



**FEBRUARY 2024**

RAISE Grant Application:

# The Cresaptown Triangle Project Infrastructure Improvements



**STATE HIGHWAY  
ADMINISTRATION**

**Merit Criteria Narrative**

Throughout the project analysis the team identified several major benefits in the implementation of the stated infrastructural aspects included in the Merit Criteria. The team has summarized the benefits in the table below as an overview of the project narrative.

Project Benefits Summary	
State of Good Repair	<ul style="list-style-type: none"> <li>• Increased roadway capacity: Redesign of US 220 and MD 53 segments will reduce chronic traffic backups and revitalize roadway condition</li> <li>• Reduced collision risks: Roadway reconfigurations and traffic signal improvements will reduce frequency of crashes</li> <li>• Curb and gutter replacements: Roadway edges and stormwater infrastructure to be replaced throughout project limits</li> </ul>
Economic Competitiveness	<ul style="list-style-type: none"> <li>• Relief of freight bottleneck: Reduces problematic freight traffic backups along US 220, enhancing movement of goods</li> <li>• Opportunity for local hiring: Enables project labor agreements and apprenticeship programs facilitating local hiring on Project</li> <li>• Long-term economic growth: Streamlines movement of freight and regional commuter traffic, catalyzing further job growth</li> </ul>
Pedestrian Safety	<ul style="list-style-type: none"> <li>• Improved intersections: Introduction of new traffic signals and restriping of crosswalks with signal-timed lights</li> <li>• Increased mobility: New sidewalks and safer crossings will promote active transportation</li> <li>• Rerouting of freight traffic: Diversion of freight traffic from MD 636 will reduce pedestrian safety hazards within town</li> </ul>
Quality of Life	<ul style="list-style-type: none"> <li>• Reduction of GHG emissions and air pollution: Via reduced idling and traffic backups from roadway and intersection redesigns</li> <li>• Improved commute times: Alleviating traffic backups will ease travel to and from job centers surrounding Cresaptown</li> <li>• Improved access to daily destinations: More walkable access to retail, schools, and other daily destinations will improve small-town quality of life</li> </ul>

Figure 1: Summary of Project Benefits

# Merit Criteria

## Safety

Protect non-motorized travelers from safety risks

The Project addresses significant transportation safety concerns by improving roadway configurations to facilitate safer pedestrian conditions. Historic crash data underscores the urgency of confronting this issue; there were 9 crashes in the Project area in 2023 and 80 collisions total over five years, according to SHA historic crash data.

A chief priority for MDOT in this project is providing protection for all roadway users – including drivers and local residents traveling on foot, with mobility devices, or by bicycle. The Project will accomplish this at intersections and on roadways by:

- Installing left turn lanes on US 220 between Potomac Street and Lee Street and two-way median-separated lanes on MD 53 to improve the efficiency of traffic movements and reduce traffic lengths during the peak travel period. This improvement will also allow for safer turns for medium- and heavy-duty vehicles, reducing the risk of collisions with other automobiles and crossing pedestrians.
- Installing a southbound left turn lane at the currently unsignalized intersection of MD 53 and MD 636, located in the heart of Cresaptown’s main street. This improvement will effectively calm traffic and prioritize walkability and safety for pedestrians.
- Diverting freight traffic from MD 636, reducing conflicts between medium- and heavy-duty vehicles, non-drivers, and emergency response services on this roadway.
- Updating signal timings at intersections – US 220/MD 53, and US 220/MD 636 – to create longer crossing times, which will account for modifications to this traffic environment and prioritize safe movement of pedestrians at a busy crossing.

Additionally, the Project will improve safety conditions for non-drivers by installing sidewalks on the south side of US 220. The problematic dearth of sidewalks on sections of US 220 and MD 53 is not isolated to Cresaptown. According to the Cumberland Area Long-Range Transportation Plan developed by the local MPO, only 20 percent of major streets in this region have sidewalks, and just two-thirds of those sidewalks are wide enough and have the proper treatments to comply with the Americans with Disabilities Act.

