Virginia Range Demand and Placement





About

- The National Shooting Sports Foundation (NSSF) works closely with federal and state wildlife agencies to increase participation in hunting and target shooting. These state-specific reports are designed to help state agencies determine potential locations for future target shooting ranges in their states.
- Specifically, this study explored existing shooting range locations and the types of opportunities they offer, current target shooting demand in Virginia, and where demand is least served. The results will help Virginia Department of Wildlife Resources identify where the greatest needs are for additional shooting ranges.
- Understanding where demand is greatest, where current shooting range opportunities exist, and where potential new participants live are all factors that can inform shooting range development and placement to support the greatest number of people.



Locations of existing Virginia ranges

- Virginia Department of Wildlife Resources' range data plus industry sources were examined. The full list of ranges was vetted by internet searches to confirm that each shooting range was still operational, the types of shooting offered at each location, and whether the range was open to the public or not.
- A "public" range is any shooting range accessible by the general public whether it is publicly or privately owned and/or managed. A "private" range is any shooting range that requires a membership.
- Any locations that offer hunting-affiliated services such as guided hunts, lodges, and more without also providing shooting opportunities were removed from the list.



ESRI's® ArcGIS

- Range locations were visually verified using Google's satellite data and mapped in ESRI's® ArcGIS software.
- ArcGIS was used to learn where target shooting participation in 2023, either archery or firearm, was clustered according to ESRI's Market Potential data service.
 - This service is based in part on a series of consumer surveys from GfK MRI, a media and consumer research firm, and helps explain existing demand within given areas for many different products, activities, and services, including target shooting.
 - ESRI's Market Potential data is best used to identify where specific types of consumers are clustered and not to quantify the actual number of consumers.
- Together, these data help to identify areas where shooting range demand may exceed opportunity.

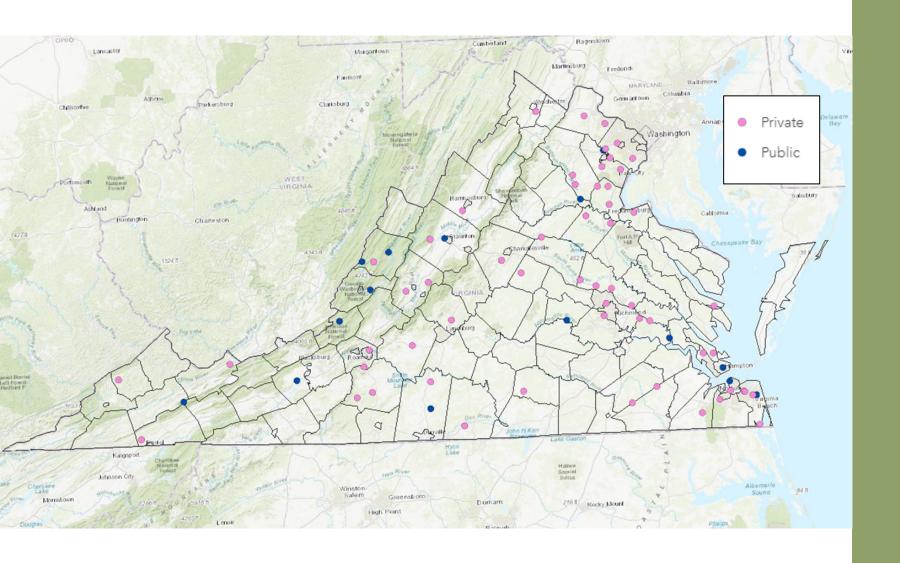


Existing ranges and characteristics

Private vs. Public		Count	Percent	Shooting Range Type	Count	Percent
Public		15	21%	Handgun Only		1%
Private		58	79%	Shotgun Only	10	14%
	Total	73	100%	Rifle, Shotgun	6	8%
				Rifle, Handgun	12	16%
Outdoor vs. Indoor		Count	Percent	Handgun, Shotgun	1	1%
Outdoor		49	67%	Shotgun, Archery	2	3%
Indoor		17	23%	All	31	42%
Both		7	10%	All + Archery	10	14%
	Total	56	100%		Total 73	100%

