

1.0 Cumulative Effects Analysis

1.1 Introduction

This Technical Memorandum describes the past, present, and reasonably foreseeable future actions in the Proposed Action's Region of Influence (ROI) and potential cumulative impacts that could result from the Proposed Action (i.e., Preferred Alternative) when considered with these other actions.

This cumulative impacts analysis involves defining the scope of the other actions and their interrelationship with the Proposed Action to determine if they overlap in space and time. The United States Environmental Protection Agency (USEPA) defines cumulative impacts as “the total effects on a resource, ecosystem, or human community of that action and all other activities affecting that resource” (USEPA, 1999). Cumulative impacts can result from individually minor, but collectively significant, actions expected to occur in a similar location and during a similar time period and can result in adverse and/or beneficial impacts. **Figure 1** presents a visual interpretation of cumulative impacts resulting from collective actions.

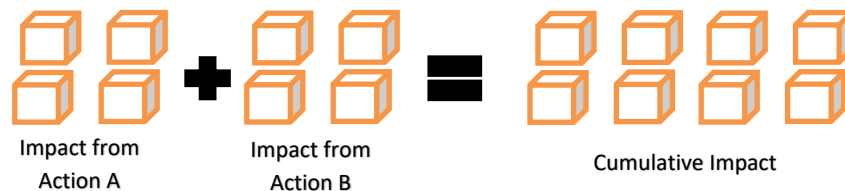


Figure 1: Visualization of Cumulative Impacts

Treasury received comments related to cumulative impacts from stakeholders during the public scoping period. Commenters were concerned about additive effects to the already industrialized and developed nature of the surrounding area; impacts to Washington, DC tourism; and cumulative light pollution.

Please refer to Treasury's [Public Scoping Report](#) for further details on the comments received during the scoping period. Concerns expressed during public scoping regarding cumulative impacts are considered and addressed in this analysis.

1.2 Cumulative Affected Environment

1.2.1 Region of Influence

The ROI for the cumulative impacts analysis is the same as the ROI for the analyzed resource areas, including the Project Site and adjacent off-site lands (see **Figure 2**). The ROI comprises areas where the Proposed Action's effects could interact with other actions and contribute to cumulative environmental impacts. The temporal scope of the cumulative impacts analysis is from 2020 to 2030 (i.e., 10 years) to include all implementation phases of the Proposed Action (e.g., demolition, construction, operation) and account for any potential delays in the schedule, as well as to capture a reasonable planning horizon for reasonably foreseeable actions in the ROI. Planning beyond that time horizon is speculative at this point.

1.2.2 Applicable Guidance

Treasury analyzed whether the Proposed Action could contribute to significant adverse cumulative impacts. As defined by the Council on Environmental Quality (CEQ) Regulations in [40 Code of Federal Regulations \(CFR\) 1508.7](#), a cumulative impact “results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions.” Each of the considered actions has the potential to affect

resources in the same time and space as the Proposed Action. **Table 1** identifies federal and state guidance and regulations relevant and applicable to this cumulative impacts analysis.

Table 1: Cumulative Effects Applicable Guidance and Regulations

Guidance/Regulation	Description/Applicability to Proposed Action
<u>National Environmental Policy Act (NEPA)</u> <u>42 United States Code (USC)</u> <u>4321 et seq.</u>	Requires the analysis of a federal proposed action's cumulative environmental effects on resources for which such effects may often manifest only at the cumulative level.
<u>Council on Environmental Quality Guidance: Considering Cumulative Effects Under the National Environmental Policy Act (CEQ, 1997)</u>	Provides guidance on conducting a cumulative effects analysis. Overall, assessing cumulative effects involves defining the scope of other actions and their interrelationship with the Proposed Action to determine if they overlap in space and/or time.
<u>Council on Environmental Quality Guidance Memorandum: Guidance on the Considerations of Past Actions in Cumulative Effects Analysis (CEQ, 2005)</u>	Provides guidance on considering past actions in cumulative effects analysis. Cumulative effects may be accrued over time and/or in conjunction with pre-existing effects from other activities in the ROI. Therefore, previous impacts and multiple smaller impacts should also be considered.

1.2.3 Past, Present, and Reasonably Foreseeable Future Projects

This cumulative impacts analysis considers recent, ongoing, and reasonably foreseeable future actions occurring within the ROI and focuses on those actions that may affect the same resources as the Proposed Action, potentially contributing to cumulative effects. These actions include commercial, residential, mixed-use, transportation, infrastructure, recreation, and institutional developments. Treasury identified these actions through consultation with the United States Department of Agriculture (USDA) and research of publicly available information sources, such as local master plans, news articles, and federal, state, and local agencies' databases. **Table 2** provides a summary of past, present, and reasonably foreseeable future actions considered in this analysis. **Figure 2** illustrates the location of the past, present, and reasonably foreseeable future actions in relation to the Project Site.

Although the term "past, present, and reasonably foreseeable future" actions is used in this analysis to describe all considered actions that may interact with the Proposed Action, the cumulative analysis focuses on ongoing and reasonably foreseeable future actions; specifically, those projects that are well-developed, in mature planning stages, and/or have funding secured.

Past actions have been included and assessed in the establishment of the environmental baseline and are already considered in the impact analysis presented for each resource area in its respective Technical Memorandum.

Present actions are only considered in this analysis if their timeframe continues (e.g., ongoing projects), while past actions are only considered if their long-term and operational impacts would occur to similar resource areas at the same time as the Proposed Action, contributing to cumulative impacts.

Table 2: Past, Present, and Reasonably Foreseeable Future Actions

No.	Project Name ¹	Project Proponent	Type of Project	Project Status	Description of Project
1	Konterra Town Center	KLNB	Mixed-Use	Proposed	Construct a \$1.75 billion mixed-use development on 2,200 acres of retail, research, and technology campuses including 1.4 million square feet (SF) of building space, more than 1,000 residential units, and 348 acres reserved for a governmental, educational, or corporate facility. Source: <i>(KLNB, 2020)</i>
2	Purple Line	Maryland Department of Transportation (MDOT), Maryland Transit Administration, Purple Line Transit Partners	Transportation	Under Construction	Build a 16-mile, 21-station light rail transit line that will connect several communities in Maryland, from Bethesda in Montgomery County to New Carrollton in Prince George’s County. The project will include five major activity center stations (Bethesda, Silver Spring, Takoma-Langley Park, College Park, and New Carrollton). Source: <i>(USDOT, 2020)</i>
3	Beltway Plaza Mall	Quantum Companies	Mixed-Use	Proposed	Renovate a 53-acre existing shopping center into new housing for 175 to 250 townhouses on Breezewood Road and 100-500 residential units on top of existing retail space, as well as office space, a central plaza, green space, and fountains. Source: <i>(Cooper, 2019)</i>
4	College Park Woods Connector Trail	Maryland-National Capital Park and Planning Commission (M-NCPPC)	Recreation	Under Construction	Construct a half-mile connector across University of Maryland between the neighborhood of College Park Woods and the Paint Branch Trail to link a residential community to the campus and the Anacostia Tributaries Trail System. Source: <i>(M-NCPPC, 2020)</i>
5	Cris Place	Cris Place, LLC	Commercial	Proposed	Construct four commercial buildings on parcels 1 and 2, totaling 22.53 acres. Source: <i>(PG County Planning Department, 2020a)</i>
6	Meier Place Emergency Vehicle Access	Prince George’s County Department of Public Works and Transportation (DPW&T)	Transportation	Proposed	Construct a 0.74-acre emergency vehicle access within the public right-of-way (ROW) for Meier Place. Source: <i>(PG County Planning Department, 2020b)</i>
7	5402 Odell Road	Private Developer	Residential	Proposed	Construct a 0.24-acre single family dwelling. Source: <i>(PG County Planning Department, 2020c)</i>
8	11730 Ellington Drive	Ben Dyer & Associates	Residential	Proposed	Construct an 0.7-acre residential building. Source: <i>(PG County Planning Department, 2020d)</i>
9	5600 Sunnyside Avenue	Clear Channel Outdoor	Industrial	Proposed	Construct an outdoor advertising sign on a 0.67-acre lot. Source: <i>(PG County Planning Department, 2020e)</i>
10	10401 Rhode Island Avenue	Beltsville Land, LLC	Industrial	Approved	Construct a 2.06-acre addition to an existing consolidated storage building. Source: <i>(PG County Planning Department, 2020f)</i>
11	Tesla Electric Vehicle Charging Station	Tesla	Transportation	Proposed	Install a Tesla electric vehicle charging station at an existing Wawa gas station. Source: <i>(PG County Planning Department, 2020g)</i>
12	Wingate Hotel	Joyce Engineering Corporation	Commercial	Proposed	Construct a 1.44-acre hotel. Source: <i>(PG County Planning Department, 2020h)</i>