### US 220 South of MD 53

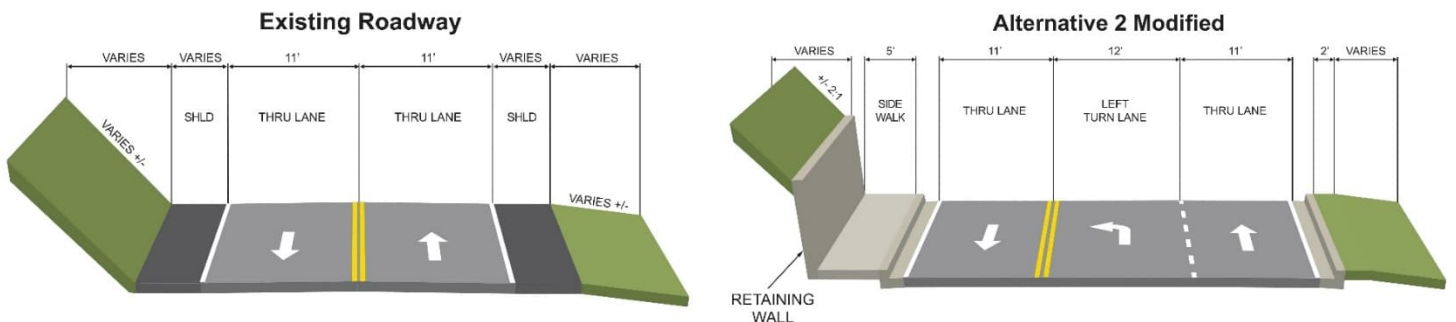


Figure 2: Typical Section of Existing Roadway and Planned Roadway Redesign, US 220 in Project Area

Within the Project area, US 220 is a two-lane, 24-foot-wide undivided roadway with no median or access controls for people attempting to cross. The roadway includes only short, isolated sections of sidewalk. The existing section diagram (Figure 2) shows the current lane structure with traffic shoulders bordered by grass, as well as proposed improvements that will create dedicated, safer space for non-drivers in the process of establishing a new traffic pattern on the roadway, thanks to newly planned five-foot-wide sidewalks bordered by a retaining wall. More broadly, improvements to pedestrian infrastructure, better visibility for cars coming around corners, and safer intersections can prevent injuries and fatalities. This typical section example is notably adjacent to Cresaptown United Methodist Church, illustrating the importance of improving pedestrian safety amenities next to a vital community destination.

Reduce fatalities and serious injuries to bring them below statewide averages

SHA is prioritizing the Project in large part because of the risk-prone nature of the existing roadway infrastructure. Per SHA’s Traffic Operational & Safety Analysis Report, In the last five years, there were 67 crashes – including one fatal collision – on the 1.3-mile stretch of US 220 in the Project area, as well 12 crashes on MD 636 and one crash on MD 53, each of which are about 0.25 miles long in the Project area.

An April 2023 Traffic Operational and Safety Analysis of the study area by MDOT determined that on US 220, rear-end (107.1) and left-turn (31.5) crash rates were significantly higher than the statewide averages, and that on MD 636, rear-end (126.4) and fixed-object (101.1) crash rates were significantly higher than statewide averages for left-turn (14.9), rear-end (65.6) and fixed-object (27.1) crash rates.

Crashes on Roadways in Project Area, 2019-2023	
US 220	67 (1 fatal)
MD 53	1
MD 636	12
Total	80

Figure 3: Crashes in Project Area by Roadway

National Roadway Safety Strategy

The Project incorporates multiple strategies that align with USDOT’s Safe Systems Approach and will achieve objectives of USDOT’s National Roadway Safety Strategy, including:

*Safer People* – The Project uses engineering solutions to account for human error, such as by redesigning roadways and intersections to include dedicated pedestrian spaces and protections.

*Safer Roads* – The Project will redesign roadway segments to shed a one-size-fits-all approach and adopt more context-sensitive elements. Examples of this work include widening a segment of southbound MD 53 from one to two lanes, geometric enhancements to improve truck turns in spatially restrictive turning areas and widening shoulders to increase traffic flow and prevent congestion.

Maryland has also signed on as an Ally in Action to the National Roadway Safety Strategy, having committed in June 2023 to adopting policies that will help to achieve objectives of the NRSS, and has since advanced its Pedestrian Safety Action Plan to guide implementation of Maryland’s Vision Zero commitment, as well as MDOT’s Complete Streets Policy.

