

U.S. National and Interstate Bicycle Routes

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The Oregon Coast Bicycle Route is an internationally celebrated route, with between 6,000 and 10,000 riders per year, but it is not recognized within the national U.S. Bicycle Route System (USBRS).¹ The USBRS is not a government program but rather a collaborative project of state and local officials and nongovernmental organizations. Federal action on interstate bicycle routes has been largely symbolic and intellectual, while state jurisdictions continue to undertake most of the work of building and implementing bike routes and bikeways. Most of the federal government's published information on national bicycle routes is directed toward local and state governments, not addressed to the general public.

The flow of information about bicycle routes has tended to be a bottom-up process. Increased recreational cycling and cycle touring led to the creation of the nonprofit organization Adventure Cycling Association (ACA) in the early 1970s and spurred the American Association of State Highway and Transportation Officials (AASHTO)'s advocacy of bicycle routes. Most information about national bicycle routes is still created and mapped by ACA and other nonprofits. Where the government provides information targeted toward individuals, local and state jurisdictions are usually the primary actors.

The focus of this article is the period from the 1970s to the present, with a special emphasis on the rapid growth of official route designation in the past decade. It considers the nationwide USBRS and Oregon's state-designated routes as examples of two important examples of the development of national bike routes, though many other routes and maps have been in use by cyclists across the country for many decades.

Federal Documents

The U.S. Department of Transportation (DoT) has left funding and logistics of routes to state and local authorities, which is a deliberate strategy of outlined in the DOT's 1972 joint publication with the U.S. Department of the Interior, *Bicycling for*

Recreation and Commuting.² This strategy of providing minimal guidance has been reflected in most federal documents relating to bicycle routes.

The USBRS first appears in the federal documentary record in the December 1979 revision of the sixth edition of the *Manual on Uniform Traffic Control Devices for Streets and Highways* (MUTCD), a publication of the Federal Highway Administration (FHWA). This document featured the first design for an interstate U.S. Bicycle Route sign, M1-9.³ AASHTO, a nongovernmental organization that serves as a liaison between states and the federal government, and that is responsible for numbering interstate highways, "unanimously adopted the U.S. Numbered Bicycle Route Purpose and Policy" at its 1979 annual meeting.⁴

In 1994, the federal government made a strong statement in favor of active transportation with *The National Bicycling and Walking Study*.⁵ Specifically, the report set a goal of "doubling the current percentage of bicycling and walking trips and reducing by ten percent the number of pedestrians and bicyclists killed or injured."⁶ The emphasis was on facilitating short trips in urban and suburban areas.⁷ Long-distance interstate or national bike routes were not mentioned.

Despite occasional hostility from motorists, bicycle routes have near-universal goodwill in national politics. The lack of controversy may be because such projects do not receive federal funding: People are unwilling to fight over a sentiment they will not have to pay for anyway. The House of Representatives passed *Concurrent Resolution 305* in May 2008, voting unanimously to recognize the importance of bicycling.⁸ Before the vote, a few legislators spoke about why Congress should actively support more bicycle facilities, including "creating bicycle-friendly Federal lands and developing a national bike route system."⁹ The bill had thirty-four cosponsors, twenty-seven Democrats and seven Republicans, and no one spoke against it. At the time, there were still only two designated routes in

provided at decision points along the bikeway, including signs to inform cyclists of bicycle route direction changes and confirmatory signs to ensure that route direction has been accurately comprehended.

Figure 9-2 shows an example of the signing for the junction of a bicycle trail with a highway. Figure 9-3 shows the signing and marking for the beginning and ending of designated bikeways. Guide signing should be repeated at regular intervals to ensure that bicyclists approaching from side streets know they are traveling on an officially designated bikeway. Similar guide signing should be used for shared lane bikeways with intermediate signs placed frequently enough to ensure that cyclists already on the bikeway do not stray from it and lose their way.

