

HOW IT ALL ADDS UP:

A behind-the-screens look at onX's work to quantify the true scope of the landlocked problem (and the fine print on what was included in this study)

Using its refined data on public lands and roads, onX conducted an analysis to determine the accessibility of every piece of federal public land in the West. This first-of-its-kind, multi-step process produced the total acreage of all landlocked lands administered by the Bureau of Land Management, U.S. Forest Service, U.S. Fish and Wildlife Service, Bureau of Reclamation, National Park Service, and other federal agencies in thirteen Western states.

For the purposes of this report, landlocked public lands are defined as federally managed lands that cannot be accessed directly from a public road (direct access) and cannot be accessed via adjoining public land by way of a public road (indirect access). Only permanent legal access was considered for this report, but existing access across some private lands may be given at the discretion of the landowner, and in many places permanent public access is assumed but not proven. Unless such access is legally documented, it was not included in our analysis.

To create the most comprehensive picture of land ownership, dirt roads, and trails in the United States, onX compiles and refines data from a collection of carefully-vetted sources, including county, state, and federal agencies, using only the most trustworthy information from each after cross-referencing the various data.

The available road data, which was designed to convey information about road type rather than public access, rendered necessary certain assumptions: While unmaintained two-track routes are often found on public lands, rarely do they provide permanent, legal access across private property to what are otherwise isolated tracts of public land. In most instances, these are access routes controlled by the owner of the surrounding property.

Further, comprehensive public easement data is not available for federal public lands, so there is presently no broad-scale way of distinguishing between the overwhelming majority of primitive routes that do not offer legal public access in perpetuity and those few that do. Easements can be verified individually by contacting agency land specialists and county surveyors, however, and that step was taken with the largest public parcels in each state for which the available data raised questions about accessibility.

As a result, the overall acreage identified as landlocked represents the most accurate assessment possible, but it is reasonable to assume that a nominal percentage of these lands do, in fact, have legally-binding easements on unmaintained two-track routes across private land.

The analysis was further refined through various means. All local- and state-owned lands factored into the indirect access assessment, unless research revealed a particular type of property as off-limits to the public—for example, most state school trust lands in Colorado are closed to hunting, fishing, and camping. Similarly, islands on lakes, rivers, and oceans without road access are not legally landlocked, so an effort was made to remove the largest islands from the total acreage calculations.

While this effort relied on the best existing data, the data are not always perfect. In some datasets, road rights-of-way next to public land parcels were removed by the data provider, causing our analysis to miss a connection between road and parcel by mere feet. In other instances, road segments are simply missing from the data or their classifications are inaccurate. Furthermore, parcel data is not "survey grade" at these scales, and can have bad topology, i.e. the real-life property corners might not be shown as corners in the data.

Numerous factors particular to individual parcels could not be included in an analysis of this scale. For example, some landlocked public lands may be accessible by other means—such as by boat or aircraft—or through private property, either because of the landowner's goodwill or due to special access permissions, as with state walk-in programs. Likewise, this report did not take into account physical or logistical barriers that can constrain access to a portion of a public tract. These might include bodies of water, seasonal restrictions on road-use, long geographic distances between access points, or extreme topography.