The members of the Community Advisory Panel (CAP), a group convened by the City of Columbus (the City) to advise the City on the development of Blueprint Columbus, held their sixth meeting on January 27, 2015 at the Goodale Park shelter house in Columbus, Ohio. The CAP is composed of representatives from Columbus neighborhoods, businesses, environmental interests, construction and homebuilding firms, ratepayer groups, and others. The CAP is scheduled to meet quarterly over the course of the Blueprint Columbus planning phase, which will conclude in September of 2015 when the draft Blueprint Columbus plan is submitted to the Ohio EPA. More information is available at www.blueprint.columbus.gov or by emailing blueprint@columbus.gov. The next CAP meeting is scheduled for June 2, 2015.

Meeting Objectives:
- Provide a project update
- Present the findings of the Jobs & Economic Impact Analysis
- Present the technical model
- Provide a community engagement update

Action Items:
- Distribute jobs impact analysis handouts.

Welcome and Introductions

Maria Mone, facilitator from the Ohio State University John Glenn School of Public Affairs, welcomed the group and invited brief introductions from everyone in attendance. She then reviewed the agenda.

Project Status Update

Susan Ashbrook, City of Columbus, welcomed the CAP members and provided the project update. Highlights from her presentation included:
- The City’s affordability analysis will be presented at the next CAP meeting. The City has decided to wait until March or April, 2015 to propose a city ordinance that would facilitate Blueprint Columbus (see
summary from Meeting 5 for more information). It is anticipated that the City will present the ordinance and City Council decision at the next meeting.

- The Clintonville pilot continues to move forward on schedule. The City will soon submit a permit to install and will request permission from the Ohio EPA to build in September. Clintonville informational meetings with residents are scheduled to begin in June. She added that the pilot appears to be technically sound and to have legal approval and community support.

**Jobs & Economic Impact Analysis**

Bill LaFayette, of Regionomics, presented findings of a jobs and economic impact analysis he completed for Blueprint Columbus. The analysis looked at two main questions: first, the number of workers needed to support Blueprint Columbus over the next 10 years; and second, Blueprint Columbus’s estimated economic impact over the next 30 years. Highlights regarding the first question included:

- The number of workers needed to complete Blueprint Columbus is greater than previously estimated. Previous estimates considered only the need for engineers, installation workers, sewer workers, and maintenance crews. However, support positions in finance, accounting, purchasing, outreach, equipment maintenance, contracting, etc., will also be required in order for the program to be successful. Existing City staff could do some of this support work; but the City will need to create new full-time, skilled staff positions to complete the work or to assume these workers’ previous duties.

- The number of workers required to implement Blueprint Columbus will vary over the life of the project. An estimated 460 workers will be needed initially and approximately 650 after 10 years. The fluctuation is due to the nature of the project lifecycle and the replacement rate of workers. The required worker estimates are based on the total number of workers in comparable industries and standard worker replacement rates. Entry-level applicants could fill approximately 40% of the initial jobs needed in construction and landscaping.

Participants had the following comments and questions about the first part of the analysis. *Responses are in italics.*

- Susan Ashbrook mentioned that job creation was one element the City considered when contemplating the advantages and disadvantages of a traditional approach or an approach that incorporates the elements of Blueprint Columbus. She noted that the construction of new tunnels does not create new permanent jobs like Blueprint Columbus could create and that local contractors could construct many of the components of Blueprint Columbus whereas labor not from Columbus would be required to construct the traditional tunnels. She also noted that the job impacts analysis is not a direct comparison to the traditional approach. The analysis was to see whether or not the Blueprint approach was better for jobs and the local economy.

- Would the new employees receive city benefits? Susan responded: *We don’t know for sure. Initially, and until we have enough green infrastructure to justify the expense, we anticipate we will complete the work with contractors. In the long term, we may be able to bring positions in-house.*

Highlights from the presentation on the second question regarding Blueprint Columbus’s estimated economic impact over the next 30 years included the following:
• This analysis focused on the total economic impact of the Blueprint Columbus approach and of the gray infrastructure only approach to the Central Ohio economy (10-county Columbus Metropolitan Statistical Area – MSA) over a 30-year period by measuring the value of the goods and services produced, the household and business earnings generated, and the quantities of full and part time employment created. The analysis found that Blueprint Columbus provides a much greater impact than a gray only approach. Blueprint would provide an estimated economic impact of 3.4 billion dollars over 30 years whereas the gray only approach would generate an estimated impact of 1.1 billion dollars over 30 years. Because these results are only estimates, they cannot be used for budgeting purposes.

• Local spending is largely the reason the overall economic impact of Blueprint Columbus is 3 times greater than the gray only approach. The analysis determined that Blueprint’s creation of local jobs would keep approximately 96% of the money circulating in the local economy. Another factor is that the gray only plan requires the purchase of land, which is considered a transfer of assets that does not generate much output.

Participants had the following questions and comments. *Responses are in italics:*

• Susan Ashbrook clarified that the estimate of 3 times the economic output is under the assumption that both Blueprint and the more gray approach would cost 2.5 billion dollars. She added that a workforce development initiative is being started with the first class to be offered on March 9th, 2015 in collaboration with Columbus State Community College. The first class will have 30 students, 10 of whom are considered hard to employ and were recruited by the Columbus Urban League, who will also teach soft skills. This type of course will be used to help fill the positions created by Blueprint Columbus.

