out of its way to accommodate a future build-out of Belward Farm by Johns Hopkins. (See Attachment B.) Yet, Hopkins has produced no concrete plans/specifics for that property.

2. The CCT is not cost-effective. With its heavy up-front investment and subsequent maintenance costs, the proposed CCT is not the most cost-effective way to deal with increased road traffic. A gradual expansion and upgrading of the existing Ride-On bus service, as the need arises, is a smarter use of taxpayer resources.

3. The CCT route is longer in distance and time than current Ride On service. (See Attachment C.)

4. The debt service is projected to be an astronomical $20M a year, based on the following assumptions:
   - Costs will not exceed the current budget of $550M.
   - JHU contributes $100M.
   - Financing terms resemble those of Virginia's Silver Line. This includes a 35-year loan amortization and obtaining a loan under the Transportation Infrastructure Finance and Innovation Act (TIFIA).

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- A $20M-per-year debt service puts the total cost at $700M. To meet this, the CCT needs 2M riders per year, at $10 per trip.* That's 5,479 riders per day (including Saturdays and Sundays) just to service the debt. This DOES NOT include operation and maintenance costs. (See Attachment D.)
    - Current Ride On fare: $1.75 (one way), no matter how far you go.

5. Neighborhoods along the CCT alignment will be greatly and adversely affected:

- The CCT Line of Disturbance (LOD) goes five feet into backyards on Upshire Circle. When construction is complete, buses will run 10-20 feet from homes Upshire Circle homes and Vistas condos every three minutes. This puts 50MPH buses dangerously close to where children play.
- The CCT alignment, by law, necessitates noise mitigation between Great Seneca Highway and homes in Washingtonian Woods, but there is insufficient space to build a noise wall or berm.
- 1-2 homes will be lost in Mission Hills when Muddy Branch Road is widened by the County; this, because the CCT will occupy the median that the County previously tagged for road widening.
- The CCT will obstruct primary egresses to Washingtonian Woods and Mission Hills. These suburban subdivisions were built as a series of cul-de-sacs with car travel in mind. Note: There are no CCT station stops servicing these neighborhoods.
- Hundreds of mature trees will be lost along Great Seneca Highway.
- Muddy Branch and Washingtonian Woods Park — where children play, fishers fish, and walkers hike — will be harmed by runoff and airborne particulate matter.
- The alignment will result in massive back-ups on Muddy Branch Road due to the addition of two traffic lights — for a total of four traffic signals in a .55-mile span. This signal spacing ignores Federal Transportation Administration safety guidelines.
- The CCT divides King Farm in half, closing cross streets and impeding cross-community access.

6. Impacts to emergency vehicle access — police and fire/rescue — into Washingtonian Woods and Mission Hills have not been factored/presented.

7. Homeowners are not being compensated for loss in property values.

QUESTIONS UNANSWERED:

1. In addition to "Build" and "No Build" scenarios, why hasn't a "Ride On Revamp" model been studied? Ride On is less than half-full along this segment, is scalable, and requires no build-out or collateral damage.
2. Can the projected 36,000 daily trips (in 2035) be backed-up in a way everyone understands? Volume at key "loading stations" is not well proven. (Attachment E.)
3. The CCT is planned for the median of Muddy Branch Road, yet the median of Great Seneca Highway, we are told, is "off the table" due to the storm water management that currently occupies the median. Storm water management expert Nimish Desai tells us that this SWM is "out-of-date" and "has a high rate of failure." Why not simultaneously upgrade it and accommodate the CCT?
4. How will the debt service be funded?
5. How will Shady Grove Metro be built-out to accept the purported new mass of riders?
6. Where are pedestrian and bicyclist accommodations and amenities in the CCT blueprint?
7. Where will compensatory trees be planted to replace what is lost?
8. Explain where corridors are left for wildlife to move up and down the stream under Great Seneca? Specific species of concern are snapping turtles, beaver, and deer.

