

TECHNICAL COMMITTEE

July 12, 2016
1:00 to 3:55 P.M.

MINUTES

The meeting was called to order at 1:00 P.M. by Mr. Scott Graf.

1. APPROVAL OF JUNE 7, 2016 MINUTES

Mr. Graf asked for approval of the minutes from the June meeting of the Technical Committee. Mr. Alex Rawls moved to approve the minutes with Ms. Martha Arzu McIntosh seconding the motion. The minutes were unanimously approved.

2. RECOMMENDED ACTION OF RESOLUTION #17-1

Mr. Zachary Kaufman introduced Resolutions #17-1 and #17-2 to the Technical Committee. In Resolution #17-1, MTA is requesting to add section 5337 funds for three MARC projects – MARC Facilities, MARC Improvements, and MARC Rolling Stock Overhaul and Replacement. In Resolution #17-2, Baltimore City is requesting to add the Inner Harbor Water Taxi Terminal project utilizing Section 1702 High Priority Project funds. The projects were publicized for public review from June 6, 2016 through July 8, 2016 with public meetings on June 8 and June 14 at the Woodlawn and Essex branches of the Baltimore County Public Library, respectively. Two comments were received in support of the projects. The Interagency Consultation Group has determined that all projects qualify as exempt.

Mr. Michael Helta from MTA presented on the MARC projects in Resolution #17-1. The updated funds result primarily from FY 2015 funds that will now be obligated in FY 2016. The scope of work for these projects has not changed. MARC Improvements includes the rehabilitation and upgrading of infrastructure on various MARC lines and parking lot improvements. MARC Facilities includes the purchase of property and construction at Martin State Airport, West Baltimore station improvements, the purchase of the Riverside Maintenance Facility from CSX, and BWI parking garage repairs. MARC Rolling Stock Overhauls and Replacement includes the overhaul of coaches, procurement and repowering of locomotives, and the implementation of MARC Positive Train Control.

Mr. Graf asked for a motion. Mr. Kwaku Duah made a motion to move Resolution #17-1 to the BRTB as presented and Mr. Rawls seconded the motion with unanimous support from the members.

[PowerPoint: Baltimore Region FY 2016-2019 Transportation Improvement Program, July 2016 Amendments, Handout: TIP Amendment Summary]

3. RECOMMENDED ACTION OF RESOLUTION #17-2

Mr. Gregory Bauer from Baltimore City DOT provided details on the Inner Harbor Water Taxi Terminal. The project will replace the existing two-story visitor center on Pier 1 with a new 5,000 square foot building that will house the water taxi sales terminal and provide a climate controlled waiting area for patrons. It will also provide access to the USS Constellation. The building will be fully ADA accessible and will include an extensive green roof and terrace.

Mr. Graf asked for a motion. Mr. Tyson Byrne made a motion to move Resolution #17-2 to the BRTB as presented and Mr. Duah seconded the motion with unanimous support from the members.

[PowerPoint: Baltimore Region FY 2016-2019 Transportation Improvement Program, July 2016 Amendments, Handout: TIP Amendment Summary]

4. RECOMMENDED ACTION OF RESOLUTION #17-3

Mr. Freeland introduced this resolution, which covers SHA's request to advance the implementation date of a segment of a project (MD 32, MD 108 to I-70) that is included in *Maximize2040*, the current long-range plan. SHA proposes to advance this date from 2030, as shown in *Maximize2040*, to 2021. SHA has broken the overall project into two phases. This is Phase 2 of the overall project, the date advancement for the first phase having already been amended into *Maximize2040* through an amendment in April 2016.

Ms. Tara Penders provided details on the project. The project will involve the construction of a second two-lane roadway between the project limits to provide safety improvements and congestion mitigation. SHA will use the design-build project delivery method. The design is not complete yet since the design-build contractor will propose options for improvements as the project progresses. Ms. Penders noted that the project now includes replacement of the Triadelphia Road Bridge over MD 32 as well as a preliminary planning study to look at potential improvements to the segment of MD 32 immediately north of the current northern terminus, from I-70 to MD 26 in Carroll County.

There was one question, from Mr. Jeff Bronow, about the construction schedule for Phase 1 of the project. Mr. Graf asked for a motion. Mr. Duah made a motion to move Resolution #17-3 to the BRTB as presented and Mr. David Cookson seconded the motion with unanimous support from the members.