Table 2: Past, Present, and Reasonably Foreseeable Future Actions

No.	Project Name ¹	Project Proponent	Type of Project	Project Status	Description of Project
13	11530 East Maple Avenue	Private Developer	Industrial	Approved	Construct a 1.01-acre concrete plant. Source: (PG County Planning Department, 2020j)
14	Trolley Lane, Lot 4	Atapco Beltsville, LLC	Industrial	Proposed	Parking lot and loading dock adjustments for an existing 48,000-SF warehouse on 12.83 acres. Source: (PG County Planning Department, 2020j)
15	Filipino Capital Church	Potomac Conference of 7th Day Adventists	Institutional	Proposed	Construct a 14,500-SF church and parking space on 4.24 acres. Source: (PG County Planning Department, 2020k)
16	Jain Temple Complex of Metropolitan Washington	Jain Society of Metropolitan Washington	Institutional	Approved	Construct a church on a 5.79-acre parcel. Source: (PG County Planning Department, 2020l)
17	1700 Beltsville Drive	Stantec	Commercial	Approved	Construct a 12.33-acre building addition. Source: (PG County Planning Department, 2020m)
18	Halltown Subdivision, Lot 10	Private Developer	Residential	Proposed	Construct a 1-acre garage and house site. Source: (PG County Planning Department, 2020n)
19	Greenbelt Metro Apartments	Greenbelt Apartments LLC	Residential	Proposed	Consolidate three lots into one parcel for development of two multi-family residential buildings (354 units) and a clubhouse. Source: (PG County Planning Department, 2020o)
20	Park Place	Konterra Associates, LLC	Industrial	Proposed	Construct 128,810 SF of industrial space for office, warehouse, and distribution use on 17.46 acres. Source: (PG County Planning Department, 2020p)
21	Konterra Business Park	Richard Dicken	Industrial	Proposed	Install a screen wall of mechanical equipment on 9.8 acres. Source: (PG County Planning Department, 2020q)
22	Sites Property	Private Developer	Residential	Proposed	Construct two single family lots on 4.99 acres. Source: (PG County Planning Department, 2020r)
23	Brick Yard	Calatlantic homes	Residential	Proposed	Construct 190 townhomes within the planned MARC Community on 67 acres. Source: (PG County Planning Department, 2020s)
24	7-Eleven	7-Eleven	Commercial	Approved	Construct a 7-Eleven gas station and food/beverage store on an 0.8-acre lot. Source: (PG County Planning Department, 2020t)
25	MD-212 Pine Street to US-1	MDOT State Highway Administration	Transportation	Approved	Implement roadway widening, resurfacing, drainage improvements, curb and gutter installations, and new bicycle lanes and sidewalks. Source: (MDOT, 2020a)
26	US-1 College Ave to MD-193	MDOT State Highway Administration	Transportation	Approved	Widen US-1 to four lanes, along with a bicycle lane, raised median, sidewalks compliant with the Americans with Disability Act, and resurfacing, landscaping, drainage, lighting, and signage improvements. Source: (MDOT, 2020b)
27	Sunnyside Avenue Bridge Replacement over Indian Creek	Prince George's County DPW&T	Transportation	Under Construction	Replace Sunnyside Avenue Bridge over Indian Creek and widen the roadway west of the CSX crossing to Kenilworth Avenue. Source: (PG County DPW&T, 2020a)

Table 2: Past, Present, and Reasonably Foreseeable Future Actions

No.	Project Name ¹	Project Proponent	Type of Project	Project Status	Description of Project
28	Montpelier Drive, Green Street Improvements	Prince George’s County DPW&T	Transportation	Proposed	Install concrete islands and curb returns. Source: <i>(PG County DPW&T, 2020b)</i>
29	Contee Road Extension from US-1 to Konterra Drive	Prince George’s County DPW&T	Transportation	Under Construction	Reconstruct Contee Road from US-1 to Konterra Drive (approximately 6,000 LF) to include a 4-lane roadway with median, bike lane, sidewalk, and street lights. Source: <i>(PG County DPW&T, 2020c)</i>
30	Beltsville Agricultural Research Center (BARC) Demolition	USDA	Institutional	Proposed	Demolish 22 buildings and associated infrastructure at BARC, requiring the disturbance of more than 5,000 square feet. Source: <i>(USDA-ARS, 2020)</i>
31	BARC Solar Array Development	USDA	Institutional	Proposed	Solar arrays would be installed at 72 sites across the BARC facility. Minimal land disturbance would be required for only 21 ground-mounted solar panels. Source: <i>(USDA-ARS, 2019)</i>
32	Route 201	MDOT	Transportation	Proposed	Road improvements are proposed for 4.5 miles of MD 201 from the Beltway to the Intercounty Connector. This route currently follows parts of Old Baltimore Pike and Edmonston Road. Improvements include widening the road to four lanes, constructing an extension, and potentially including bicycle and pedestrian access. Source: <i>(Greater Beltsville Business Association, 2020; National Capital Region Transportation Planning Board, 2017)</i>
33	High-Speed Superconducting Magnetic Levitation (MAGLEV) System	Federal Railroad Administration (FRA), MDOT	Transportation	Proposed	FRA and MDOT are proposing a high-speed ground transportation line between Baltimore, MD and Washington, DC, with an intermediate stop at Baltimore Washington International (BWI) Thurgood Marshall Airport. The MAGLEV system would include a viaduct or below-ground tunnel, tunnel portals ranging between 330 feet to 1,600 feet, Trainset Maintenance Facilities, Maintenance of Way Facilities, stations, Fresh Air and Emergency Egress sites, power facilities, operations control center, and signals and communications. The final alignment would extend 33 to 36 miles end-to-end, depending on which Build Alternative is selected. Source: <i>(USDOT et al., 2020; USDOT et al, 2021)</i>
34	FY 20 and FY 21 Infrastructure Improvements at BARC	USDA	Institutional	Under Construction	Infrastructure improvements proposed at BARC include: repair the patio walkway at Buildings #010A and #010B; replace the roof of Building #209; replace the roof and gutters of Building #007, replace guardrails along Powder Mill and Soil Conservation Road; and repave roads in the Dairy Area Wastewater treatment filter system for Building #218.
35	FY 20 and FY 21 Industrial Improvements at BARC	USDA	Institutional	Under Construction	Repair and improve industrial systems at BARC including: replace Chillers 1 and 2 at Building #004, Chillers 1 and 2 at Building #007, 250-ton chillers at Building #001, 300-ton chillers at Building #010A; repair the water treatment PH control system and the chlorine production and injection system for Building #310.

Table 2: Past, Present, and Reasonably Foreseeable Future Actions

No.	Project Name ¹	Project Proponent	Type of Project	Project Status	Description of Project
36	FY20 and FY 21 Utility Repair at BARC	USDA	Institutional	Under Construction	Repair utility systems at BARC including: heating water system pipelines in Range 10 greenhouses; water infiltration in Building #005; chilled water pipes in Building #161; rooftop heating and air conditioning units in Building #177C; air handling units in Building #003; electrical wires for East Campus; Building #010A cooling tower; water plant filter replacement; and electrical substation on West Campus.
37	Emission Reductions Projects	Treasury	Institutional	Proposed	Treasury plans to implement emission reduction efforts including evaluating alternatives to chromium plating, installing new low-volatile organic compound (VOC) press for printing money bands, using electricity from renewable energy sources, and continuing to conduct comprehensive air emission and greenhouse gas (GHG) analyses.
38	I-495 & I-270 Managed Lanes Study	Federal Highway Administration (FHWA)	Transportation	Proposed	The I-495 & I-270 Managed Lanes Study evaluates road improvement solutions to address traffic congestion and trip reliability on I-495 from south of the American Legion Bridge in Fairfax County, Virginia, to east of the Woodrow Wilson Bridge in Prince George’s County, Maryland; and I-270 from I-495 to I-370 in Montgomery County, Maryland, including the east and west I-270 spurs north of I-495. MDOT’s preferred Build Alternative would be to add two high-occupancy toll (HOT) lanes in each direction on I-495, convert one existing high-occupancy vehicle (HOV) lane to a HOT lane, and add one HOT lane in each direction on I-270 (FHWA, 2021).
39	Proposed Off-site Utility Work at BARC	Treasury	Institutional	Proposed	Treasury anticipates it may need to construct about 1 mile (about 4,600 to 5,600 linear feet) of new force main to tie its sanitary sewer system into the USDA’s existing sanitary sewer lines south of the Project Site in support of the Proposed Action. Treasury may also need to upgrade electrical utilities servicing the proposed Currency Production Facility (CPF). Additional NEPA analysis will be conducted in the future if Treasury selects the Preferred Alternative for implementation, once additional design information is available. Currently, the locations and nature of proposed off-site utility work are not known.
40	Recommended Traffic Mitigation Measures at BARC	Treasury	Transportation	Proposed	Treasury has identified various methods through which it could mitigate potential adverse impacts to traffic and transportation from the Proposed Action. There are seven local intersections for which Treasury would consider mitigation measures. Additional NEPA analysis will be conducted in the future if Treasury selects the Preferred Alternative for implementation, once additional design information is available. Currently, the nature of improvements at each intersection is not known.