9. It can be shown that areas like Belward Farm provide waters that heal the injury of the impervious surfaces of the city. How will this loss to the ecosystem be solved?

10. What mitigation measures will protect the Muddy Branch, Washingtonian Woods Park, and replace the wetlands at Muddy Branch Road and Great Seneca Highway during and after the construction?
11. With the increased impervious surfaces, how will impacts on a watershed already impaired for chlorides be minimized?
12. The CCT doesn't accommodate for future construction of proposed grade-separated interchanges at Muddy Branch Road and Great Seneca Highway, and Sam Eig Highway at Great Seneca Highway? This is a huge oversight. How will this affect the cost of the interchanges when they are built?
13. What are Hopkins' plans for Belward Farm — short-term and long-term?
14. Who pays for necessary grading, SWM and incremental sewer lines on Belward (and beyond) prior to construction of the CCT? Who pays for the construction of the road across Belward?

SENSIBLE SOLUTIONS:

1. Plan for a less costly, gradual upgrading and selective re-routing of the Montgomery County Ride-On Bus service as the need for increased ridership emerges. Poll the public. Will they ride this bus to work? The MTA used a computer-generated software model to forecast 2035 ridership. Logic dictates that if employees along this corridor don't presently take the Ride On bus, they will not take the CCT.

If this is not done:

2. Realign the CCT to the median of Great Seneca Highway and utilize Option 4 (from the Mission Hills Study). (See Attachment F.) This moves the CCT out of Washingtonian Woods yards, and away from Washingtonian Woods Park and the Muddy Branch. It also takes the CCT off Muddy Branch Road entirely, solving most concerns above. Plus, Option 4 shaves one minute off the trip between Shady Grove Metro and Metropolitan Grove MARC.

3. Incorporate new pedestrian pathways (including an overpass at Muddy Branch Road and Great Seneca Highway) and bikeways to further the objective of getting cars off the road. One of the unintended consequences of the CCT is that it will put those trapped in their neighborhood into cars to go distances currently walked or biked.

4. Finally, developer money should not be accepted to kick-start or float this project in any way. It is self-serving and fraught with ethically errant.

"Common sense is as rare as genius."
— Henry David Thoreau

Projects for "the public good" fail when its governing bodies fail to acknowledge its taxpayers. We residents have the practical knowledge to complement the engineering expertise of the MTA.

We'd like a seat at the transportation table, for more sensible public transit.

Kind Regards,

Washingtonian Woods HOA President, Russ Dalin

Mission Hills HOA President, Jeff Jex

The Vistas Condo Assoc. President, Alyson Meiselman

The Oaks Condo Assoc. President, Marty Deutsch

Sensible CCT & MTA Area 2 Citizens Advisory Committee Member, Lisa Cline

Scale-It-Back.com Coordinator, The Gaithersburg–North Potomac–Rockville Coalition, Donna Baron

North Potomac Citizens Association (NPCA) President, Susan Fitzpatrick
NPCA, Naomi Yount, Stu Callison, Mary Ellen Hughes

GSSC Implementation Advisory Committee Co-Chair, Phil Usatine
GSSC Implementation Advisory Comm. Member/Belward Farm Steward, Tim Newell

Darnestown Civic Association President, Lisa Patterson
Darnestown Civic Association Chairman, Art Slesinger

Montgomery Countryside Alliance Executive Director, Caroline Taylor
Montgomery Countryside Alliance Past President, Diana Conway