5. RECOMMENDED ACTION OF RESOLUTION #17-4

Mr. Kaufman gave a brief overview of the FY 2017 – 2020 Transportation Improvement Program (TIP). It includes 146 projects requesting a total of \$2.71 billion – \$1.87 in federal funds and \$.84 billion in matching funds. SHA (\$1.46 billion), MTA - Transit (\$685 million), and Baltimore City (\$282 million) are the largest sources of fund requests by implementing agency. Of the nine project

categories, highway preservation (80) and highway capacity (30) have the largest number of projects. In regards to total funding by project category, the highway preservation (47%), transit (19%), and highway capacity (15%) categories account for approximately 80% of funds programmed. There are 22 new projects in the 2017-2020 TIP, including 13 SHA projects, 7 Baltimore City projects, and one each from MTA and Baltimore County. A 30-day public review began on May 23, 2016 and ended on June 24, 2016. In addition to four public meetings and advertisement on the web and in newspapers, BMC staff developed an interactive project map that allowed people to view and search for TIP projects. Several comments were received and the BRTB is preparing responses to those comments.

Mr. Graf asked for a motion. Mr. Byrne made a motion to move Resolution #17-4 to the BRTB as presented and Mr. Rawls seconded the motion with unanimous support from the members.

[Handouts and PowerPoint: Baltimore Region FY 2017-2020 TIP, PAC Resolution Regarding the 2017-2020 TIP]

6. RECOMMENDED ACTION OF RESOLUTION #17-5

Ms. Regina Aris introduced this resolution which documents the air quality analysis, called a Conformity Determination, of the FY 2017 – 2020 TIP and the Amended *Maximize2040*. The Interagency Consultation Group (ICG) is the committee that oversees the methodology to conduct the analysis and also provides review of BMC results once they are replicated by MDE. The criteria pollutants that are analyzed for this non-attainment area includes: volatile organic compounds (VOC) emissions on an average summer weekday, nitrogen oxides (NOx) emissions on an average summer weekday as well as annually, and annual direct emissions of Fine Particulate Matter (PM2.5). Emissions are calculated for specified horizon years that for this analysis include 2017, 2025, 2035 and 2040. The charts in Resolution #17-5 show the projected emissions below the approved/adequate SIP budgets for each of the pollutants.

Mr. Graf asked for a motion. Ms. Valorie LaCour made a motion to move Resolution #17-5 to the BRTB as presented and Mr. Byrne seconded the motion with unanimous support from the members.

7. RECOMMENDED ACTION OF RESOLUTION #17-6

Mr. Freeland introduced this resolution and explained that each year, with the development of a new TIP, the BRTB must certify that it is carrying out its transportation planning responsibilities in accordance with the applicable federal requirements. Mr. Freeland noted that, for this self-certification document, staff updated the language to account for the recent enactment of the Fixing America's Surface Transportation (FAST) Act as well as to document recent transportation activities, including (1) the development and approval of the current long-range plan, (2) the development and approval of the most recent TIP, recent revisions to the Title VI program, and recent public involvement activities.

Ms. Arzu-McIntosh made a motion for approval of the resolution, and Ms. LaCour seconded the motion. The joint committee voted to approve the resolution.

8. RECOMMENDED ACTION OF RESOLUTION #17-7

Mr. Kaufman began by stating that the FAST Act replaces the Transportation Alternatives Program with set-aside funding for transportation alternatives from the Surface Transportation Block Grant program. The categories of eligible projects have not changed. Applications were due on May 16, 2016, followed by a technical review at SHA and a meeting with BMC staff to discuss projects.

The amount available to the Baltimore region is \$979,941. Unfortunately, the original SHA estimate of funds available to the region (\$2.2 million) was incorrect. Four applications totaling \$4,570,985 in funding requests were received for these funds. In addition to Baltimore region funds, there is also \$813,721 available to applicants that fall within the Aberdeen-Bel Air South-Bel Air North urbanized area. One application requesting \$98,500 fell into this urbanized area and was thus eligible for these funds. Total requests from the five applications were \$4,669,485. Mr. Kaufman presented a brief description and site map of each project. Under the recommendations, 1 project for a stormwater management facility in Carroll County is endorsed for the funds available to the Baltimore region. This would cover \$979,941 of the \$1.235 million request for this project. The funds for the Aberdeen-Bel Air South-Bel Air North urbanized area will carry over to the next solicitation. The four projects not recommended for funding will still be considered for statewide funding.