Table 2: Past, Present, and Reasonably Foreseeable Future Actions

No.	Project Name ¹	Project Proponent	Type of Project	Project Status	Description of Project
41	Future DC Facility Operations	Treasury	Institutional	Proposed	Treasury's plans for the existing DC Facility if it implements the Proposed Action are not yet determined. Future changes to those facilities, or the operations conducted therein, would constitute separate proposed actions, and Treasury would prepare appropriate NEPA documentation for those actions.

¹Note: Hyperlinks are provided only for projects with websites or specific project data.

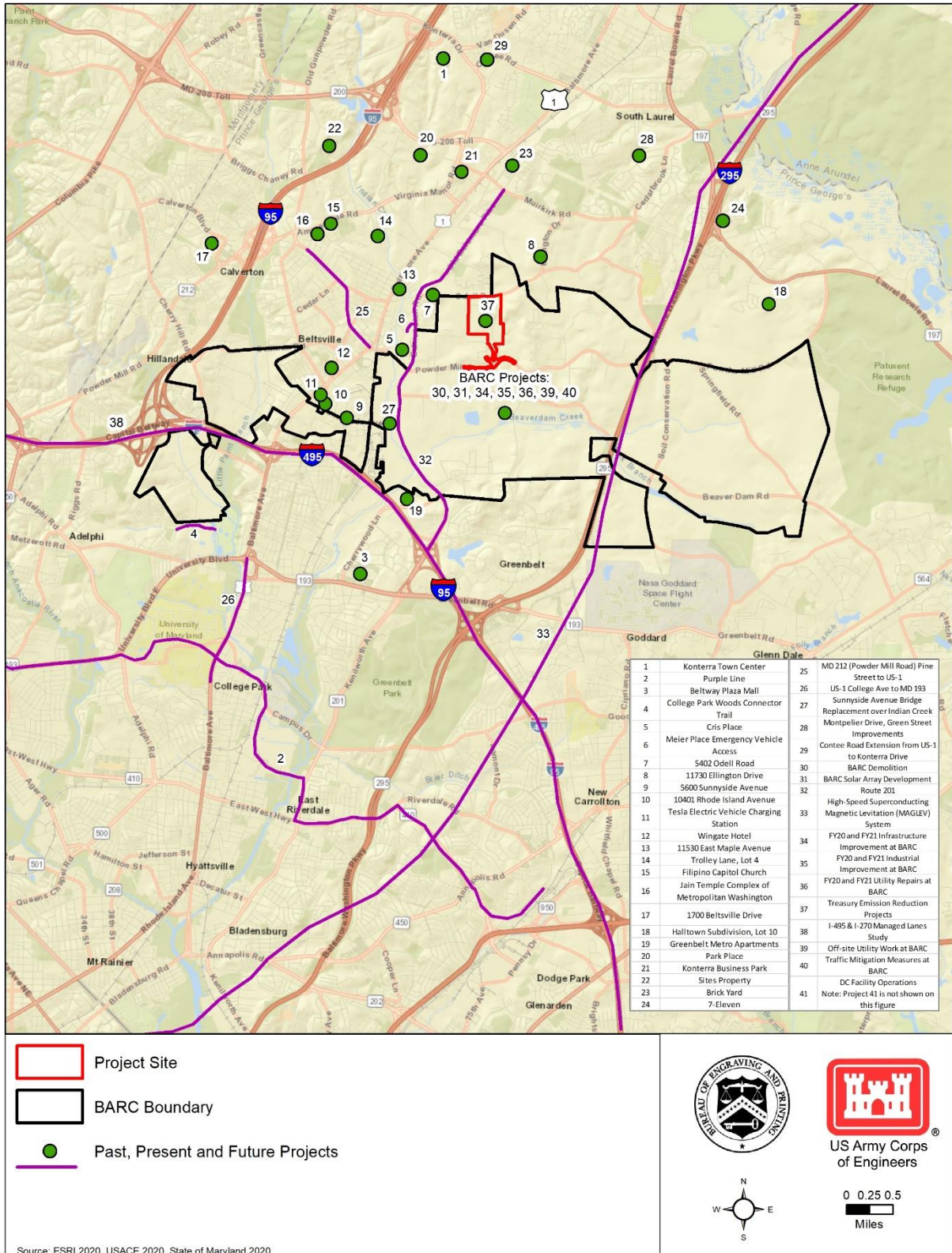


Figure 2: Past, Present, and Reasonably Foreseeable Future Actions in the Combined ROIs

1.2.3.1 Impacts of Past, Present, and Reasonably Foreseeable Future Projects

The collective impacts of past, present, and reasonably foreseeable future actions are likely to be similar to the impacts of the Proposed Action and primarily result from construction activities. The temporary nature of construction, as well as the incorporation of standard Best Management Practices (BMPs), Regulatory Compliance Measures (RCMs), and Environmental Protection Measures (EPMs) into the Proposed Action (i.e., identified as impact-reduction measures for each resource area), would ensure that adverse impacts are minimized to the extent possible.

Collective impacts of past, present, and reasonably foreseeable future actions are summarized below.

- Land disturbance from construction of past, present, and reasonably foreseeable future actions may affect surrounding soils and generate air emissions, increased noise, fugitive dust, potential hazardous and toxic materials and waste (HTMW), and stormwater runoff. In addition, some inherent health and safety risks would be present due to the nature of construction work.
- Vegetation clearing in undeveloped areas may disturb wildlife species and their habitats, in addition to inadvertent cultural discoveries. Of note, the MAGLEV project could permanently impact up to 451 acres of forest, including up to 437 acres of habitat for Forest Interior Dwelling Species (FIDS), and up to 45 acres of wetlands within the entire MAGLEV project area including a 30-foot buffer. Of these permanent impacts, up to 160 acres of forest impacts and up to 16 acres of wetland impacts would occur on BARC (USDOT et al, 2021). Minimal land disturbance would be expected for the BARC Solar Array project as all of the 72 sites that comprise the Proposed Action are either buildings, parking lots, or existing agricultural fields with no excavation proposed (USDA-ARS, 2019).
- Transportation and large-scale construction projects, such as the MD-212 Pine Street to US-1 project and the Konterra Town Center project (see **Table 2**), may result in short-term traffic congestion, particularly from road closures and detours, and reductions in traffic capacity. Traffic and transportation impacts are generally localized and would likely be readily absorbed by the existing road capacity.
- An increase in temporary employment to support construction of past, present, and reasonably foreseeable future projects may result in short-term, beneficial impacts on socioeconomic conditions. Construction workforces may generate sales, taxes, and revenue at local and state levels while employment temporarily increases.
- Similarly, long-term employment and associated socioeconomic benefits may occur as well from operation of larger mixed-use and commercial projects (e.g., Beltway Plaza Mall project, see **Table 2**).
- Transportation improvement projects, such as the US-1 College Avenue to MD-193 project and , I-495 & I-270 Managed Lanes Study (see **Table 2**), may benefit traffic and transportation in the long term by increasing road capacity and pedestrian/bicycle connectivity, and reduce congestion, travel delays, and mobile emissions. Similarly, the MAGLEV project would result in a small percentage of automobiles diverted from major roadways (i.e., 1.3 percent annually) (USDOT et al, 2021).
- Mixed-use and recreational projects, such as the College Park Woods Connector Trail (see **Table 2**), may result in long-term beneficial impacts on recreation and land use by increasing and improving land utility and social amenities through the creation of green space and community gathering areas.

1.3 Cumulative Environmental Effects

This section analyzes potential cumulative impacts within the ROI under the Proposed Action (i.e., Preferred Alternative) and the No Action Alternative, when considering other past, present, and reasonably foreseeable future actions.

1.3.1 Approach to Analysis

The thresholds for significance of cumulative impacts are the same thresholds for significance of each resource area evaluated for the Proposed Action, as described in each respective Technical Memorandum. For this analysis, Treasury assumed a significant cumulative impact would occur if the incremental effect of the Proposed Action, considered with effects of past, present, and reasonably foreseeable future actions, would rise to the level of significance under those criteria.