## Environmental Sustainability

### Reduce transportation-related air pollution and GHG in communities

The Project will help to reduce transportation-related air pollution by improving the efficiency of traffic movements along US 220, which suffers from capacity constraints and resulting traffic backups. According to a 2016 SHA analysis of PM peak hour directional delays at intersections in the Project area, 95<sup>th</sup> percentile volumes cause delays of approximately 60 seconds per vehicle for through traffic at US 220/MD 53 – with queues as long as 2,400 feet – and 65 seconds for vehicles turning left at US 220/MD 636 – with queues more than 500 feet long. These delays are projected to worsen significantly by the year 2040 under a No-Build scenario. (Figure 4) Coupled with these increasingly severe delays, the presence of significant freight traffic along this corridor is particularly problematic, given the outsized role of medium- and heavy-duty vehicles in producing excess exhaust and resulting emissions.

**Table 1: Existing and Future PM Peak Northbound Directional Delay and Level of Service, and 95<sup>th</sup> Percentile Queue Lengths**

Intersection	Existing (2016)			No Build (2040)		
	Delay (sec./vehicle)	LOS	95 <sup>th</sup> Percentile Queue	Delay (sec./vehicle)	LOS	95 <sup>th</sup> Percentile Queue
US 220 at MD 53	59.8 (Through)	E	2,400' (Through)	85.9 (Through)	F	> 1 mile (Through)
US 220 at MD 636	65.4 (Left-Turn)	E	525' (Left-Turn)	74.3 (Left-Turn)	E	525' (Left-Turn)*

\* Note: no change from the existing since the volume is metered by the MD 53 signal

Figure 4: Analysis of Average Daily Traffic at Project Area Intersections, 2016

According to a benefit-cost analysis, implementation of the Project's scope of improvements to streamline traffic movements will reduce CO<sub>2</sub> emissions by 2,867.40; nitrous oxide (NO<sub>x</sub>) emissions by 0.13; sulfur oxide (SO<sub>x</sub>) emissions by 0.01; and particulate matter (PM<sub>2.5</sub>) emissions by 0.02 metric tons per year compared to a No-Build scenario.

These emissions reductions will be achieved by reducing traffic idling during peak congestion periods. For example, traffic queues approach 1,000 feet at the northbound approach to the intersection of US 220/MD 53 during PM peak periods, according to a 2022 Synchro/SimTraffic analysis carried out to determine the impacts of the Project scope on traffic operations. Emissions from these idling cars have a negative impact on air quality in Cresaptown and surrounding communities as a result of the existing infrastructure. Intersection and roadway redesigns and other improvements will significantly mitigate this issue.

Address negative impacts of transportation on communities by reducing exposure to elevated levels of air, water, and noise pollution

The Project will help to reduce exposure to airborne pollutants stemming from traffic congestion in nearby Census Tract 102, a Historically Disadvantaged Community (HDC) in Mineral County, West Virginia, whose western border is only a half-mile from the Project area. This community of 3,731 residents suffers from high rates of asthma (75<sup>th</sup> percentile), diabetes (82<sup>nd</sup> percentile), and heart disease (89<sup>th</sup> percentile), and is considered disadvantaged in terms of both its proximity to abandoned land mines sites and the proportion of households whose income is less than or equal to 200 percent of the federal poverty level (71<sup>st</sup> percentile).

Reductions in emissions could help prevent premature deaths and asthma cases in Maryland, translating to reductions in public health costs, particularly for vulnerable residents in the community. The reductions would reduce impacts all along the US 220 corridor, including to neighboring HDCs in Cumberland. While the Project Area tracts—1300 and 2000—are not considered HDCs, they do include high-percentile thresholds for hazardous air quality, as shown in Figure 4:

National Air Toxics Assessment Metric	Census Tract 1300	Census Tract 2000
Respiratory Hazard Index Score (% , Tract Level)	60.00	60.00
Particulate Matter (PM2.5) Score (% , Tract Level)	77.25	75.50
Ozone Score (% , Tract Level)	84.57	84.65