After some discussion regarding funding levels for this program, Mr. Graf asked for a motion. Mr. Rawls made a motion to move Resolution #17-7 to the BRTB as presented and Mr. Byrne seconded the motion with unanimous support from the members.

[Handout: Updated Attachment 1 to Resolution #17-7, Applications to the 2016 Surface Transportation Block Grant set-aside for transportation alternatives; PowerPoint: 2016 Transportation Alternatives Applications]

9. PRESENTATION FROM THE NOMINATING COMMITTEE

Mr. Byrne reported that the Nominating Committee, consisting of Mr. Jefferson Miller, Ms. McIntosh, and himself, came to a consensus on the slate of officers to offer to the TC. The slate of Officers recommended includes: Carroll County representative for Chair and the City of Annapolis representative for Vice-Chair. There will be an opportunity in August for nominations from the floor preceding the vote. Mr. Graf thanked the Nominating Committee for their work.

10. WELCOME TO THE COOPERATIVE FORECASTING GROUP

Mr. Graf turned to the CFG Chair, Ms. Margaret Kaii-Ziegler and asked her to introduce the members and begin the joint discussions. The CFG members introduced themselves and identified their jurisdictions/agencies. Ms. Kaii-Ziegler asked about approving minutes from the previous meeting and Mr. Shawn Kimberly indicated that would take place at the August meeting.

11. ROUND 8B COOPERATIVE FORECAST

Mr. Shawn Kimberly presented an overview of the Round 8B socioeconomic forecasts for 2010-2040. He reported that the round 8B forecast data set contains updates from Baltimore City, Baltimore County, Carroll County, and Howard County. Anne Arundel County and Harford County made no updates to their round 8A forecasts. Also noted was that for the first time, a portion of Queen Anne's County is included in the regional forecast data set.

Mr. Kimberly stated that at the regional level, there were slight increases to the forecasted growth in population, household, and employment. Baltimore City submitted an update that includes the expected population, household, and employment impacts of the planned Port Covington development and excludes the impacts associated with the canceled Red Line project that had been included in the previous forecast update, Round 8A. Baltimore County submitted an update highlighted by the addition of the Tradepoint Atlantic development at Sparrows Point. Carroll County made an adjustment to their household forecasts, and Howard County made modifications to the population and household forecasts to adjust for recent growth reported by the Census Bureau.

Mr. Kimberly mentioned that he plans for the Round 8B socioeconomic forecasts to be presented to the BRTB for endorsement by the end of the second quarter of the fiscal year. The forecasts will first need to receive recommendation for BRTB endorsement from the Technical Committee.

[PowerPoint: Round 8B Cooperative Forecast]

12. CHANGING DEMOGRAPHICS AND LAND USE IN HOWARD COUNTY

Mr. Bronow covered several different demographic changes taking place in Howard County starting with the overall population growth. He noted that the county's historical growth was enhanced during the post-World War II period with the widespread adoption of the automobile and resulting suburban development of the region. The population of Howard County is forecast to continue growing over the course of the next 25 years, albeit at a slower pace than was seen in the latter half of the 20th century. A contributing factor to the anticipated slower population growth in the future is the dwindling availability of land. Mr. Bronow anticipates much of the future residential growth to consist of infill and redevelopment. Currently, Howard County stands at approximately 80 percent build-out for residential capacity, with an additional ten percent permitted or otherwise in-process, and ten percent undeveloped capacity (based upon current zoning).

Mr. Bronow explained that the county's development is concentrated in the east, within the planned water and sewer service area. The rural west planning area falls outside of the planned water and sewer service area, accounts for approximately 60 percent of the county's total acreage, and is characterized by a combination of large-lot single-family homes and preserved agricultural land.

Howard County has a diverse housing stock with just over 50 percent accounted for by single-family detached homes. The majority of future development in the county is anticipated to be higher in density and comprised of approximately 2/3 townhomes and multi-family units and 1/3 single-family detached. In the future the county anticipates a housing stock that will be less than 50 percent single-family detached.

