Frequently Asked Questions about the [Nature-based] Recreation Access Model (2021 version)

Prepared by David Bucklin and Kirsten Hazler, modelers

Walkability/Alternative Transportation

Q: Why aren't you including walkability in the model?

A: We believe the ParkServe model developed by the Trust for Public Land does a good job of addressing that issue, and see no reason to duplicate their effort. You can find that model here: https://www.tpl.org/parkserve. DCR will continue to look at data and information that can improve the targeting of urban outdoor recreation priorities.

Q: Does the 10-minute walk in the ParkServe model include rural areas?

A: ParkServe does not include rural areas, but does include most cities and towns (down to populations of 2,500). We also feel that walkability is a challenging goal to set in rural areas because the low population density across such large areas doesn't support walkability. Any analysis of walkability in rural areas will show that it is generally low, and will thus be largely uninformative.

Q: How can we get information on walkability in rural areas, if your model doesn't include it and the area of interest is not covered by the ParkServe model?

A: You can get a rough estimate of the area within a 10-minute walk of a particular location by delineating a half-mile buffer around it. You could buffer a proposed new park by a half mile to determine the general area it would serve, assuming a 10-minute walk. Alternatively, you could buffer a neighborhood (or its centroid) by a half mile to determine whether any park is within a roughly 10-minute walk of neighborhood residents. This method is not perfect, but is likely good enough to make a general assessment to support a project-specific grant application, or for other planning purposes.

Q: Can you include accessibility by bike or public transportation in the model?

A: It is theoretically possible, but not practically feasible. We regret the car-centric nature of the model, but it is beyond the scope for us to include every mode of transportation in this model. For specific projects, we would recommend conducting such analyses on an as-needed basis.

Model Details

General

Q: Are all the sites included in the model publicly accessible?

A: Yes. This model does not include lands or water access locations that are not open to the general public.

Q: Is population considered when assessing recreation needs in this model?

A: Yes! The "recreation pressure" metrics are a function of population and the amount of recreation opportunities available. Areas with high recreation pressure are considered to have insufficient recreation opportunities relative to the number of people in the area. The other metrics are independent of population.

Q: How did you decide on baseline standards to use for calibrating recreation pressure?

A: For land-based recreation, we used a baseline standard of 10 acres per 1,000 people. This is a standard for state parks that was published in the 2018 edition of the Virginia Outdoors Plan (although that document does not distinguish between "available greenspace" and other acreage as we do).

For water-based recreation, we used a baseline standard of 10 water access points per 100,000 people. We based this on an old (ca. 2009) standard listed by the National Recreation and Park Association (NRPA) for swimming pools, because we found nothing else to guide the decision. NRPA no longer publishes such standards.

Fundamentally, baseline standards are subjective. Because the model is still in draft form, the standards we used are subject to change based on feedback received.

Q: Does the model include criteria related to economic status, diversity, and special needs of populations served?

A: At this time, no. We considered adding an equity factor to the model, but we now recommend that model users instead supplement this model with another model and/or data specifically targeted for that purpose. One model you may want to consider using for this is the Virginia Social Vulnerability map provided by the Virginia Institute of Marine Science (VIMS). Some other GIS resources include:

- Racial Equity GIS Hub (ESRI)
- Poverty Data Tools (U.S. Census Bureau)
- Mapping Poverty in America (New York Times)

Land-based Recreation

Q: What does "PPA" stand for?

A: "PPA" stands for parks and protected areas, and refers to any land that is open to the general public for recreational use. It encompasses national, state, regional, and local parks, as well as national and state forests, battlefields and historic sites, wildlife management areas, Natural Area Preserves that offer public access, and similar lands.

Q: What size park is considered too small to be included as a resource in this model?

A: It depends on the analysis, but for the most inclusive analysis (travel time to nearest resource), we set the threshold at 5 acres of available greenspace. We did not calculate travel time to PPAs smaller than that.

In the service catchment analysis, catchments are only delineated for PPAs with at least 25 acres of available greenspace. However, when calculating the total available greenspace within a service catchment, we included both the available greenspace of the focal PPA, as well as the available greenspace of all other PPAs within the catchment, regardless of size. In this way, even the smallest PPAs can influence the calculation of recreation pressure.

Because the model is still in draft form, all size thresholds are subject to change based on feedback received.

Q: You said you buffered trails and roads by 300 feet to define "available area" within a PPA. Is that 300 feet on each side, or 150 feet on each side?

A: 300 feet on each side.

Q: How was the 300-ft buffer chosen?

A: It was a subjective choice. The idea was that the buffer should be wide enough so that someone on a trail could feel somewhat immersed in the recreation area; i.e., enough for a visual buffer. Essentially the same distance (100 meters) is used to define "interior" or "core" area in another ConservationVision model, the Virginia Natural Landscape Assessment. In that model, natural land cover must be at least 100 meters from an edge to be considered part of the interior, core habitat.

Because the model is still in draft form, the buffer distance is subject to change based on feedback received.

Q: If there are wetlands and resource protection areas (RPAs) within the 300-foot buffer, these areas will be very limited for trails and any other recreation uses. Is there a way to expand the buffer area if the route dissects and/or bisects a wetland or RPA?

A: This question appears prompted by some confusion about what we mean by "available area". You might think that "available area" means areas where a new trail or recreation use could be sited, but this is not the case. For the purpose of this model, "available area" means the area that is currently, functionally available (at least visually) to the recreational user because a trail, road, or access point is already present.