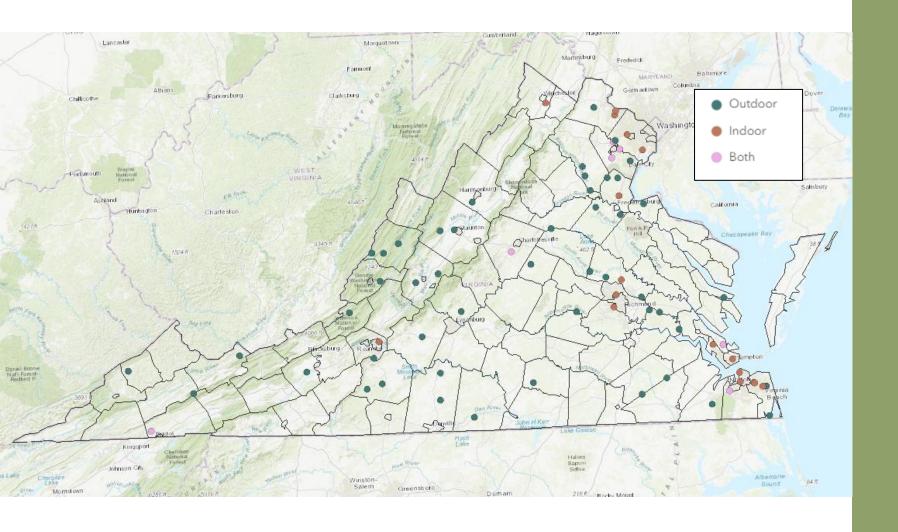
^{*}Source data prioritized firearm range listings and, as a result, not all archery ranges may have been captured in the count above.

The majority of Virginia's ranges available to the public are privately owned, requiring a membership or payment of fees. The majority (56%) offer shooting opportunities for most weapon types.



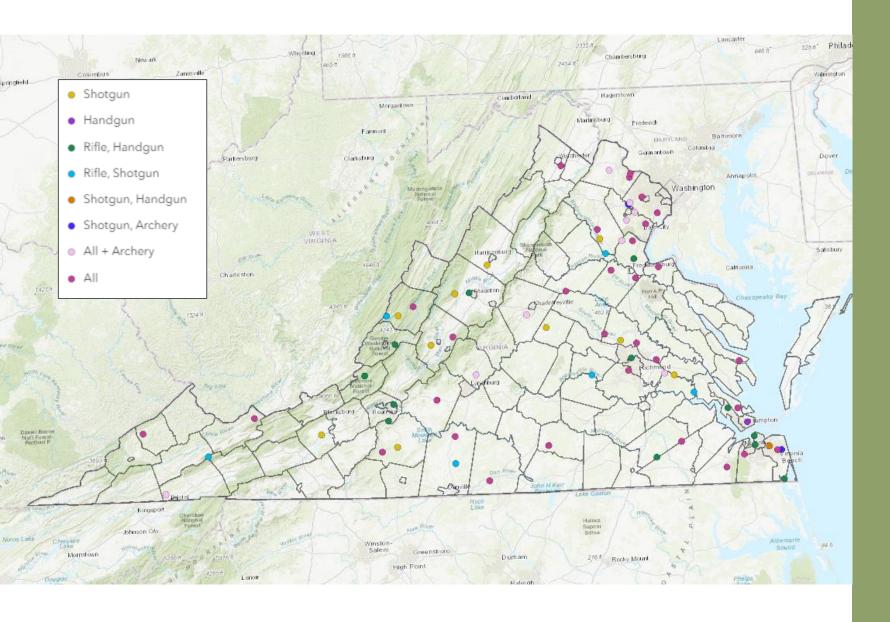
Geographical distribution of Virginia's ranges

Virginia's ranges are broadly distributed across the state, with some clustering in areas with greater populations. The majority (79%) operate under a membership structure.



Diversity of Virginia's range facilities

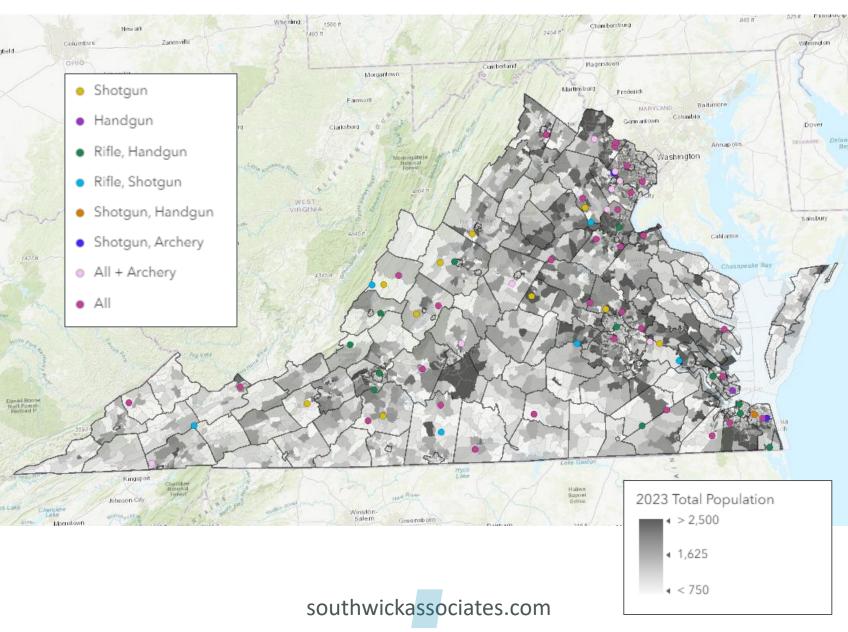
The majority (77%) of facilities provide outdoor target shooting opportunities.