1.3.2 Cumulative Impacts under the No Action Alternative

Under the No Action Alternative, Treasury would not construct or operate the Proposed Action. The past, present, and reasonably foreseeable future actions considered in this cumulative analysis (see **Table 2** and **Figure 2**) would likely still be developed and regional development and growth would continue, regardless of the Proposed Action. The Project Site, however, may continue to degrade and fall into disrepair. The USDA, as a federal agency, would coordinate with the Maryland Historical Trust and any consulting parties to identify methods to avoid, minimize, and/or mitigate deterioration of the on-site historic resources as needed to maintain the BARC Historic District in compliance with the National Historic Preservation Act (NHPA) ([54 USC 300308](#)), thereby keeping potential adverse cumulative impacts to cultural resources at **less-than-significant** levels when considered with the development of other past, present, and reasonably foreseeable future actions in the historic district.

Similarly, deterioration of existing buildings may release contaminants into the environment, including the soil, resulting in potential HTMW and soils impacts. Potential health and safety risks could also arise for BARC employees required to be near or enter the degraded facilities. BARC employees would operate in accordance with the USDA's health and safety protocols and Occupational Safety and Health Administration standards to ensure potential adverse cumulative impacts to soils, HTMW, and health and safety remain at **less-than-significant levels** when considered with other actions in the ROI.

As no incremental effects would occur to other resource areas under the No Action Alternative, **no cumulative impacts** would be expected on the following resource areas when considered with past, present, and reasonably foreseeable future projects: land use; visual resources; air quality; noise; topography; water resources; biological resources; traffic and transportation; utilities; and socioeconomics/environmental justice (EJ).

1.3.3 Cumulative Impacts under the Preferred Alternative

The Preferred Alternative's contribution to cumulative impacts when considered with other past, present, and reasonably foreseeable future projects is analyzed below. Based on the results on this analysis, the Preferred Alternative could contribute to **significant adverse cumulative impacts** to water resources due to permanent impacts on surface waters, and cultural resources, particularly the BARC Historic District's viewshed, when considered with development of other past, present, and reasonably foreseeable future projects. Collective actions occurring within the BARC Historic District could affect its historic character and integrity. **Significant cumulative adverse impacts** could also occur to traffic conditions, and consequently result in disproportionate and **significant adverse cumulative impacts** on EJ communities from traffic congestion as well. Adverse cumulative air impacts on EJ communities are expected as well, but at less-

than-significant levels. Cumulative impacts to other resource areas are expected to be negligible or less than significant.

1.3.3.1 Land Use

Construction

Construction of the Preferred Alternative with past, present, and reasonably foreseeable future actions would result in **less-than-significant adverse cumulative impacts** on nearby land uses from construction disturbance. Increased noise and dust, as well as temporary traffic delays from construction movements, would potentially affect the use of surrounding businesses, homes, and recreational areas. However, these impacts would be temporary and cease once construction has been completed. In addition, construction activities would be confined to project sites, and EPMS would be implemented to minimize adverse impacts from dust, noise, or road closures to nearby receptors.

Operation

While the Proposed Action would be an “Industrial” facility within a “Residential” zone, its operation would not substantially affect the area available for “Residential” use. In addition, no incompatible operations would occur under the Preferred Alternative in the ROI outside of Treasury’s proposed parcel that could interact with other past, present, and reasonably foreseeable future actions. Agricultural land is abundant within the ROI and Treasury operations would only reduce designated “Agricultural” land use by 4.5 percent in the ROI. Further, the USDA has indicated that it does not need the Project Site to conduct its agricultural research activities. As such, the Preferred Alternative would result in **negligible adverse cumulative impacts** on land use, zoning, or recreation (including recreational tourism).

1.3.3.2 Visual Resources

Construction

Construction sites for ongoing and future large-scale projects, as well as the Project Site, would likely detract from the visual quality of the local area by removing many of the existing natural and built features such as trees, vegetation, and buildings. However, large construction sites are not unusual in cities and their visual impacts on passersby and nearby residences are temporary. As construction activities would be limited to normal business hours during the day, lighting levels in the ROI would not change substantially from the status quo. While construction of the Preferred Alternative would be visible from Odell Road, in addition to other past, present, and reasonably foreseeable future projects in the vicinity (e.g., 5402 Odell Road and Treasury Emissions Reduction Projects [see **Table 2**]), the Preferred Alternative’s contribution to cumulative changes to the viewshed would be minimal and temporary. Therefore, the Preferred Alternative with past, present, and reasonably foreseeable future actions would result in **less-than-significant adverse cumulative impacts** on visual resources.

Operation

Implementation of the Preferred Alternative with past, present, and reasonably foreseeable future actions would alter the existing viewshed. The Proposed Action and other actions in the vicinity would be visible to the residences along Odell Road and result in a permanent change to the existing viewshed. Cumulative impacts would not be significant, however, as the other actions potentially visible to the residences along Odell Road are a proposed residence (5402 Odell Road), which would be consistent with the existing landscape, and emissions reductions projects that would occur within the ROI. In addition, the Proposed Action would be designed in a manner consistent with Treasury’s project-specific Memorandum of Agreement (MOA) or Programmatic Agreement (PA) for cultural resources to reduce potential adverse visual effects, if feasible, to the existing cohesive BARC landscape. As such, the Preferred Alternative would

contribute ***less-than-significant adverse cumulative impacts*** to visual resources for residences along Odell Road.

Security and nighttime lighting from the Preferred Alternative would increase the amount of nighttime light relative to existing conditions; however, no other actions in the ROI (e.g., 5402 Odell Road and Treasury Emissions Reduction Projects) would result in new permanent light sources. Further, Treasury would seek to minimize off-site light pollution through sensitive design of the Proposed Action. Therefore, the Preferred Alternative would result in ***less-than-significant cumulative adverse impacts*** on light pollution.

As the Proposed Action would be set back and surrounded by a vegetated buffer, impacts to roadway views would be minimal. Therefore, the Preferred Alternative with past, present, and reasonably foreseeable future actions would result in ***less-than-significant adverse cumulative impacts*** on visual resources in the ROI from roadways.

1.3.3.3 Air Quality

Construction

Construction of the Preferred Alternative with past, present, and reasonably foreseeable future actions would generate an increase in air emissions in the ROI. However, criteria pollutant emissions, including fugitive emissions, from construction equipment and activities would not exceed [National Ambient Air Quality Standards \(NAAQS\)](#) and would be lower than the applicable *de minimis* thresholds. As such, the Preferred Alternative is not expected to contribute to significant cumulative impacts on local and regional air quality. Further, proponents of past, present, and reasonably foreseeable future actions would be responsible for certifying compliance with applicable federal, state, and local requirements as needed. Construction standards would minimize the amount of fugitive emissions (i.e., dust) that could travel off-site and potentially affect sensitive receptors in the ROI. Therefore, the Preferred Alternative with past, present, and future actions would result in ***less-than-significant adverse cumulative impacts*** on air quality.

Operation

Operation of the Proposed Action in conjunction with other new facilities in the ROI would increase emissions in the ROI. Although these emissions would contribute to a general deterioration of air quality, the contribution of each project and the Preferred Alternative would be relatively small. Even taken collectively, total emissions would represent a small proportion of all emissions in the ROI or state, and would not have any noticeable regional or global impact on climate change. Further, none of the past, present, or reasonably foreseeable future actions are of a type that could generate individually significant amounts of emissions and be considered a major source for air permitting purposes. Treasury's emission reduction projects (see **Table 2**) may minimize cumulative air emissions as well. Treasury would obtain and maintain the appropriate air quality permits for the Proposed Action and comply with applicable emission and work practice standards to minimize its contribution to cumulative air emissions. In addition, improved emission controls and efficiencies associated with VOCs from the Proposed Action would further reduce the Preferred Alternative's contribution toward cumulative emissions in the ROI. As such, the Proposed Action's contribution of emissions would not threaten the attainment status of the region, have a noticeable GHG impact, or lead to a violation of any federal, state, or local air regulation. Therefore, the Preferred Alternative with past, present, and future actions would result in ***less-than-significant adverse cumulative impacts*** on air quality.

1.3.3.4 Noise

Construction

Construction activities from the Preferred Alternative with past, present, and reasonably foreseeable future actions would cause ***less-than-significant adverse cumulative impacts*** on noise in the ROI. The use of

heavy equipment at construction sites would increase local noise levels, as would the commute of heavy trucks and construction contractor vehicles. In addition, construction of transportation improvement projects, such as widening US-1 to four lanes from College Avenue to MD-103 (see **Table 2**), along with the Preferred Alternative, would result in traffic congestion which would cause nearby land owners/users to experience increased noise levels. However, noise impacts across the ROI would be generally consistent with previous development, temporary, and phased. In addition, noise levels would be in compliance with the [Noise Control Act of 1972](#) and [Prince George's County Noise Ordinance](#), and construction workers would comply with Occupational Safety and Health Administration (OSHA) safety requirements regarding noise safety.