9B-20 Bicycle Route Sign (D11-1)

This sign is intended for use where no unique designation of routes is desired. It should be placed at intervals frequent enough to keep bicyclists informed of changes in route direction and to remind motorists of the presence of bicyclists.



D11-1
24" x 18"



M1-8
12" x 18"



M1-9
18" x 24"

9B-21 Bicycle Route Markers (M1-8, M1-9)

Where it is desired to establish a unique identification (route designation) for a State or local bicycle route, the standard Bike Route Marker (M1-8) should be used. The route marker (M1-8) shall contain a numerical designation and shall have a green background with a reflectorized white legend and border.

Where a bicycle route extends for long distances in two or more States, it is desirable to establish a unique numerical designation for that route. A coordinated submittal by the affected States for assignment of route number designations should be sent to the American Association of State Highway and Transportation Officials, 444 North Capitol Street NW., Suite 225, Washington, D.C. 20001. The route marker (M1-9) shall contain the assigned numerical designation and have a black legend and border with a reflectorized white background.

Bike Route Markers are intended for use on both shared facilities and on designated bikeways, as required, to provide guidance for bicyclists.

9B-10

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Image 1. The original black-and-white design for the interstate bicycle route marker, M1-9, was published in the December 1979 revision of the Federal Highway Administration's *Manual on Uniform Traffic Control Devices for Streets and Highways*, Sixth Edition. Formal adoption of a new green-and-white design is among the proposed amendments to the *MUTCD* as published in the Federal Register on December 14, 2020. The upcoming 11th Edition will also shift information about the sign and its uses into three new sections of the manual focused on bicycle facilities, including "Section 9D.07 U.S. Bicycle Route Sign (M1-9)."

the USBRS—not counting the many regional, local, and privately mapped interstate routes in unofficial use. This resolution did not change the number of bicycle routes, provide funding, nor establish any concrete plans or objectives. It did, however, advocate "a coordinated system of United States bicycle routes across the country." Despite this support in the House, the Senate never voted on the bill after referring it to the Committee on Commerce, Science, and Transportation.¹⁰

Specific federal action on bicycle routes has occasionally been proposed, but not implemented. For example, members of the House Transportation and Infrastructure Committee proposed the creation of a new Office of Livability under the

FHWA in 2009.¹¹ The Office of Livability would be responsible for making USBRS a federal agency. This visionary plan placed the federal government in a supervisory role, leaving the main work of route creation to local and state authorities. For example, the draft legislation called for a program of grants that the Office of Livability would award to local and state authorities. For political reasons, the transportation authorization bill of which it was a part was never introduced. The Obama Administration asked Congress to delay work on the unfinished bill, which lacked financing and other details, in favor of a temporary extension of the existing transportation legislation, which was due to expire in three months.¹² In response, members of the transportation committee published a white paper, sent a sharply worded letter to the president, and circulated the draft text of the bill.¹³

Designating Scenic Bikeways, a 2019 toolkit produced jointly by a division of the Federal Highway Administration, the U.S. Forest Service, and the Association of Oregon Counties, presents the USBRS and Oregon's Scenic Bikeway program as models for establishing bikeways on rural roads nationwide.¹⁴ This is an example of the pattern of unfunded federal agency support for the creation and maintenance of long-distance interstate bike routes. The report itself is designed to highlight key concerns and opportunities for the target readership of rural road owners, as opposed to bikeway proponents, whose interests are addressed by other publications. This report emphasizes safety considerations, potential liability, enforcement, and funding.¹⁵ The report also provides current and historical context. For example, the introduction cites a U.S. Department of Transportation policy statement supporting bicycle facilities, and it gives a few lines of background on USBRS and the Oregon Scenic Bikeways program.¹⁶ A map of the USBRS National Corridor Plan, displaying 13,000 miles of designated routes along with future development corridors that would bring the total to 50,000 miles, is included in the report.¹⁷