Figure 4: National Air Toxics Assessment Scores, via Maryland EJScreen

#### Alignment with applicant’s State Carbon Reduction Strategy

The projected reduction in emissions from idling vehicles will help contribute to statewide greenhouse gas emissions targets. Under the Climate Solutions Now Act of 2022, the State of Maryland has committed to reducing its carbon emissions to net-zero by 2045. The Maryland [Climate Pollution Reduction Plan](#), announced by the Maryland Department of the Environment (MDE) in December 2023, includes an intermediate goal to reduce greenhouse gas emissions by 60 percent by 2031, and mentions a need to reduce traffic emissions as one of many contributing mechanisms to achieve this milestone. Projected reductions in CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>x</sub>, and PM<sub>2.5</sub> emissions (noted above) that will result from this project will aid the State of Maryland in meeting these targets. The forecasted reductions also align with MDOT’s [Greenhouse Gas Reduction Act](#) (GGRA) Plan to reduce statewide greenhouse gas emissions by 40 percent from 2006 levels by 2030 (known also as “40 by 30”).

#### Improve the resilience of at-risk infrastructure to extreme weather events and natural disasters caused by climate change

Installation of new curbs and gutters will occur along US 220 from the southern Project limits to the roadway’s intersection with MD 53; along northbound MD 53 from its intersection at US 220; at the intersection of Brant Road southwest and southbound MD 53; and at the northeast and southeast quadrants of the intersection of MD 53/MD 636. SHA expects upgraded gutters will help to mitigate negative impacts from occasional high-rainfall events that have become more common due to climate change and cause flooding along these roadways in Cresaptown, which can impact flow of traffic.

Avoid adverse environmental impacts on wetlands

Preliminary environmental analysis by SHA has determined that the Project would have minimal or no effects on nearby natural resources, as summarized in Figure 5. SHA has committed to taking steps to mitigative potential negative effects of these impacts to streams and anticipates

## Alternatives Impacts Comparison

Resource Category	Alternative 1 – No Build	Alternative 2 Modified
<b>Social/Cultural Environment</b>		
Potential Residential Displacements	0	2
Potential Business/ Commercial Displacements	0	1
Parcels Impacted (number)	0	30
Right of Way Impacts (Ac)	0	2.9
Parkland/Recreation Area (number)	0	0
NRHP-eligible Historic Places (number)	0	0
<b>Natural Resources</b>		
Wetland (acres)	0	0
Streams (linear feet)	0	up to 145
100 Year Floodplain (acres)	0	0.36
Forested Area (acres)	0	< 0.1
<b>Costs</b>		
Preliminary Construction Cost (\$million)	0	6.5
Preliminary Right-of-Way Cost (\$million)	0	1.5

*Figure 5: Comparison of Impacts of No-Build and Build Scenarios*

receipt of a programmatic Categorical

Exclusion for the Project. NEPA study has already been completed as part of a larger corridor-wide analysis effort that includes other areas outside of the Project limits, leading to a 2018 Record of Decision approving implementation of the Project (see Project Readiness section).

### Quality of Life

Increase affordable transportation choices by expanding active transportation usage or significantly reducing vehicle dependence

The existing pedestrian infrastructure of Cresaptown includes minimal sidewalks, with only one significant ADA-compliant stretch of sidewalk along US 220, as well as sporadic segments of sidewalk in varying condition and width along MD 53. The Project's addition of nearly 1,200 feet of new sidewalk via roadway redesigns on US 220 and MD 53 will help to foster a safer and more inviting environment for active transportation that would give residents of Cresaptown a new incentive to use other forms of transportation than private automobiles – such as walking or bicycling – to make short trips within town.

Many households within walking distance of basic amenities – including retail shops, places of worship, and schools (see “Improve Access to Daily Destinations” subsection below) – in Cresaptown have not had a reasonable, safe option to access these amenities. The Project will help to restore that access and an overall small-town, walkable character to this rural Appalachian community situated along an otherwise busy freight and automobile traffic corridor in Western Maryland. Emphasizing walking in the community would also align with MDOT's [targets](#) to reduce VMT per capita by 20 percent by 2050.





According to five-year U.S. Census American Community Survey data for 2022, mobility in Cresaptown is highly vehicle-oriented, with more than 88 percent of residents commuting alone to work by car. Fewer than 5 percent of residents do not own a car and only 2 percent walk to work. Increasing roadway capacity for transit will better connect the community with the larger ACT system and encourage more residents to utilize public transit and on-demand services more appropriate in a rural environment.