Operation

Operation of the Proposed Action and new businesses, such as the Beltway Plaza Mall and Konterra Business Park (see **Table 2**), would increase ambient noise in the ROI from additional vehicular traffic, although operational noise from these facilities would be consistent with the existing urban and suburban soundscape in the ROI. With the implementation of project-specific noise-reduction measures, noise impacts in the long term would be minimized to the extent practicable. Therefore, the Preferred Alternative when considered with past, present, and future actions would result in **negligible adverse cumulative impacts** on noise.

1.3.3.5 Topography and Soils

Construction

Construction of the Preferred Alternative considered with past, present, and reasonably foreseeable future actions would result in cumulative disturbance to soils. The primary impacts associated with soil disturbance would result from increased erosion of exposed or stockpiled soils and compaction from construction vehicles and equipment. Impacts on soils would cease upon the completion of construction activities and would be minimized to the extent practicable with implementation of standard EPMS, RCMs, and adherence to the Maryland Department of the Environment's (MDE's) [General Permit for Stormwater Associated with Construction Activity](#) requirements. As such, the Preferred Alternative with past, present, and future actions would result in **negligible adverse cumulative impacts** on soils.

As the Preferred Alternative would have no incremental adverse impacts on topography, **no cumulative impacts** on this resource would result.

Operation

The Proposed Action would create up to approximately 29.4 acres of new impervious surface within the ROI. Taken into consideration with the amount of impervious surface that would be created from development of other actions, particularly commercial, transportation, and industrial projects (see **Table 2**), there would be a collective increase in stormwater runoff generated in the ROI due to the loss of permeable surfaces. Increased stormwater runoff would result in soil erosion and sedimentation. Stormwater detention features and green infrastructure/low impact development (GI/LID) measures proposed under the Preferred Alternative, in compliance with the Energy Independence and Security Act (EISA) ([42 USC 17094 et seq.](#)), would minimize its contribution toward adverse cumulative effects to the extent practicable. Therefore, the Preferred Alternative with past, present, and future actions would result in **negligible adverse cumulative impacts** on soils.

Operation of the Proposed Action with past, present, and reasonably foreseeable future actions would have **no cumulative impacts** on topography.

1.3.3.6 Water Resources

Construction

Construction of the Preferred Alternative with past, present, and reasonably foreseeable future actions would result in ***no or negligible adverse cumulative impacts*** on stormwater. Construction-related ground disturbance could increase on- and off-site soil erosion and sedimentation that could impact stormwater discharges in the ROI. Stormwater management controls and compliance with necessary permits and approvals would help to reduce erosion and sediment transport, as well as minimize the potential for long-term adverse cumulative impacts on areas downstream. In addition, compliance with [National Pollutant Discharge Elimination System](#) permit requirements and federal, state, and local regulations would minimize the Preferred Alternative's contribution to cumulative impacts on surface waters and water quality.

Like the Preferred Alternative, action proponents would be expected to obtain the MDE's [General Permit for Stormwater Associated with Construction Activity](#) to manage stormwater flow from construction sites. For actions disturbing more than one acre of land, such as the Wingate Hotel and Beltway Plaza Mall (see **Table 2**), as well as the Preferred Alternative, the construction contractor would prepare and adhere to a state-approved Erosion and Sediment Control Plan (ESCP). Adherence to requirements under approved ESCPs would ensure that runoff during construction would have no potential to further degrade water quality in surface water bodies in the ROI.

The Preferred Alternative would result in ***significant adverse cumulative impacts*** on surface water when considered with past, present, and reasonably foreseeable future projects. Transportation improvement projects and bridge repairs (e.g., Sunnyside Avenue Bridge Replacement over Indian Creek), may require water crossings resulting in permanent impacts to surface waters. The Preferred Alternative's additional impact from the diversion/fill of 226 linear feet of stream would contribute measurably to collective impacts in the ROI. Treasury would minimize these project-specific impacts through compliance with Sections 404/401 of the Clean Water Act (CWA).

Disturbances from excavation and other construction activities could mobilize contaminants in the soil or discharge other pollutants that may seep into the surficial groundwater. Thus, there is the potential for ***less-than-significant adverse cumulative impacts*** on groundwater from collective construction activities. Impact-reduction measures, such as dewatering excavated areas, would ensure that the Preferred Alternative's contribution to adverse cumulative impacts would remain less than significant.

While the total amount of wetland impacts is unknown for all past, present, and reasonably foreseeable future actions, it is expected that wetland impacts would be mitigated as applicable on a project-specific basis. Through adherence to applicable permitting and mitigation measures, the Preferred Alternative's contribution to adverse cumulative impacts on wetlands would remain ***less than significant***.

Operation

The Proposed Action would result in up to 29.4 acres of new impervious surface in the ROI. Past, present, and reasonably foreseeable future actions, particularly commercial, transportation, and industrial projects (see **Table 2**), would increase impervious surface area as well, although the exact total amount is unknown. A collective loss of permeable surface in the ROI would increase stormwater runoff. Under the Preferred Alternative, Treasury would properly design, construct, and maintain GI/LID measures on the Project Site that would comply with state of Maryland requirements and Section 438 of the EISA, ensuring that pre-development hydrology is maintained on-site to the maximum extent technically feasible. Likewise, action proponents are expected to implement minimization measures and adhere to permit requirements as applicable to reduce runoff discharge. Therefore, the Preferred Alternative with past, present, and future actions would result in ***negligible adverse cumulative impacts*** on stormwater and water quality.

Any collective increase in wastewater resulting from the Preferred Alternative and past, present, and reasonably foreseeable future actions would be treated appropriately and comply with existing permit requirements and established total maximum daily loads for the receiving waterbody. Therefore, operation of the Preferred Alternative would result in **less-than-significant adverse cumulative impacts** on the flow of surface waters in the ROI.

Operation of the Proposed Action would not result in any incremental effects on wetlands or groundwater; therefore, with past, present, and reasonably foreseeable future projects, **no adverse cumulative impacts** on these resources would occur in the long term.

1.3.3.7 Biological Resources

Construction

Construction of the Preferred Alternative with past, present, and reasonably foreseeable future actions would result in **less-than-significant adverse cumulative impacts** on biological resources. Vegetation clearing in undeveloped areas and large-scale development projects, such as the Purple Line, MAGLEV, and Konterra Town Center (see **Table 2**), would result in the removal of plant communities and vegetation resources. As previously mentioned, the MAGLEV project could permanently impact a total of up to 451 acres of forest within the entire MAGLEV project area including a 30-foot buffer, depending on which Build Alternative is selected. Of these permanent forest impacts, up to 160 acres could occur at BARC. In comparison, the Proposed Action would result in the removal of only 3.6 acres of forest land within BARC. While the total amount of vegetation clearing is unknown for all past, present, and reasonably foreseeable future actions, there would be a permanent loss of vegetation communities in the ROI when taken into consideration with the Proposed Action. Vegetation removal would also reduce the amount of shrubs, trees, and cover available to wildlife as suitable habitat.

Cumulative impacts on vegetation would not be significant, however, due to the Proposed Action's incremental effect from removing only 3.6 acres of forest. When considered with other projects, such as MAGLEV, the Proposed Action's contribution to forest impacts would be minimal, and the Proposed Action would include implementation of EPMS and RCMs to ensure adverse impacts to forest resources in the ROI would remain less than significant. Further, cumulative impacts from other projects would be minimized through project-specific mitigation measures. The MAGLEV project, specifically, would conduct a full Forest Stand Delineation and prepare a Forest Conservation Plan, in accordance with the Maryland Forest Conservation Act, to identify areas of forest retention, reforestation, and long-term protective measures (USDOT et al, 2021). It is expected that other project proponents would continue coordination with MDNR and local agencies. Similarly, Treasury would enact proactive compliance with existing laws and policies to minimize vegetation impacts to the extent practicable.

If the MAGLEV project sites its Trainset Maintenance Facility in the eastern portion of BARC, it would be the least impactful Build Alternative relative to forest vegetation, affecting less than 100 acres of forest and 93 acres of FIDS habitat (USDOT et al, 2021). Therefore, while the Proposed Action and MAGLEV would both occur at BARC, cumulative impacts on forests would be less than anticipated if MAGLEV facilities are not built at BARC. Alternative selection for the MAGLEV project, however, is independent of the Proposed Action.

Construction noise and dust would disturb nearby wildlife, including migratory birds, although impacts would be localized to the immediate vicinity. Mobile wildlife, such as bald eagles and small mammals, would be expected to avoid or relocate away from construction activities and inhabit nearby suitable areas. In addition, the majority of wildlife species in the ROI are likely accustomed to human activity. As such, cumulative adverse impacts on wildlife species, including bald eagles and migratory birds, would be **less-**

than-significant. Conversely, **no cumulative impacts** on federal- or state-listed species would occur as no incremental effects from the Preferred Alternative would be expected.