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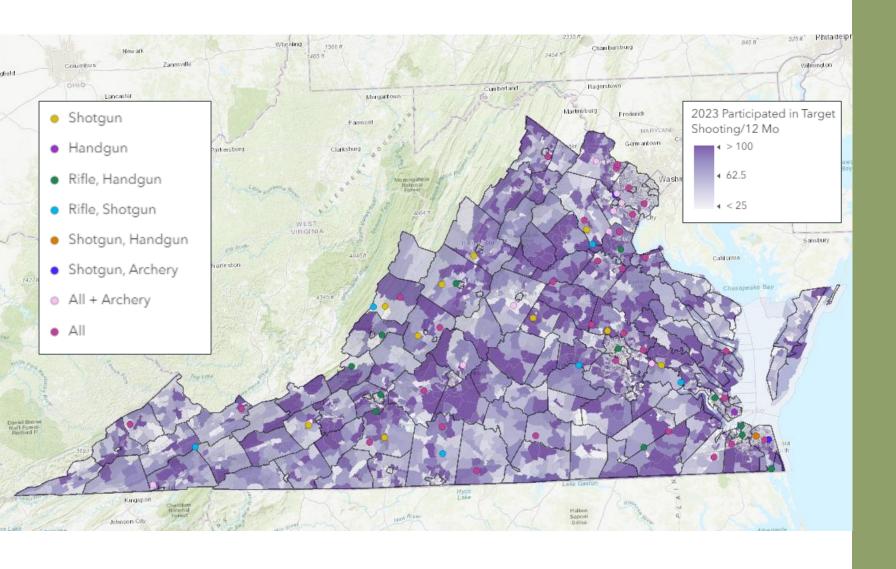
Shooting opportunities offered by Virginia's ranges

Many (56%) offer shooting opportunities for most weapon types. Another 16% offer rifle and handgun opportunities, and another 14% offer only shotgun.



Distribution of population with range overlay

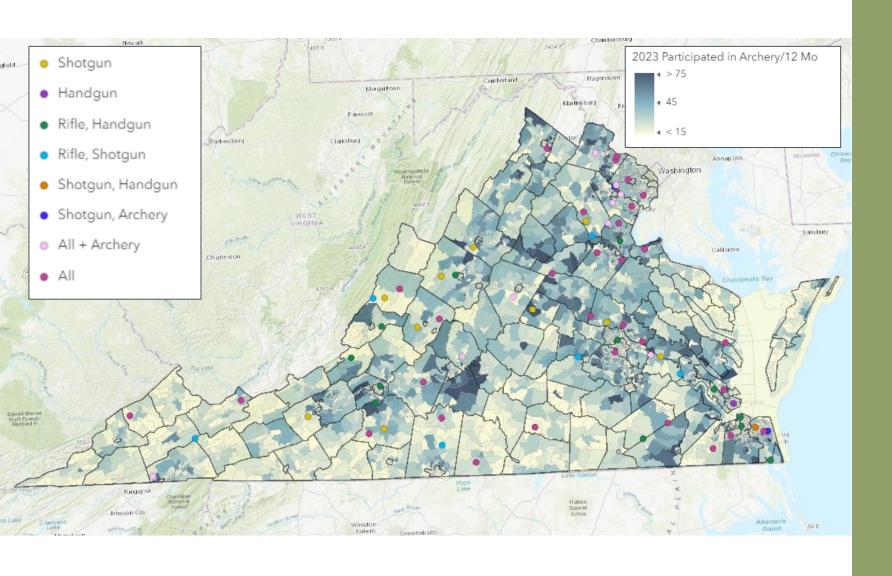
All data was explored at the block group scale. Block Groups (BGs) are statistical divisions of census tracts, are generally defined to contain between 600 and 3,000 people. Block groups are smaller divisions than zip codes and allow us more granularity in looking at data, especially for urban areas.