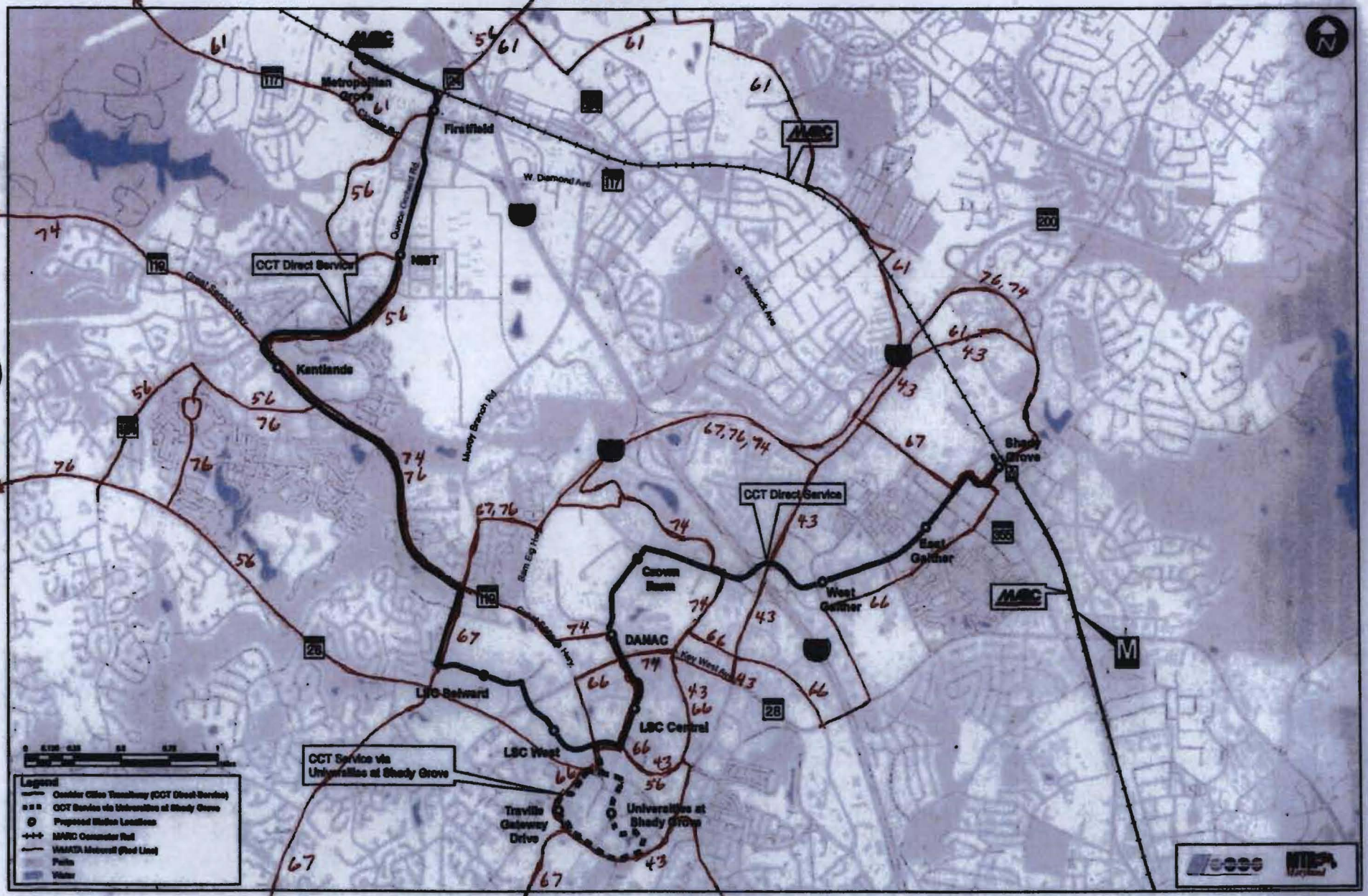
The Muddy Branch Alliance Director and Environmental Engineer, Paul Hlavinka

King Farm Citizens Assembly President, Gail Sherman
King Farm Citizens Assembly Board Chair, MTA Area 3 Citizens Advisory Committee Member & City of Rockville Traffic and Transportation Commissioner, Mel Willis

Lakelands HOA former board member, Muddy Branch Alliance VP, former transportation planner and current consultant, Cynthia Pansing