Operation

Operation of the Proposed Action with past, present, and reasonably foreseeable future actions would result in **less-than-significant adverse cumulative impacts** on wildlife in the ROI from disturbance associated with increased noise, lighting, and human presence. Additionally, there could be occasional migratory bird mortality resulting from window strikes due to the development of new buildings in the ROI. Common wildlife species in the ROI would be accustomed to human presence and infrastructure; other wildlife species, such as migratory birds, would be expected to relocate to other suitable habitat in the ROI.

No or negligible cumulative impacts would be expected to occur to vegetation or special status species.

1.3.3.8 Cultural Resources

Construction

Development of the Preferred Alternative with past, present, and reasonably foreseeable future actions would result in a **less-than-significant adverse cumulative impact** on cultural resources due to disturbances to the BARC Historic District. Treasury would continue to consult with the State Historic Preservation Office (SHPO) and all cultural resources consulting parties to identify appropriate measures that would avoid, minimize, or mitigate adverse effects on cultural resources in accordance with Section 106 of the NHPA. While construction of past, present, and reasonably foreseeable future actions in the architectural Area of Potential Effects (APE) may lead to the disturbance of structures or sites of historic value, action proponents are expected to comply with applicable federal and state requirements to avoid or minimize impacts on historic and archaeological resources to the extent practicable. Further, none of the 22 buildings proposed for demolition under the BARC Demolition project are eligible for NRHP listing or are contributing resources to the BARC Historic District (USDA-ARS, 2020).

Due to the absence of paleontological deposits at the Project Site, the Preferred Alternative would likely have **no cumulative impact** on paleontological resources. The potential for inadvertent cultural discoveries while conducting ground-disturbing activities for the Preferred Alternative and other actions in the archaeological APE (e.g., Treasury Emissions Reduction Projects) introduces the possibility of **less-than-significant adverse cumulative impacts** if any are discovered and damaged during construction.

Operation

Operation of the Proposed Action with past, present, and reasonably foreseeable future actions would have a **significant adverse cumulative impact** on the BARC Historic District's viewshed. Other actions proposed for development in the BARC Historic District include infrastructure improvement projects, such as MAGLEV, Route 201, and Sunnyside Avenue Bridge Replacement. The Preferred Alternative when considered with these other actions would contribute toward a diminished integrity of the BARC Historic District's character-defining viewsheds and landscape design, setting, and feeling.

1.3.3.9 Traffic and Transportation

Construction

Construction of the Preferred Alternative combined with construction of transportation and large-scale construction projects in the ROI, such as the MD 212 Pine Street to US-1 project and the Route 201 project (see **Table 2**), may result in short-term traffic congestion, particularly during construction of the proposed Powder Mill Road modifications. The Preferred Alternative's contribution to cumulative traffic congestion on local roadways, however, would be temporary and relatively minor compared to existing daily traffic, resulting in **less-than-significant adverse cumulative impacts** on traffic in the ROI. In addition, traffic and

transportation impacts are generally localized and would likely be readily absorbed by the existing road capacity.

Construction of the Proposed Action would result in **less-than-significant adverse cumulative impacts** to the bicycle network, when considered with other actions in the ROI. The Preferred Alternative would require bicycle lane closures on Powder Mill Road, while construction of the College Park Woods Connector Trail (see **Table 2**) would require disruptions to existing trails. These closures would be temporary and bicycle lanes/trails would be restored after construction is complete.

Negligible adverse cumulative impacts on public transit may occur from construction of the Preferred Alternative with other past, present, and reasonably foreseeable future projects in the ROI. Construction workers are not anticipated to take public transit in perceptible numbers and their use of public transit would be temporary. Further, volumes of construction workers that might use public transit would vary during each phase of construction, allowing the already high-use public transit network to absorb additional riders.

As the Preferred Alternative would result in no impacts on parking and public pedestrian access, it would have **no cumulative impacts**.

Operation

The Preferred Alternative with past, present, and reasonably foreseeable future actions would result in **less-than-significant adverse cumulative impacts** on local roadway traffic in the ROI. New commuters in the ROI would not result in a substantial increase to regional roadway users, as commuters would primarily use major, regional roadways (e.g., the Capital Beltway and the Baltimore-Washington Parkway) that are already heavily trafficked. In addition, most of the planned projects in the ROI that could involve long-term commuters (i.e., employees of commercial and mixed-use facilities) would not result in a substantial number of daily commuters, especially considering development of transportation improvement projects, such as the I-495 & I-270 Managed Lanes Study (see **Table 2**), may help alleviate traffic and transportation concerns in the long-term by increasing road capacity.

The addition of anticipated traffic from the Proposed Action would result in significant adverse impacts on the level of service (LOS) at local intersections (Intersections 6, 8, 10, 12, 13, and 14). In addition, queue lengths at Intersection 8 would increase substantially. Future actions that could potentially interact with the same intersections are the developments at BARC, nearby transportation improvements (e.g., Maier Place Emergency Vehicle Access and Route 201), bridge replacement on Sunnyside Avenue, and construction of 5402 Odell Road and Cris Place (see **Table 2**). As a result, **significant adverse cumulative impacts** on queue lengths and LOS would occur. Cumulative impacts would be temporary, however, and only result if construction of these actions occurs while the Proposed Action would be operational, as these actions would not affect traffic conditions in the long term. Once construction of past, present, and reasonably foreseeable future actions has been completed, cumulative impacts on LOS and queue lengths would cease. Treasury should consider implementation of traffic mitigation measures, and would implement impact-reduction measures, to reduce the Preferred Alternative's contribution to cumulative impacts.

Cumulative impacts of the Proposed Action with past, present, and reasonably foreseeable future actions on public transit would be **negligible**, as increases in employees utilizing public transit would be minimal compared to the number of existing public transit users in the region. In addition, the proposed Purple Line project and MAGLEV project (see **Table 2**) could increase public transit capacity and alternatives in the region to further alleviate any additional strain.

The pedestrian and bicycle network in the ROI would experience **less-than-significant adverse cumulative impacts** from operation of the Proposed Action when considered with past, present, and reasonably foreseeable future actions. Powder Mill Road is commonly used by bicyclists and additional

vehicle traffic from operation of the proposed CPF and other projects that may increase roadway users could make biking in the ROI less appealing.

As operation of the Proposed Action would have no impact on off-site parking, **no cumulative impacts** would result.

1.3.3.10 Utilities

Construction

Construction of the Preferred Alternative with past, present, and reasonably foreseeable future actions would result in **negligible adverse cumulative impacts** on utility service. Service disruptions to local communities could occur while new utility infrastructure is being connected to existing systems. These disruptions would be minimized to the extent practicable through efficient construction sequencing (e.g., keeping existing utilities operational until the new utilities are ready to be connected), and affected end users would be given advance notice of anticipated disruptions. Further, the amount and types of development considered in this analysis is not unusual in an urban or suburban environment or for an ROI of this size, and is therefore not anticipated to result in substantial cumulative degradation of utility services.

Operation

Operation of the Preferred Alternative and past, present, and reasonably foreseeable future activities would generate more demand on the utilities servicing the ROI than current demand, as demand at the Project Site is negligible or non-existent, as are vacant development sites. This cumulative increase would take place over time, however, allowing utility providers the time to plan accordingly if needed. Further, the addition of the Preferred Alternative to the other past, ongoing, and future projects would not compromise the ability of utility companies to meet the increased demand, as Treasury has determined that providers would be able to accommodate the increased demand from the Proposed Action while supplying their existing demands. Future utility work that would occur under the Proposed Off-Site Utility Work at BARC project would ensure utilities servicing the proposed CPF are sufficient. Overall, the Preferred Alternative with past, present, and reasonably foreseeable future actions would result in **negligible adverse cumulative impacts** on utility demand and availability, as increased utility usage would be relatively small compared to the available capacity of regional and local utility providers.

1.3.3.11 Socioeconomics and Environmental Justice

Construction

An increase in temporary employment to support construction of the Preferred Alternative and past, present, and reasonably foreseeable future actions may result in **beneficial cumulative impacts** on socioeconomic conditions. Construction workforces would generate sales, taxes, and revenue at local and state levels while employment temporarily increases. The amount of new jobs created, however, would likely only represent a small percent of the population in the ROI currently employed in the same industry. Further, employment would be temporary and last only throughout the duration of construction. Therefore, cumulative benefits resulting from an increase in temporary construction employment would **not substantially alter** socioeconomic conditions or labor force characteristics in the ROI.