#### Removing barriers and gaps by reconnecting communities

The Project will bridge gaps in easeful pedestrian access and walkability in the Project area, including via:

- Installation of crosswalks with signal-timed lights at US 220/MD 53 and US 220/MD 636 intersections
- Removal of the one-way street designation for MD 53, which will eliminate detours by auto traffic on local streets
- Diversion of freight traffic from MD 636, reducing cut-throughs by trucks on local roads
- Installation of nearly 1,200 feet of new sidewalks in the Project area.

Currently there is inconsistent pedestrian connectivity between Cresaptown roadways, particularly with the sidewalks along US 220 in the Project area (see example in Figure 7). Improving roadway markings and adding ADA-compliant crossings will make it safer and easier for residents to travel to and cross arteries in the center of the town, which holds community institutions such as Cresaptown United Methodist Church, PVAA Sports Complex, the Calvary Christian Academy, and Sheetz.



Figure 7: A sidewalk-less northwest corner of the US 220-MD 53 intersection.

For specific roadway improvements that will help protect all roadway users, see the Merit Criteria: Safety section.

### Economic Competitiveness and Opportunity

#### Improve intermodal and freight mobility

This juncture of US 220 represents a troublesome freight bottleneck for the State of Maryland, making the Project one of the state's top unfunded freight priorities in this region, according to the [Maryland Statewide Freight Plan](#). MDOT and the Cumberland Area Metropolitan Planning Organization have designated US 220 through Cresaptown as [a Critical Rural Freight Corridor](#). MDOT classifies the severity of existing freight delays on this corridor as moderate to severe, depending on conditions and time of day. Recurring traffic queues at the intersection of US 220/MD 53 during the PM peak period, which range from 59.8 seconds to 65.4 seconds on

average, continue to hamper freight capacity to a degree that hinders economic growth and viability for this region.

SHA will improve roadway operational capacity to better serve freight traffic through the introduction of dedicated turn lanes to and from US 220, by restriping US 220 within the Project area to add one additional lane (for a total of three lanes), by creating a wider turn radius for trucks from US 220 onto MD 53, and by revising signal timings to reduce traffic backups at the intersection of US 220/MD 53. This investment will improve the level of freight service on these roadways.

The Appalachian Regional Commission, an economic development partnership entity of the federal government and 13 state governments that works to strengthen the economies of Appalachian communities, has endorsed the Project in part because of its benefits for freight activity, [noting](#) US 220 “is one of the most-used freight corridors in Western Maryland, Northern West Virginia, and Southwestern Pennsylvania.” The Greater Cumberland Committee, a nonprofit business group that supports regional economic development in this area, has also [publicly endorsed](#) the Project, deeming it a “critical transportation infrastructure project” in a Feb. 15 news article by The Cumberland Times-News.

The Project also stands to improve efficiency of intermodal freight goods transfers between CSX’s Cumberland Terminal Subdivision and freight truck traffic that are critical to the region’s energy sector. Allegany Coal and Land Company, based in nearby Frostburg, Maryland, is among the private stakeholders that have endorsed the Project in part for its intermodal freight capacity improvement potential. (See Letters of Support).

#### Promote long-term economic growth and broader economic & fiscal benefits

The Project will facilitate improved commuting conditions for Cresaptown-area workers traveling to and from jobs at local employment centers (see Figure 8), such as IBM at Rocket Center, and Northrup Grumman’s Allegany Ballistics Laboratory in Mineral County, West Virginia, located three miles south of the Project area; American Woodmark Corporation, a cabinet maker with a production facility in Cumberland, Maryland, located about four miles southwest of the Project area; CSX’s Cumberland Terminal Subdivision and UPMC-Western Maryland, both in Cumberland; Frostburg State University, 11 miles northwest of the Project area; and Beitzel Corporation, an industrial construction and maintenance firm in Grantsville, 25 miles west of the Project area. Reducing congestion along the Route 220 corridor will improve commute times for workers at these employment hubs and can facilitate further job growth in this region.