Area 2 Citizens Advisory Committee Member and Woods Resident, John Dunlop

North Potomac Resident, Lisa Sontheimer



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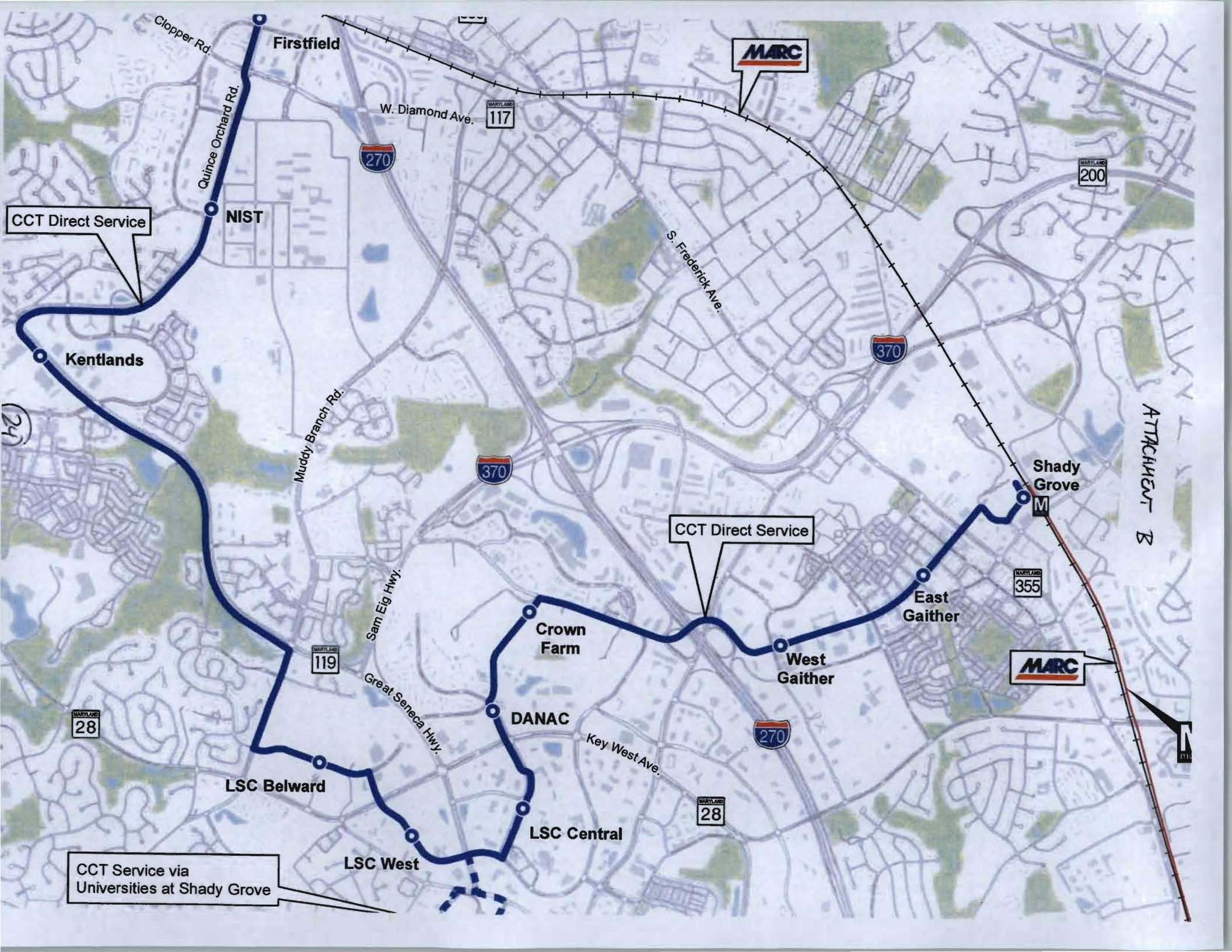
ATTACHMENT A