You would not want to expand the buffer in places with wetlands or RPAs, because then you would be inflating the calculations of the area that is currently available for recreational use. If anything, PPAs with a high percentage of sensitive areas (like Natural Area Preserves) should have less available area for recreation, not more.

Q: How do you treat linear parks in this model?

A: Linear parks are treated the same as any other PPA, but with our methods they would likely be considered to have their full area "available" to recreational users, since they are tied closely to a trail or road.

Q: Why do you ignore the "attractiveness" of some places? Not all greenspace is equal.

A: We are limited by simplifications needed to make a statewide model, and cannot possibly include every detail that may be of interest. We recommend supplementing our model with other information as needed.

Q: Why did you use both a 30-minute and a 60-minute drive time for delineating service areas?

A: We used a 30-minute drive time for PPAs having at least 100 acres of available greenspace, and a 60-minute drive time for PPAs having at least 600 acres of available greenspace. The assumption is that people are willing to travel farther to get to larger blocks of public access lands. In the 2018 edition of the Virginia Outdoors Plan, a table of park area standards listed a 25-mile service area for regional parks (with minimum of 100 acres) and a 1-hour or 50-mile service area for state parks (with minimum of 600 acres).

Because the model is still in draft form, travel time limits are subject to change based on feedback received.

Water-based Recreation

Q: In the presentation it looked like there was no water access along the Atlantic coast of the Eastern Shore. Why?

A: This was an oversight in how we presented those maps. We should have excised the underwater/unpopulated/roadless areas from the map to avoid confusion. We have since updated the maps. If you look at the normal land area, where people actually live and travel, it shows the water-based recreation pressure on the Eastern Shore to be low, as expected. The highest pressure is around Onancock, and there it's 27 (out of 100).

Bear in mind that it is also quite possible for some areas to be very close to the water yet not have public access within a specified travel time, and/or to have an insufficient number of public water access locations given the size of the population. Private water access does not count in this model.

Q: Does water access include beaches?

A: Yes. Water access includes swimming, fishing, and boating access.

Q: How does the number of boaters relate to water-based recreation pressure?

A: At this time we do not have detailed information on the number of boaters. Water-based recreation pressure is based on total population and number of water access points.

Q: Does this model distinguish between water access for motorized and non-motorized boats?

A: Not at this time. This might be a future update.

Q: How do you account for the fact that some water access locations can accommodate more users than others?

A: At this time, we do not have sufficient, consistent data to address this issue; all water access locations are treated equally in the model. We hope we can include this aspect in a future update.

Feedback

Q: How do we provide feedback on the model?

A: A feedback survey is open for input through May 16, 2021. You may also contact Landscape Ecologist Kirsten Hazler at kirsten.hazler@dcr.virginia.gov.

Q: Can we "play" with the model to see how it works before giving recommendations?

A: A draft web map is available for this purpose.

Q: What happens if something that used to be an open space/park has since been developed? What should I do if I see a trail/trailhead/park/water access point mapped that doesn't actually exist?

A: Please let us know, because this affects model results! We pull most of our recreation data from the Virginia Outdoors Plan mapper. There is contact information on that website so you can report errors if needed. Bear in mind that the model will not be updated immediately.

Timeline

Q: What is the timeline for this project?

A: We anticipate completion by early June, 2021.

Q: How often will the model be updated to reflect changes in recreation, roads, and other input datasets?

A: At this time, we do not have a fixed schedule for updates. At best, it would be updated every 1-2 years. Changes to recreation and population datasets are likely to have a greater impact on model results than changes to roads.

Model Applications

Q: How heavily are these data weighted in LWCF and other DCR grant opportunities?

A: You can find that information in documents provided on the grant program web pages. Please address any questions and comments regarding model weightings to the staff listed on the respective grant pages:

- Land and Water Conservation Fund
- Virginia Recreational Trails Program
- Virginia Land Conservation Foundation

Q: Is the intent that VLCF will focus Open Space category dollars to fund Nature-Based Recreation projects? Will there be a new source of funding for projects that are smaller than five acres and don't meet the Nature-Based Recreation criteria?

A: The current VLCF Open Space & Parks category does allow for small urban open space park projects, and there has been no indication from the Board that this would change. In addition, with 25% of VLCF funds going to the Virginia Outdoor Foundation's Open-Space Lands Preservation Trust Fund, more than any of the other categories, funds are available from that source as well as the Land and Water Conservation Fund for park projects.

Q: If we are considering an easement in an area where this model indicates high recreation need, but it will not be a public access easement, how do you recommend we use this data in that decision making process?

A: If the property will not be providing public access, this model might not bear on the decision of whether to take the easement; presumably the easement is intended to protect other values. However, depending on the situation, you might want to ask the land owner to consider adding recreational use language to the easement agreement. If they agree to this, you might rate it more highly relative to a similar property where the owner refuses to add public access.

Q: What if we agree with the recreation pressure concept in general, but don't agree with the standard you used to calculate it? What if we think the baseline standard should be 20 acres per 1,000 people instead of 10?

A: We plan to attribute the service catchments with the raw numbers used to calculate recreation pressure as well. This way, localities will have the flexibility to calculate their own, local recreation pressure values based on a different standard, if desired to support their local planning efforts.

Because the model is still in draft form, all standards and thresholds are subject to change based on feedback received.