The increasing diversity of the county's population is a trend that Mr. Bronow expects will continue into the future. Of the county's 39,000 person population growth from 2000 to 2010, non-Hispanic

Asian and Pacific Islanders and African Americans accounted for nearly 36,000 people. Over the same time period, the non-Hispanic white population declined for the first time in the county's history. International migration is playing an important part in the county's growth as well, accounting for 35 percent of the population increase from 2010 to 2015. Howard County has the highest share of foreign born population in the region and the third highest share in the state. Mr. Bronow noted that Howard County's population is reflective of the national population in terms of the massive growth of the 65+ population between 2011 and 2030. By 2030 it is expected that 20 percent of Americans will be 65+ years old.

Mr. Bronow expects that future development in the county will be largely comprised of higher densities and mixed-uses. Much of the development will be focused in downtown Columbia and along the US 1 corridor. The county adopted a 30-year plan for downtown Columbia in 2010 which allows for the development of 5,500 units and 6.0 million square feet of commercial space. The US 1 corridor has about 5,000 residential units planned or in process with capacity for an additional 4,000 units. Much of the development in the corridor is anticipated in transit oriented developments around three different Marc stations.

[PowerPoint: Howard County Changing Demographics & New Development]

13. INSITE REGIONAL ACTIVITY BASED MODEL SYSTEM

Ms. Yijing Lu reviewed the activity based model and introduced the population synthesizer (PopGen) in our activity-based model. With regard to PopGen, the objective, methodology, and the data used to generate the synthetic population were discussed. Several comparisons between the synthetic population and given/observed margins were presented to show the performance of PopGen. From the comparison, with the statistical distributions of the controlled variables, PopGen can generate the corresponding synthetic population closely matching the distributions of controlled variables and non-controlled variables. Different demographic margins have different distributions of synthetic population. With the experience of PopGen, the more controlled variables at TAZ level, the better synthetic population will have.

[PowerPoint: Population Synthesis -Activity-Based Microsimulation Model - InSITE]

14. CONFERENCE REPORT / SACRAMENT WHITE PAPER

Mr. Kimberly described to the group the topics of discussion at a recent conference he attended: the 2016 COG/MPO Socioeconomic Modeling Mini-conference. Of the subjects discussed at the conference, the one that was the most relevant to the work of the Technical Committee and the Cooperative Forecasting Group was the section on Scenario Planning and Evaluation with Modeling Tools.

Mr. Kimberly defined scenario planning and explained how it can be a useful tool for planners looking to anticipate and better respond to uncertain future conditions. He explained how considering and analyzing alternative possibilities for a number of variables (including demographic, economic, political, and environmental) can help stakeholders to understand how a state, region, or community, might look and function in the future. Tools that can be used in the scenario planning

process include travel demand models, population synthesizers, land use models, as well as workshops that draw upon the experience of local officials, university staff, private industry, and other stakeholders. Mr. Kimberly noted that the majority of MPOs present at the conference were involved in some type of scenario planning process.

Mr. Kimberly introduced the topic of a white paper developed for the Sacramento Area Council of Governments (SACoG) entitled *Trends in the Housing Market: An Update on Changing Demographics and Consumer Preferences*. The purpose of the paper was to examine the factors affecting the housing market as SACoG prepared their draft Metropolitan Transportation Plan. Mr. Kimberly explained that the paper describes how major national demographic shifts brought on by the Baby Boomer generation, the Millennials, and immigration will have major impacts upon housing markets across the country. He said that a topic such as this (the impacts of demographic shifts on future housing markets) would be an excellent topic to explore via a scenario planning process. Mr. Kimberly concluded by noting that BMC has the tools in-house (including a recently updated travel demand model and PopGen, a population synthesizer) to perform the type of quantitative analysis necessary to support a scenario planning process, and asking what other types of futures the group would like to explore. This led to a group discussion and served as a transition into agenda item 15 (Discussion – Regional Transportation and Land Use Sensitivity Analysis).