Clopper Rd.
Firstfield
Quince Orchard Rd.
W. Diamond Ave.
MARC
117
270
200
NIST
CCT Direct Service
S. Frederick Ave.
370
Kentlands
Muddy Branch Rd.
Shady Grove
CCT Direct Service
Sam Eig Hwy.
355
East Gaither
Crown Farm
West Gaither
MARC
119
Great Seneca Hwy.
DANAC
28
Key West Ave.
270
LSC Belward
LSC Central
28
LSC West
CCT Service via Universities at Shady Grove
ATTACHMENT B

TRAVEL TIMES ON THE CCT BUS SYSTEM, DRIVING AND RIDE-ON BUSES

Point A	Point B	Travel time driving	Travel time on CCT buses	Number of CCT station stops	Travel time on current Ride-On bus system
Metropolitan Grove	Belward	7 minutes	14 minutes	3 stops	Metropolitan Grove to Shady Grove Hospital - 28 minutes
Metropolitan Grove	Shady Grove Metro	11 minutes	38 minutes	10 stops	Ride the Marc train to Metro at Rockville and transfer
Kentlands	Crown Farm	6 minutes	20 minutes	4 stops	10-16 minutes
Kentlands	Shady Grove Metro	11 minutes	26 minutes	7 stops	15 minutes
Public Safety Training Academy	Shady Grove Metro	9 minutes	20 minutes	5 stops	20 minutes to the Rockville station
Belward Farm	Shady Grove Metro	9 minutes	24 minutes	6 stops	14 minutes

Parking: The number of parking spaces at the CCT bus stations has not been determined. Most CCT stations such as Belward Farm will not have public parking.

Frequency of service for the CCT buses will be every 3.5 minutes during peak periods, every 6 minutes mid-day, and every 10 minutes during off-peak times for the CCT Direct Service. For the CCT Service via Universities at Shady Grove buses will operate every 15 minutes.

Sources:
CCT bus travel times: Rick Kiegel, CCT Project Manager for MTA
Driving times: Google maps
Ride On bus routes: Ride On website - Some routes are indirect and could shortened if realigned.

Compiled by Donna Baron, Coordinator of The Gaithersburg - North Potomac - Rockville Coalition, online at scale-it-back.com

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ATTACHMENT C

ATTACHMENT D

1. Cost Calculation

550,000,000	Total Cost
(100,000,000)	JHU contribution
450,000,000	Net Cost

2. Loan Amortization

35	Year Amortization

3. Interest Rate

2.75%	30 year Treasury
0.01%	Transportation Infrastructure Finance and Innovation Act added rate
2.76%	Total Interest Rate

4. Annual Debt Calculation

450,000,000	Net Cost
35	Year Amortization
2.76%	Total Interest Rate
20,065,424	Annual Debt Service
702,289,855	Total Cost