The upcoming 11th edition of the *MUTCD*, which is expected to incorporate proposed changes that were published in December 2020, appears to continue the federal government's pattern of outlining best practices and guidelines for bicycle routes without offering financial support.¹⁸ The changes will provide a new standard for bicycle route signage but will not significantly address safety policies, despite the appeals of cycling advocates. The public comment period had to be extended by two months because of the volume of responses to its content. The ACA was one of the organizations that submitted a letter, which called for more radical safety measures in the *MUTCD* to protect non-vehicular road users.¹⁹ Information related to bicycle routes and bikeways is hidden deep in

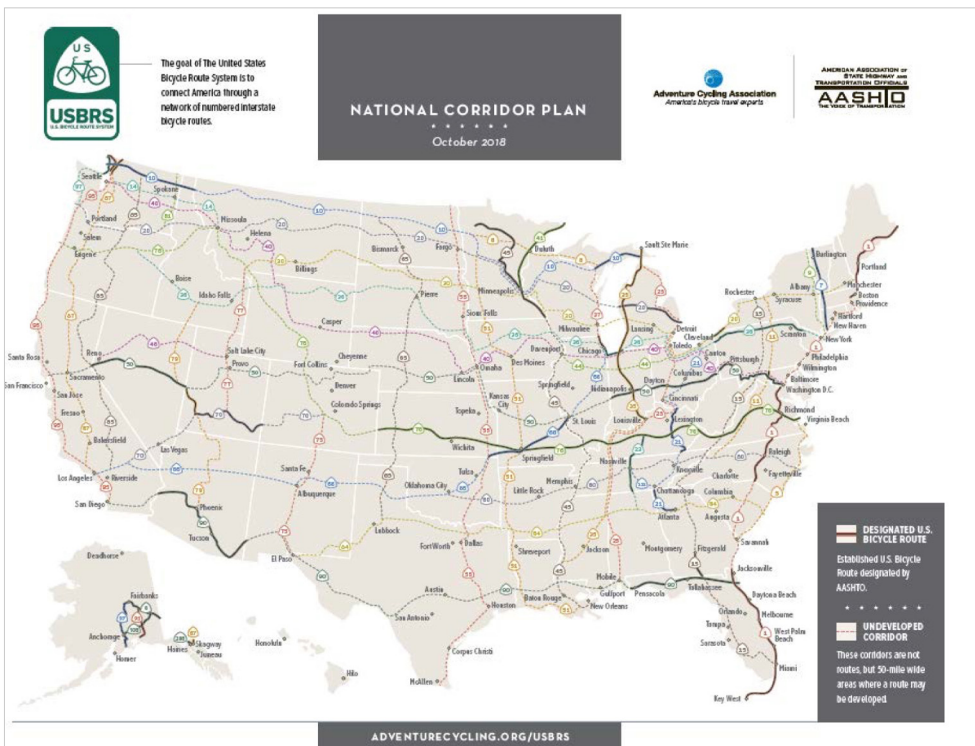


Image 2. A map of the U.S. Bicycle Route System National Corridor Plan dated October 2018 was published in *Designating Scenic Bikeways: A Framework for Rural Road Owners*, FHWA Publication No. 19-004. (The latest version, available on the Adventure Cycling Association website, shows the 18,534 miles of routes designated as of June 2022.)

this sprawling document about traffic control in general, making the information difficult to find. By contrast, if the United States had an Office of Livability and the USBRS were a federal agency, as proposed in 2009, it could create more focused and discoverable bicycle guidelines.

When viewed holistically, federal documents addressing bicycle routes follow this pattern of being lengthy, difficult to read, and dense. Their sprawling nature is more suited to their intended audience of state and local governments, and less approachable for private individuals who might want more information on national bicycle routes. It makes sense to be comprehensive. Yet the people who must implement these guidelines are still human beings, with limited attention spans. Editing the information to be more readable and relevant to the most common uses, or perhaps providing selected excerpts targeted to specific needs, could make a greater impact on the state and local government workers they address.