Cresaptown’s own central business district also stands to benefit from the reduction of traffic on MD 636 and the improved efficiency of freight movements on major thoroughfares. By creating more walkable conditions through the redesign of the US 220/MD 53 intersection and the addition of sidewalks within the Project area, Cresaptown small businesses stand to benefit from increased foot traffic and more easeful movement of local automobile traffic within town. With more direct access from MD 53 to US 220, freight traffic will decline on MD 636 and with the dedicated turn lane at MD 53/MD 636, the freight movements that occur will be safer and more predictable. According to a 2023 LOS analysis conducted by SHA, 80 percent of southbound US 220 right-turning vehicles would continue turning right onto MD 636, while 20 percent would be diverted to MD 53 under the Project’s build scenario.

Employment Center	Distance from Project	Jobs
IBM (Rocket Center)	3 miles south	400
North Grumman-- Allegany Ballistics Laboratory (Rocket Center)	3 miles south	1,650
American Woodmark Corporation (Cumberland)	4 miles southwest	570
UPMC-Western Maryland (Cumberland)	10 miles northeast	2,100
Frostburg State University	11 miles northwest	878
CSX Cumberland Terminal Subdivision	8 miles northeast	500
Beitzel Corporation (Grantsville)	25 miles west	575

Figure 8: Job Centers Near Project Area with

Create good-paying jobs, including through the use of a project labor agreement

The Project presents an opportunity for local workforce hiring via a project labor agreement, which Maryland supports on major public works construction projects. An executive order signed by Gov. Wes Moore in November 2023 authorizes state government units under the executive branch to allow community hiring provisions for state construction projects over \$5 million and allows executive branch units to require or consider the use of contractors participating in registered apprenticeship programs. Given the Project budget of approximately \$7 million, the Cresaptown Triangle Project is authorized to consider utilizing project labor agreements and apprenticeship programs facilitating local hiring.

State of Good Repair

Prioritize improvement of the condition and safety of existing transportation infrastructure within the existing footprint

The Cresaptown RAISE Project will revitalize roadway infrastructure in Cresaptown and introduce modern updates to intersections and roadways, namely US 220, that are sorely needed to improve traffic flows and create safer conditions for motorists and pedestrians alike. Roadway resurfacing will occur on US 220 within the Project area, which is in relatively good condition due to having been repaved within the last 15 years but will be restriped and redesigned to include dedicated left turn lanes at key intersections, as well as adjacent sidewalks, curbs, and gutters.

MDOT is a national leader in asset management policy and practice. SHA is home to a dedicated Asset Management Office (AMO) responsible for guiding the SHA Asset Management

Program toward optimal performance, using risk-based resource allocation to maintain all roadway assets in a good state of repair. SHA maintains more than 75 types of transportation assets across 14 critical asset classes with a total replacement value of more than \$39 billion. This program continually prioritizes asset needs based on age, condition, criticality, and risk. It implements standards, improves systems and data, fosters collaboration, and strengthens institutional knowledge.

Create new infrastructure in remote communities that will be maintained in a state of good repair

Creating safer roadways, new sidewalks, and improved intersections for pedestrians and motorists will introduce new infrastructure that positively impacts the movement of people in and around Cresaptown, a USDOT defined rural area. The safer road conditions will help promote additional investment along MDOT's defined rural freight corridor in the area. SHA will work with Allegany County to maintain improved assets in future years.

## Partnership and Collaboration

Engage residents and community-based organizations to ensure communities are meaningfully integrated throughout the Project lifecycle

In December of 2017, the project team conducted a public meeting where they received feedback from residents and other important stakeholders regarding the proposed improvements. Overall, the county [expressed support](#) for the “plan for the development for a multilane highway to improve safety, enhance accessibility, and promote economic vitality in Allegany County.” The community support for Alternative 2 of the proposal based on the information gathered was instrumental in lifting the Project off the ground. The initial partnership in establishing the project's NEPA process alongside the West Virginia Department of Transportation Division of Highways (WVDOH) helped establish a footing for the project with other public partnerships.