ATTACHMENT E

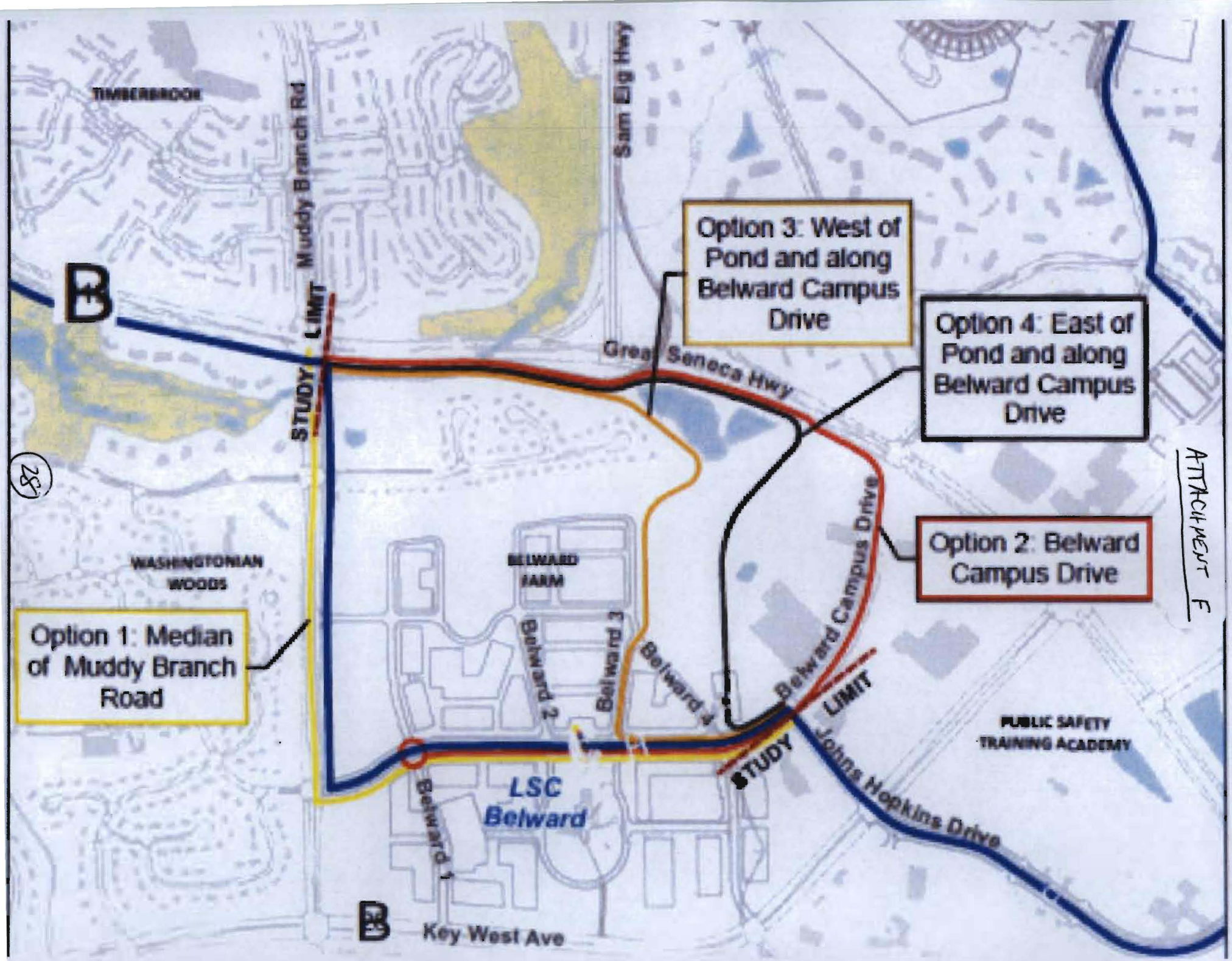
A bus operating near the proposed Corridor Cities Transitway (CCT) route typically carries 0-10 people on a regular basis, however, the CCT website (http://www.cctmaryland.com) states "The projected ridership on the CCT is 35,900 trips **per day** in 2035."

In a presentation at the Planning Board, the transportation planners stated that they expect very few people to travel to the "Science City" from south of Shady Grove Metro station. In addition, they said that the CCT is not being built for commuters traveling to the Metro. Johns Hopkins' Real Estate Director, David McDonough, said travel is expected to be "intra-route".

Therefore, in order to reach the ridership projection of 35,900 trips per day, 18,000 people must live on the CCT route, work near one of the CCT stations, and use the CCT to travel to and from work every day. However, Matt Bell, chief operating officer of MedImmune, stated in the Washington Post (March 29, 2015) that most employees "by far" drive to work. Medimmune declined to have a CCT station adjacent to their property as well as a pedestrian bridge from the proposed CCT station across Great Seneca Highway to their property.

A CCT bus will have 62 seats. With 60 people per bus, 36,000 rides would require 600 full busloads per day. At 40 buses per hour, every 3 minutes in both directions, that would require 15 hours running full loads all day each day, from 6 AM to 9 PM.

If that is what is required to justify the CCT on a financial or cost/benefit basis, it is **very** unrealistic.



ATTACHMENT F