[PowerPoint: Conference Report / Sacramento White Paper]

15. DISCUSSION ON REGIONAL TRANSPORTATION AND LAND USE SENSITIVITY ANALYSIS

Mr. Charles Baber initiated the TC/Cooperative Forecast member discussion informing members that staff was interested in hearing from members and learning about their agencies interests and local discussions related to changing demographics and evolving transportation policy objectives. Technical Committee and Cooperative Forecast chairs developed a joint meeting agenda to foster member discussion. Joint meeting presentations were summarized:

1. Round 8B Cooperative Forecast captured demographic changes and inclusion of two regional projects – Tradeport Atlantic and Port Covington.
2. Howard County staff presentation on the county's slowing population growth that is forecasted to be older with greater racial/ethnic diversity. Planned higher density and mixed use in downtown Columbia and US 1 Corridor, and changing housing stock from single family detached to single family attached and apartments.
3. BRTB funded regional disaggregate modeling system consisting of a Population Synthesizer (PopGen) creating a household and person roster database and an advance Activity Based Model (InSITE). Disaggregate modeling system captures changes in demographics (aging, mix/density, travel demand/system management, person type (F/P worker, student, retiree), and household structure (household with/without children/workers) providing essential tools for scenario planning.
4. BRTB workshop reporting the use of scenario planning as a necessary planning process exploring demographic trends and other possible variations (higher migration/immigration) influence on transportation performance measures and resulting policy decisions.

TC and Cooperative Forecasting members engaged in a discussion of their demographic and transportation interests.

- Members identified national research on reported millennial preference for urban areas and millennials wanting “BMW” – Bicycles, Mass Transit and Walkability.
- Members asked how rural areas can grow and discussed outcry for more pedestrian/bicycle projects during public meetings, but with local opposition/implementation barriers associated with implementation.
- How can local agencies manage and balance public preference for greater non-motorized accessibility with location privacy?
- Members identified the trends in an aging diversified population. Local jurisdictions use MDP’s age cohort model population by age output showing large forecasted increases in 65+ populations.
- Interest is in the dependency ratio (the number of non-workers supported by a worker) and meeting the travel needs of an older population. Several jurisdictions expressed the need in creating higher density to support an expanded transit system with greater frequency in meeting the travel needs of an elderly population.
- The identification of technical changes such as autonomous vehicles and telecommunication enhancements for teleworking could change work travel patterns.
- Members were interested in learning more about job accessibility from different locations and matching labor skills with employment needs. How will commutation change?
- The impact of the shared economy on household ownership could change and how housing purchasing and consumer react to higher interest rates after an extended period of low interest rates.

At the conclusion, members agreed to further discussion on changing demographics and transportation scenario planning at their scheduled August meetings. Creation of a TC/Cooperative forecasting subcommittee to develop a scope of work was suggested.

16. OTHER BUSINESS

There was no other business to be discussed.

ATTENDANCE

TC Members

Martha Arzu McIntosh – Anne Arundel County Department of Planning & Zoning
Alex Brun– Maryland Department of the Environment
Tyson Byrne - Maryland Department of Transportation
Ken Choi – Maryland Department of Planning (MDP)
Kwaku Duah – City of Annapolis Department of Transportation
Scott Graf – Carroll County Department of Planning
Michael Helta – Maryland Transit Administration (MTA)
Emery Hines – Baltimore County Department of Public Works
Valorie LaCour - Baltimore City Department of Transportation
David Cookson – Howard County Department of Planning & Zoning
Tara Penders – State Highway Administration (SHA)
Alex Rawls – Harford County Department of Planning & Zoning

CFG Members

Jeff Brownow – Howard County
Scott Graf – Carroll County
Margaret Kaii-Ziegler – Anne Arundel County
Bob Pipik, Baltimore Department of Planning, Director of Research and Strategic Planning Division
Alfred Sundara - MDP
Kui Zhao – Baltimore County

Staff and Guests

Regina Aris - Baltimore Metropolitan Council (BMC)
Charles Baber - BMC
Gregory Bauer – Baltimore City DOT
Victor Bonaparte - BMC
Chris Davis – Baltimore County Planning and Zoning Associate
Blake Fisher - BMC
Terry Freeland – BMC
Derek Gunn – State Highway Administration (SHA)
Victor Henry – BMC
Zach Kaufman - BMC
Shawn Kimberly – BMC
Michelle Daytnor - SHA