• If a community has referrals, can they be sent to the class? Yes, but 20 of the seats will go to local businesses. *If you know people who would be interested, please refer them to Stephanie Robinson at the Columbus Urban League. The cost will be $349.00 and students who complete the course will receive OSHA certification and a green infrastructure certificate. The city will recognize the certificate as experience, which will help them find employment in the positions created by Blueprint.*

• Would you accept some of the restored citizens? *Yes, this is one of the populations we are targeting.*

Technical Model

Dax Blake, City of Columbus, presented on the collection system modeling status. Highlights from his presentation included:

• Modeling the collection system provides many benefits and is accepted by the EPA as a way to measure future system performance. For example, modeling helps to identify deficiencies in sewers (overflows, basement backups, bypasses at treatment plants) caused by specific weather patterns and to predict how future development may impact the existing sewer infrastructure. It also enables the City to test proposed remedies without building the remedy, which means the City can try a variety of approaches in a shorter period of time to determine which approach is most effective.

• Columbus has continued to refine its model ever since it was first developed in 1988. The model captures 67% of the sewer system, simulates 1,898 miles of pipe (of 2,846 total), 45,781 manholes, all overflow structures, and all rooftops in the Blueprint areas. Rooftops are included to show the water that could potentially enter the sanitary sewer system. One- hundred- eighty flow meters are placed
in the sewer system to collect data that is used to calibrate the model. The model also incorporates 20 years of rain gauge data from as many as 68 rain gauges. It takes approximately 30 hours to run a 20-year simulation in the model.

- The model will be used to determine how the system will respond to implementation of Blueprint, the addition of new sewer tunnels (OARS), and increasing population. Recently, each area of Blueprint, and the homes located within these areas, were modeled. The homes were divided into three classifications: homes with drainage to the street/curb, homes with drainage to buffer area around the house, and homes with direct drainage to the lateral pipe (illegal direct connection).

- The City will model over 1,000 scenarios, testing each for technical feasibility, whether or not it meets project requirements, and cost effectiveness. The cost effectiveness will be completed via other efforts, not the model. Reviewing these scenarios will help to determine the right mix of gray infrastructure, infiltration, and inflow measures to maximize system performance and cost effectiveness.

- The model includes some important assumptions. First, the City is assuming a 50% participation rate for rerouting roof water to the street via a storm lateral. Second, the City is assuming a 90% participation rate for lining later pipes. Third, the City will line 100% of mainline sewers and manholes. Fourth, the City assumes a 25% participation rate for use of sump pumps. These participation rates, with the exception of the 100% of mainline sewers and manholes, are estimations that will need to be monitored during future implementation.

- The model results show that the total SSOs and total plant bypasses are significantly reduced when Blueprint is compared to the 2005 baseline conditions established in the Wet Weather Management Plan (WWMP) and to future projects, assuming 50% and 25% participation rates in roof drain redirection and sump pump use, respectively. For example, the model estimates the 2005 overflow volumes would result in 80 million gallons from total SSO and 212 million gallons from total plan bypasses. Blueprint would result in 2 million gallons from SSOs and 23 million gallons from total plant bypasses, and the future projects that will be implemented by 2019 would result in 11 million gallons from total SSOs and 37 million gallons from total plan bypasses.

- Initial model results also indicate that no additional pipes would be needed in the City’s far south if Blueprint were implemented.

- The City will continue to run the model on several Blueprint areas to identify the right mix of green and gray infrastructure. Cost estimation will begin when the modeling is complete.

Participants had the following questions and comments. Responses are italicized.

- What are you going to do with this and how does it fit in with the Blueprint vs. the more gray approach? Since we cannot go out and just start building, we use the model to determine how the system will respond if we implement the traditional or Blueprint approach. It is a predictive model that tells us how the system would react if we implement certain changes.

- Why is the OARS tunnel behind schedule? The equipment encountered unexpected conditions—karst limestone was encountered and the water contained in the geologic feature is slowing down the operation.
The Southside Settlement Park is still being implemented? Yes, that is a Blueprint Columbus project that emphasizes vacant lot repurposing for storm water treatment. We hope to complete it by the fall.

Community Engagement Update

Margie Hiermer, RAMA Consulting, briefed the group on the community engagement component of the project. She reminded the group that RAMA distributed 10,000 flyers in the fall and went door-to-door to provide information on the major components of Blueprint Columbus. In Clintonville RAMA distributed informational materials to all accessible residential properties in the pilot project area. RAMA is now moving into the feedback collection phase using a mail back survey flier, door-to-door polling, and polling at community and civic events. She requested that CAP members notify her of community meetings or events where RAMA could present an overview of Blueprint Columbus and collect feedback.

Educational Videos

The participants watched two educational videos, one describing sump pumps and another describing how lateral lining is completed. The videos can be found at the following links:

- Sump Pumps https://www.youtube.com/watch?v=5nBqjqCLbj0
- Lateral Lining https://www.youtube.com/watch?v=fUsFZfZ7YJ0 (Start at 11:25 mark)

The meeting adjourned at approximately 8:00 pm.