With regard to EJ communities, construction of the Preferred Alternative with past, present, and reasonably foreseeable future actions may have potential cumulative impacts on minority populations in the ROI. Construction activities would result in criteria pollutant and fugitive dust emissions in the local vicinity and generate increased levels of noise and traffic congestion.

Although the Preferred Alternative is not expected to result in significant effects to EJ communities during construction, it may contribute to **disproportionate adverse cumulative impacts** on EJ communities when

taken into consideration with other construction activities in the ROI. It is assumed that other past, present, and future actions would adhere to federal, state, and local regulations to minimize air emissions and noise levels to the extent practicable and implement standard air emission and noise reduction measures. Given the temporary and phased nature of construction, cumulative impacts on EJ communities would not result in long-term exposure. Therefore, the Preferred Alternative with past, present, and reasonably foreseeable future actions would result in **less-than-significant adverse cumulative impacts** on EJ communities.

Operation

Beneficial cumulative impacts on communities in the ROI may result from operation of the Proposed Action with other past, present, and reasonably foreseeable future actions, due to an increase in local revenue and spending. Operations of the Proposed Action and commercial and mixed-use projects could provide additional revenues to the surrounding communities, as employees and other residents would patronize local businesses.

Operation of the Proposed Action with past, present, and reasonably foreseeable future actions would generate air emissions and traffic congestion from operational activities that would **disproportionately affect** surrounding EJ communities, specifically minority populations in Census Tract 8074.08. While estimated emissions under the Preferred Alternative would not exceed regulatory thresholds and would be minimized through emission reduction initiatives (see **Table 2**) and operational efficiency associated with the Proposed Action, cumulative impacts on EJ communities would occur when taken into consideration with emissions from other actions in the ROI. With adherence to appropriate permits and compliance with applicable emission standards, cumulative impacts on EJ communities from air emissions would be minimized to **less-than-significant** levels. Traffic from the Preferred Alternative and other actions in the ROI, however, would result in **significant adverse cumulative impacts** on EJ communities. Project-specific impact-reduction measures would be implemented by project proponents to the extent practicable. In addition, Treasury should consider implementing traffic mitigation measures, such as intersection upgrades, to minimize the Proposed Action's contribution to cumulative impacts.

1.3.3.12 Hazardous and Toxic Materials and Waste

Construction

Incremental impacts of the Preferred Alternative when considered with collective impacts of past, present, and reasonably foreseeable future actions would result in **less-than-significant adverse cumulative impacts** on hazardous materials. Construction activities would involve the use of hazardous materials, and potentially result in discharge, spills, and contamination. Any construction activities requiring ground disturbance could expose previously unknown sources of hazardous materials. All projects would be built in accordance with applicable laws and regulations governing the storage, use, and disposal of such substances. Additionally, construction contractors would implement spill and leak prevention and response procedures to avoid or minimize potential impacts from accidental releases.

Operation

Operation of the Proposed Action with other past, present, and future actions would result in **less-than-significant adverse cumulative impacts** on hazardous materials. Most past, present, and reasonably foreseeable future activities would not require the long-term storage, use, and disposal of any significant amount of hazardous substances. The Proposed Action would use limited quantities of hazardous materials for the currency production process, such as solvents, acids, bases, inks, petroleum-based lubricants, fuels (e.g., diesel), and batteries. When not in use, these materials would be stored in sealed, labeled containers and drums, with secondary containment, as appropriate. These controls combined with Treasury's experience handling these hazardous materials without significant incident, would minimize the Preferred Alternative's contribution to adverse cumulative impacts.

1.3.3.13 Human Health and Safety

Construction

As construction is an inherently risky activity, construction of the Preferred Alternative with past, present, and reasonably foreseeable future actions may result in a collective increase in the demand for medical and first responder services due to health and safety incidents. The Preferred Alternative would minimize the risk for injury and accidents to the extent practicable through adherence to applicable training requirements, safe work practices, and applicable federal regulatory requirements. It can be expected that construction activities for other projects would also comply with applicable OSHA-regulated safety standards and protocols. While the risk of accident cannot be entirely eliminated, it is not likely to exceed the capabilities of local emergency services; therefore, the Preferred Alternative when considered with past, present, and future projects would result in **less-than-significant adverse cumulative impacts** on health and safety regardless of project conditions.

Operation

Operation of the Proposed Action and other past, present, and reasonably foreseeable future actions is anticipated to result in a reduction in the risk of accidents and injuries in the ROI. Efficient work production flows, operational improvements, and continued adherence to training requirements, work practices, and applicable regulatory requirements would prevent or substantially minimize the potential for accidents associated with the Proposed Action. Project proponents in the ROI would also be expected to comply with similar practices and OSHA standards. A reduction in accidents and injuries would also increase capacity for emergency responders and medical facilities. Therefore, the Proposed Action would have a **beneficial cumulative impact** on human health and safety in the ROI.

1.4 Cumulative Impact-Reduction Measures

The impact-reduction measures identified as part of the Proposed Action for each resource area would further minimize the Proposed Action's contribution to adverse cumulative impacts to the greatest extent practicable; therefore, no impact-reduction measures are proposed for cumulative effects. Coordination between Treasury, state regulators, local regulators, and construction contractors would alleviate the potential for future cumulative conflicts during construction and operation.

1.5 Cumulative Mitigation Measures

The mitigation measures identified for each specific resource area would further serve to reduce the Proposed Action's contribution to adverse cumulative impacts; therefore, no mitigation measures are proposed for cumulative effects. Project-specific mitigation would minimize cumulative adverse impacts to the greatest extent practicable; although, potential significant adverse cumulative impacts on cultural resources would remain.

1.6 References

CEQ. (1997). *Considering Cumulative Effects Under the National Environmental Policy Act*. Retrieved from https://www.energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-ConsidCumulEffects.pdf

CEQ. (2005, June 24). *Memorandum: Guidance on the Considerations of Past Actions in Cumulative Effects Analysis*. Retrieved from https://www.energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-PastActsCumulEffects.pdf

Cooper, R. (2019, March 14). Beltway Plaza in Greenbelt poised for overhaul. *Washington Business Journal*.

- FHWA. (2021). *I-495 & I-270 Managed Lanes Study*. Retrieved from <https://495-270-p3.com/environmental/>
- Greater Beltsville Business Association. (2020). *Road Improvement Discussion with MNCPPC*. Retrieved from <http://www.beltsvillebusiness.com/event-3749964>
- KLNB. (2020). *Konterra Town Center Fact Sheet*. Retrieved from KLNB Commercial Real Estate Services: <http://klnb.propertycapsule.com/property/output/document/view/id:19016/?time=1577094842/>
- MDOT. (2020a). *MD 212 (Powder Mill Rd) Pine St to US 1 (Baltimore Ave)*. Retrieved from Maryland Department of Transportation State Highway Administration: <https://mdot-sha-md212-pine-st-to-us1-pg1062116-maryland.hub.arcgis.com/>
- MDOT. (2020b). *US 1 (Baltimore Ave) College Ave to MD 193 (University Blvd)*. Retrieved from Maryland Department of Transportation State Highway Administration: <https://mdot-sha-us1-college-ave-to-md193-pg6242116-maryland.hub.arcgis.com/>
- M-NCPPC. (2020). *College Park Woods Connector Trail*. Retrieved from The Maryland-National Capital Park and Planning Commission: <http://www.pgparcs.com/2974/College-Park-Woods-Connector-Trail>
- National Capital Region Transportation Planning Board. (2017). *Visualize 2045: MD 201 Widening*. Retrieved from https://www.mwcog.org/assets/1/6/5_-_MD_201.pdf
- PG County DPW&T. (2020a). *Capital Improvement Program Active Projects: Sunnyside Avenue Bridge Replacement*. Retrieved from PG County Department of Public Works and Transportation: <https://princegeorges.maps.arcgis.com/apps/webappviewer/index.html?id=c13928ea8a2946acba51feb034088ce3&extent=-8578036.5975%2C4715854.5108%2C-8559691.7107%2C4725695.7782%2C102100>
- PG County DPW&T. (2020b). *Capital Improvement Program Active Projects: Montpelier Drive, Green Street Improvements*. Retrieved from PG County Department of Public Works and Transportation: <https://princegeorges.maps.arcgis.com/apps/webappviewer/index.html?id=c13928ea8a2946acba51feb034088ce3&extent=-8578036.5975%2C4715854.5108%2C-8559691.7107%2C4725695.7782%2C102100>
- PG County DPW&T. (2020c). *Capital Improvement Program Active Projects: Contee Road Extension from US-1 to Konterra Drive*. Retrieved from PG County Department of Public Works and Transportation : <https://princegeorges.maps.arcgis.com/apps/webappviewer/index.html?id=c13928ea8a2946acba51feb034088ce3&extent=-8578036.5975%2C4715854.5108%2C-8559691.7107%2C4725695.7782%2C102100>
- PG County Planning Department. (2020a). *Proposed Development Cases: Cris Place*. Retrieved from Prince George's County, MD Planning Department: <https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.90061305665435%2C39.03437133632438%2C%2C%2C%2C&markertemplate=%7B%22title%22%3A%225544911%22%2C%22longitude%22%3A-76.90061305665435%2C%22latitude%22>
- PG County Planning Department. (2020b). *Proposed Development Cases: Meier Place Emergency Vehicle Access*. Retrieved from Prince George's County, MD Planning Department:

<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.89945015172567%2C39.03792169548852%2C%2C%2C&markertemplate=%7B%22title%22%3A%22NRI-026-2019%22%2C%22longitude%22%3A-76.89945015172567%2C%22latitu>

PG County Planning Department. (2020c). *Proposed Development Cases: 5402 Odell Road*. Retrieved from Prince George's County, MD Planning Department:

<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.895168483085%2C39.043657042509665%2C%2C%2C&markertemplate=%7B%22title%22%3A%22NRI-093-12%22%2C%22longitude%22%3A-76.895168483085%2C%22latitude%22>

PG County Planning Department. (2020d). *Proposed Development Cases: 11730 Ellington Drive*.