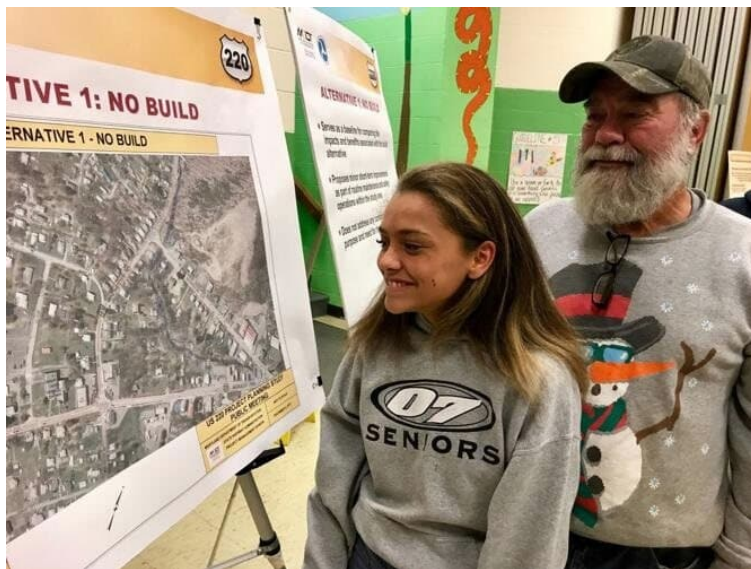


Figure 9: Attendance at 2017 Public Engagement Meeting

This builds upon a [community survey](#) in Allegany County, which found that 50.6 percent of respondents desired workforce investment in future years. The Project will provide equitable workforce investment through road capacity expansion to fuel economic growth in the area near employment centers such as IBM. The demand for tech-specific jobs shows even greater regional support for investment; 79 percent of respondents in the survey agreed that computer sciences, e-commerce, and technology development will enhance economic development opportunities for the region.

MDOT conducted public outreach to support the development of the Project scope to ensure it reflects the needs and priorities of community members and stakeholders in the project area, including:

- A Public Informational Workshop held on November 13, 2014, to discuss the study's purpose and need.
- An Informational Public Workshop held on December 9, 2015, where the project team presented the No-Build alternative and six build alternatives.
- After receiving comments from the public at the 2015 Workshop, the study team dropped five build alternatives and refined the design.
- The public received a newsletter in July 2017 explaining why the alternatives were dropped from consideration and providing details on the refined design (known as Alternative 2 Modified).
- Subsequent workshops with community group leaders to identify priorities for improvements at and around the Cresaptown Project Area in late 2017.
- An SHA open house information session for residents.
- Distribution of comment forms at events for further feedback

Coordinate with other types of projects such as economic development, commercial or residential development near public transportation.

Many businesses and organizations rely upon MD 53 and US 220 to function daily. As a result, collaboration with partners such as IBM, ATK Tactical Systems Company, NewPage Paper Mill, and Barton Business Park can provide millions of dollars into the economy. IBM has expressed support for the Project, which highlights the ability of these improvements to support economic development. Barton Business Park is also within an Enterprise Zone. Enterprise Zone employers that hire for newly created full-time jobs are eligible for a one-to three-year Maryland state tax credit. This also aligns with the goals of the Allegany County Regional Economic Development Plan, which identifies these areas as enterprise or opportunity zones with investment incentives, and highlights "fostering effective transportation access" as an important goal in its general plan of action.

## Innovation

Use practices that facilitate accelerated project delivery such as single contractor design-build arrangements

An accelerated project delivery model through single-contractor design epitomizes efficiency and punctuality, highlighting the Project's commitment to technological innovation. The

Project utilized digital as-builts as a method to streamline updates by turning 2D paper models into three-dimensional (3D) datafiles that can be regularly updated and shared with stakeholders throughout a project's life cycle.

Additionally, the Project team has implemented programmatic strategies to provide an efficient process for environmental approvals and permits as applicable. In completion of 30 percent design of the Project, SHA and FHWA have completed a Categorical Exclusion (CE) agreement to ensure that residents are not subject to significant impacts to planned growth or land use for the area; are not required to relocate in significant amounts; and are not impacted by drastic negative externalities from pollution or any negative alteration of natural, historic, or religious sites. SHA maintains a [Programmatic Categorical Exclusion](#) (PCE) agreement with FHWA, a proven tool to accelerate and streamline project delivery and environmental reviews.