Distribution of target shooters with range overlay

Though a greater proportion of rural residents participate in target shooting, urban and suburban areas have a greater number of adults who participate due to greater population densities, resulting in overall greater demand.

Open spaces to safely shoot are much more available to target shooters in rural areas.



Distribution of archery shooters with range overlay

The geographic distribution of archery shooters is largely similar to that of firearm target shooters.

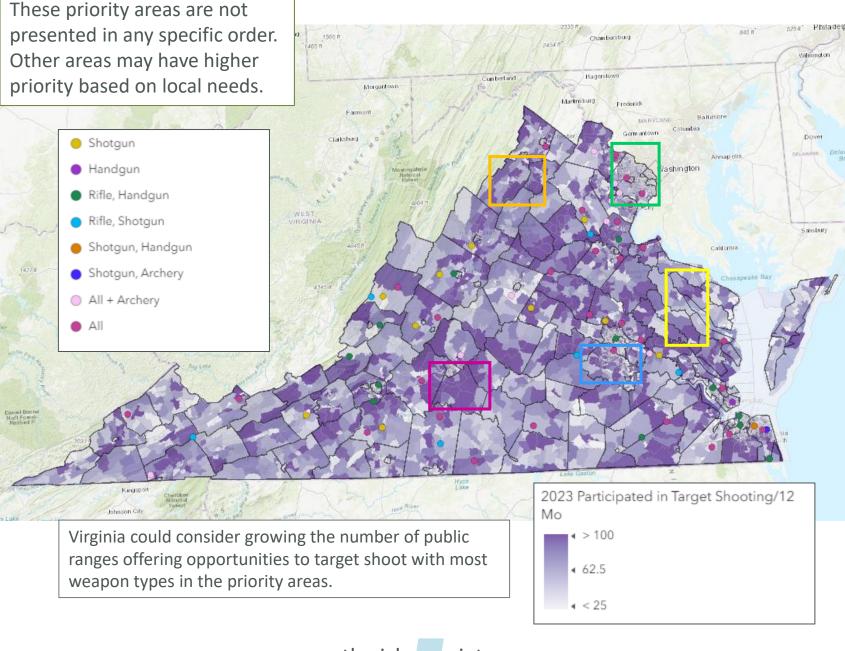
Please note the participation results, archery & firearm, only show areas where current target shooters live. There may be many more interested in participating who do not due to a lack of convenient shooting, crowding, and/or poor experiences.

Participation and population in Virginia's urban areas

	Percent of the		Percent of the state's
Virginia's MSAs	state's ranges	state's population	adult target shooters
Arlington-Alexandria	25%	36%	31%
Winchester	1%	1%	2%
Virginia Beach-Chesapeake	16%	20%	18%
Richmond	16%	15%	15%
Roanoke	7%	4%	4%
Lynchburg	3%	3%	3%
Charlottesville	3%	3%	4%
Blacksburg-Christiansburg-Radford	1%	2%	3%
Total	73%	84%	78%

^{*}Metropolitan Statistical Area (MSA)

Virginia's metro areas, especially northern Virginia, typically have the greatest need for additional ranges, as the existing ranges are serving up to twice the number of target shooters than others across the state. Currently, demand is high in these areas and will likely continue to rise as populations increase. Though the availability of land is a limiting factor and major cost driver, these areas have the greatest need for range development and/or expansion.



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Possible priority areas for range development

Five areas are identified as priority regions for additional ranges or range expansion based on:

- 1) The number of ranges within reach of people and the diversity of range types available, and
- 2) The proportion of the surrounding public engaged in target shooting OR -
- 3) For denser urban areas, the total number of people participating in target shooting.

Northern Virginia area

Southern Lynchburg area

Southorn Pichmond area

Southern Richmond area

Essex/Richmond Counties area

Shenandoah County area

Closing thoughts

Building new ranges and increasing capacity at existing ranges is one step to meeting statewide demand for target shooting. A need also exists to ensure current and potential new target shooters are aware of any new opportunities and that any new ranges offer the types of shooting they want in a safe, welcoming environment.

These results only show areas where current target shooters live. There may be many more people interested in participating who do not due to a lack of convenient shooting locations, crowds, and/or poor experiences. Also, these results do not explain the capacity or quality of existing ranges and the shooting experiences and offerings desired most by current and would-be target shooters.



In 2023 and 2024, multiple projects were funded by the FWS Multi-State Conservation Grant program, covering resources for range managers to boost operations, the types of shooting activities people desire most at a public range, and how to increase the number of non-traditional range consumers to range. These are all available at no cost.

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