For accessibility purposes, most of the documents have been prepared with optical character recognition (OCR) and are reasonably accessible; however, long documents become large digital files, which require a high-speed internet connection to download and navigate. The digital divide means that many federal documents online are inaccessible to people without high-speed internet.

State Bicycle Routes

As mentioned above, state and local authorities have done most of the groundwork, communication, and funding for the establishment and maintenance of bicycle routes in the United States. The first two U.S. Bicycle Routes were established in 1982 after AASHTO invited states to identify and propose appropriate routes in 1979. Route 1 initially ran from North Carolina to Virginia, and Route 76, named in honor of the bicentennial a few years earlier, extended from Illinois to Virginia.²⁰ Both have since been extended, with Route 1 now running from Maine to Florida and Route 76 stretching from Colorado to Virginia.

In the early 1970s, the Oregon state government became a leader in bicycle route designation, largely by means of the implementation of new funding models. In 1971, the Oregon Department of Transportation (ODOT) decided that 1 percent of all state highway funding had to go toward bicycle spending.²¹ Ten years later, in 1982, Oregon designated its internationally renowned scenic Oregon Coast Bicycle Route.

In contrast to federal bicycle route documents, ODOT provides a detailed map and practical instructions for traveling the Oregon Coast Scenic Bicycle Route.²² The intended audience, which is individual bicyclists, informs the form, style, and content of Oregon's maps. They are easy to find, read, and use. Internet search engine results for "Oregon coast bicycle" turn up multiple web sources. The maps are clear, with enough detail to be useful for a bicyclist to understand the directions even at a glance. An estimated elevation graph allows cyclists to account for anticipated effort and fatigue between stops. Concise and useful advice, including information about weather, accommodations, and safety, equips novices as well as experienced riders to successfully navigate this route. The route is broken into four sections, with enough detail to aid someone traveling at the speed of a bicycle. Downloading the two-page PDF still requires internet access and does not completely bridge the digital divide, but the small file size does mean those without ultrafast internet service or high-powered computer equipment can view this map.