Retrieved from Prince George's County, MD Planning Department:

<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.873313217833%2C39.04954861756615%2C%2C%2C&markertemplate=%7B%22title%22%3A%22NRI-145-13%22%2C%22longitude%22%3A-76.873313217833%2C%22latitude%22>

PG County Planning Department. (2020e). *Proposed Development Cases: 5600 Sunnyside Avenue*.

Retrieved from Prince George's County, MD Planning Department:

<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.90982772957157%2C39.02357456914821%2C%2C%2C&markertemplate=%7B%22title%22%3A%22CNU-55310-2017%22%2C%22longitude%22%3A-76.90982772957157%2C%22lati>

PG County Planning Department. (2020f). *Proposed Development Cases: 10401 Rhode Island Avenue*.

Retrieved from Prince George's County, MD Planning Department:

<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.91635086189598%2C39.026108391956654%2C%2C%2C&markertemplate=%7B%22title%22%3A%22NRI-195-13%22%2C%22longitude%22%3A-76.91635086189598%2C%22latitud>

PG County Planning Department. (2020g). *Proposed Development Cases: Tesla Electric Vehicle Charging Station*. Retrieved from Prince George's County, MD Planning Department:

<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.91723491955892%2C39.02724858401446%2C%2C%2C&markertemplate=%7B%22title%22%3A%22ROSP-4477-01%22%2C%22longitude%22%3A-76.91723491955892%2C%22latitu>

PG County Planning Department. (2020h). *Proposed Development Cases: Wingate Hotel*. Retrieved from Prince George's County, MD Planning Department:

<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.91491749097%2C39.03161581074005%2C%2C%2C&markertemplate=%7B%22title%22%3A%22NRI-009-2018%22%2C%22longitude%22%3A-76.91491749097%2C%22latitude%22>

- PG County Planning Department. (2020i). *Proposed Development Cases: 11530 East Maple Avenue*. Retrieved from Prince George's County, MD Planning Department:
<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.90148927870975%2C39.044222581335006%2C%2C%2C%2C&markertemplate=%7B%22title%22%3A%22NRI-175-13%22%2C%22longitude%22%3A-76.90148927870975%2C%22latitude%22%3A-39.044222581335006%22%2C%22latit>
- PG County Planning Department. (2020j). *Proposed Development Cases: Trolley Lane, Lot 4*. Retrieved from Prince George's County, MD Planning Department:
<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.90540530387185%2C39.051488285278275%2C%2C%2C%2C&markertemplate=%7B%22title%22%3A%22TCP2-017-94-05%22%2C%22longitude%22%3A-76.90540530387185%2C%22latit>
- PG County Planning Department. (2020k). *Proposed Development Cases: Filipino Capitol Church*. Retrieved from Prince George's County, MD Planning Department:
<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.91579081717776%2C39.05388780312807%2C%2C%2C%2C&markertemplate=%7B%22title%22%3A%22P-09002%22%2C%22longitude%22%3A-76.91579081717776%2C%22latitude%22%2C%22latit>
- PG County Planning Department. (2020l). *Proposed Development Cases: Jain Temple Complex of Metropolitan Washington*. Retrieved from Prince George's County, MD Planning Department:
<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.9187519759303%2C39.05252142101367%2C%2C%2C%2C&markertemplate=%7B%22title%22%3A%225-18098%22%2C%22longitude%22%3A-76.9187519759303%2C%22latitude%22%3A-39.05252142101367%22%2C%22latit>
- PG County Planning Department. (2020m). *Proposed Development Cases: 1700 Beltsville Drive*. Retrieved from Prince George's County, MD Planning Department:
<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.94235541526197%2C39.05102170289542%2C%2C%2C%2C&markertemplate=%7B%22title%22%3A%22NRI-016-2019%22%2C%22longitude%22%3A-76.94235541526197%2C%22latit>
- PG County Planning Department. (2020n). *Proposed Development Cases: Halltown Subdivision, Lot 10*. Retrieved from Prince George's County, MD Planning Department:
<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.82829502434627%2C39.04244603726258%2C%2C%2C%2C&markertemplate=%7B%22title%22%3A%22TCP2-030-2019%22%2C%22longitude%22%3A-76.82829502434627%2C%22latit>
- PG County Planning Department. (2020o). *Proposed Development Cases: Greenbelt Metro Apartments*. Retrieved from Prince George's County, MD Planning Department:
<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.89783334936334%2C39.010958722508185%2C%2C%2C%2C&markertemplate=%7B%22title%22%3A%22TCP1-009-2019%22%2C%22longitude%22%3A-76.89783334936334%2C%22latit>
- PG County Planning Department. (2020p). *Proposed Development Cases: Park Place*. Retrieved from Prince George's County, MD Planning Department:

<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.89552619110484%2C39.06433142311726%2C%2C%2C&markertemplate=%7B%22title%22%3A%22DDS-665%22%2C%22longitude%22%3A-76.89552619110484%2C%22latitude%22>

PG County Planning Department. (2020q). *Proposed Development Cases: Konterra Business Park*. Retrieved from Prince George's County, MD Planning Department:

<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.88943221222284%2C39.06239877045224%2C%2C%2C&markertemplate=%7B%22title%22%3A%22SDP-9019-06%22%2C%22longitude%22%3A-76.88943221222284%2C%22latitud>

PG County Planning Department. (2020r). *Proposed Development Cases: Sites Property*. Retrieved from Prince George's County, MD Planning Department:

<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.91625430237245%2C39.066164062113415%2C%2C%2C&markertemplate=%7B%22title%22%3A%22P-10001%22%2C%22longitude%22%3A-76.91625430237245%2C%22latitude%22>

PG County Planning Department. (2020s). *Proposed Development Cases: Brick Yard*. Retrieved from Prince George's County, MD Planning Department:

<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.87931277457577%2C39.06340508920274%2C%2C%2C&markertemplate=%7B%22title%22%3A%22TCP2-118-05-10%22%2C%22longitude%22%3A-76.87931277457577%2C%22lati>

PG County Planning Department. (2020t). *Proposed Development Cases: 7-Eleven*. Retrieved from Prince George's County, MD Planning Department:

<https://mncppc.maps.arcgis.com/apps/webappviewer/index.html?id=bcd237981f9c4000a29e41b38f4f12b5&marker=-76.83739307732479%2C39.05557741561084%2C%2C%2C&markertemplate=%7B%22title%22%3A%22SE-4818%22%2C%22longitude%22%3A-76.83739307732479%2C%22latitude%22>

USDA-ARS. (2019). *Final Environmental Assessment, Proposed Solar Array Project, Henry A. Wallace Beltsville Agricultural Research Center*.

USDA-ARS. (2020). *Demolition of 22 Buildings at the Henry A. Wallace Beltsville Agricultural Research Center, Beltsville, Maryland*.

USDOT. (2020). *Purple Line Project*. Retrieved from US Department of Transportation: <https://www.transportation.gov/tifia/financed-projects/purple-line-project>

USDOT et al. (2021). *Draft Environmental Impact Statement and Draft Section 4(f) Evaluation, Baltimore-Washington Superconducting MAGLEV Project*.

USDOT et al. (2020). *Environmental Study*. Retrieved from Baltimore-Washington Superconducting Maglev Project: <https://www.bwmaglev.info/>

USEPA. (1999). *Consideration of Cumulative Impacts in EPA Review of NEPA Documents*. Retrieved from <https://www.epa.gov/sites/production/files/2014-08/documents/cumulative.pdf>