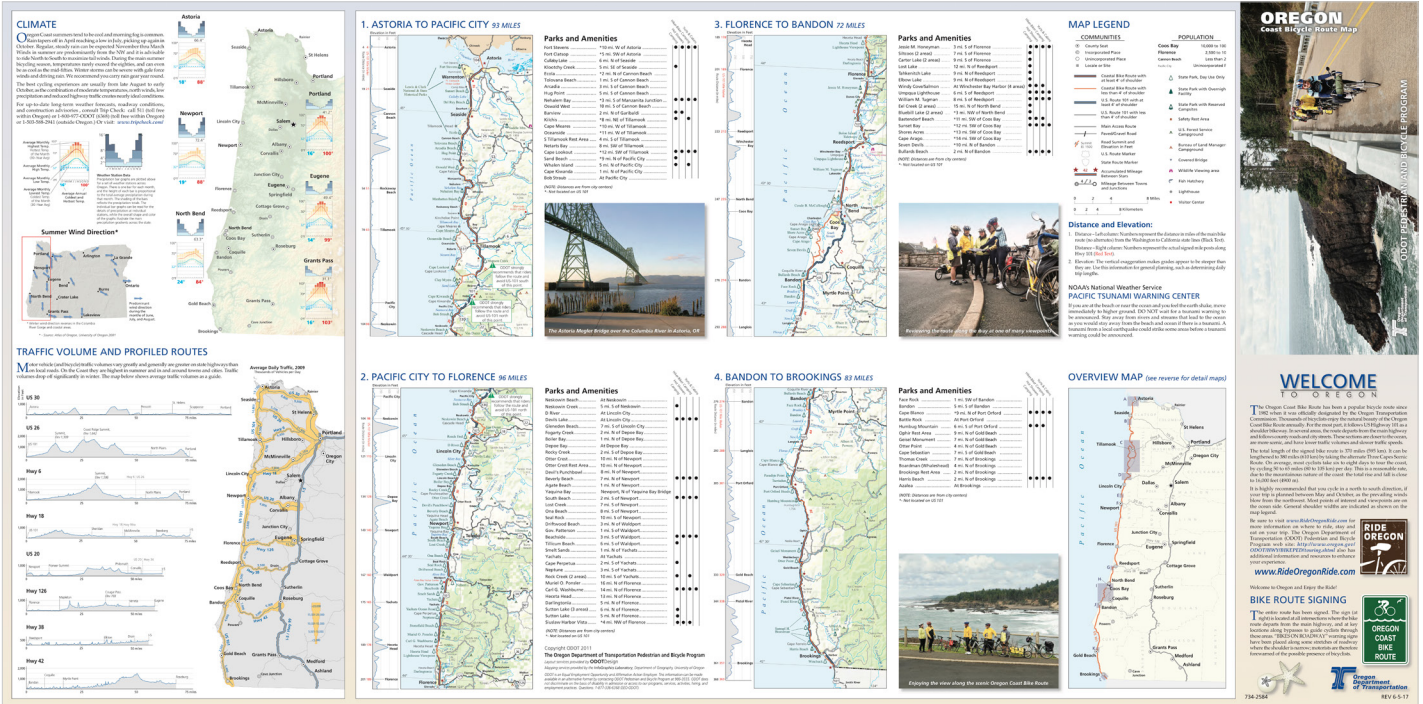


Image 3. The Oregon Coast Bicycle Route Map published by the state of Oregon, containing such details as prevailing winds, traffic patterns, elevation changes, lodging tips, and inset maps with notable landmarks, is unmistakably designed for the long-distance cyclists who travel the route.

Although it is easy to find the Oregon Coast maps online, it is not always clear whether the document being viewed is the most recent version. Several first-page results from a major mainstream search engine led to undated maps of the route, hosted on a variety of nongovernmental websites, that were older than the most recent version from 2017. Version numbers are not noted on the maps, and some of the earlier maps do not indicate the year of creation. With wide dissemination, it becomes hard to control the information lifecycle, and superseded information may be unwittingly left in circulation, which could lead cyclists to use more dangerous routes than those intended. A better approach for the information seeker is to forgo search engines and navigate directly to the ODOT website (<https://www.oregon.gov/odot>), where current, printable bicycle route maps can be found either by using the search function at top right or by selecting Plan Your Trip on the Oregon Pedestrian and Bicycle Program page.

The Future of Long-Distance Bicycle Routes in the U.S.

As of this year, U.S. Bicycle Routes extend through 33 states.²³ On February 24, 2021, a renewable five-year memorandum of understanding between AASHTO and ACA formalized their longtime partnership in maintaining USBRS planning and

route numbering.²⁴ Several new routes were added as lately as June 2022, expanding the network to more than 18,000 miles.²⁵

A survey of state bicycle and pedestrian coordinators in 2013 found that signage for USBRS routes was unfunded, inconsistent, and lacking adequate guidance from AASHTO and the MUTCD.²⁶ As noted, proposed changes to the upcoming edition of that manual will establish more detailed guidance for bicycle route signs and markings.

The continued bottom-up information flow means that most of the long-distance cycling routes in the United States are not recognized by federal or state governments, and instead represent nonprofits' mapping of cyclists' use of existing highways. Pushes for change over the past fifteen years may shift this trend, especially as the bicycle boom fueled by the COVID-19 pandemic continues. The Biking on Long-Distance Trails (BOLT) Act, H.R. 6337, passed by the House of Representatives in July 2022 and awaiting committee discussion in the Senate, aims to map as many as twenty off-road and gravel bicycle routes through federal land.²⁷ Should this bill pass into law, it would upturn the usual order of private organizations and local and state authorities taking the lead in designating long-distance bicycle routes.

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