

# GRAVEL

***Recommendations for  
Supporting the Growth of  
Gravel Riding in Pennsylvania***



# ***Recommendations for Supporting the Growth of Gravel Riding***

## **Introduction**

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“Gravel” riding, also known as mixed-surface riding, is one of the fastest-growing forms of cycling. Poised somewhere between road and mountain biking, “gravel” is a cycling discipline that takes its name from the unpaved dirt and gravel roads that are featured in most routes. It is generally safer than road cycling, less technical than mountain biking, and more adventure-driven than riding multi-use trails.

With more than 25,000 miles of dirt and gravel roads in Pennsylvania alone,<sup>1</sup> the Pennsylvania Environmental Council (PEC) and others have observed the rapid growth of gravel riding in the state. Over two dozen organized events are held around the state annually, and people take part in informal group and solo rides all throughout the year.

To support the responsible growth of gravel riding, PEC hosted a Gravel Summit in State College on April 28, 2022, and intends to host a larger summit in 2023. The recommendations that appear in this report are based on the summit discussion as well as PEC’s own insights concerning the future of mixed-surface cycling. Together, the recommendations are intended to contribute to a statewide climate in which land managers, route planners, and the riding public are in communication, working together to steward the land, and contributing to the outdoor economy. In short, PEC recommends:

1. Conducting gravel-specific research to improve understanding of the gravel demographics and economic impact.
2. Establishing statewide coordination that improves communications between land managers, route planners, and the riding public, resulting in an increase in responsible gravel cycling on public lands.
3. Creating a statewide resource for gravel riders that recommends vetted routes that support high-quality experiences and responsible land use, while strengthening the outdoor recreation economy.
4. Leveraging the growth in gravel cycling to further support Pennsylvania’s investment in multi-use trails.
5. Positioning communities to flourish by taking part in the outdoor recreation economy.

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1 Pennsylvania Department of Agriculture Dirt, Gravel, & Low Volume Road Maintenance Road Program, [www.agriculture.pa.gov](http://www.agriculture.pa.gov)

These are detailed in the Recommendations section of this report. Also included in the report is some additional background information on mixed-use cycling as well as a summary of the Gravel Summit.

## Background

### ABOUT GRAVEL ROUTES

Gravel routes are often user created and posted on sites like Strava and Ride with GPS. Other routes are created by race and event coordinators to accommodate large group events. In Pennsylvania, for instance, participants in the well-known [unPAved](#) event in Lewisburg follow routes custom-designed for the ride.

In recent years, state agencies, cycling groups, tourism promoters, bike shops, and others have begun developing and marketing routes as well. These routes are more likely to be carefully vetted and kept current than the multitudes of user-generated options. They are also typically developed in support of a larger agenda, whether that for be tourism and economic impact, land stewardship, trail development, or other purposes.

Whatever their origins, gravel routes tend to incorporate both paved and unpaved roads as well as trails. Riders say that moving across different surfaces and communities feels like a journey, an exploration through some of Pennsylvania's most scenic landscapes. Gravel routes put people in beautiful places like state forests, beloved rail-trails, and farmland.



## GRAVEL ROUTES EXPLAINED

Unlike trails, which are treated as stand-alone assets with defined beginning and end points, gravel routes make use of a variety of roads and trails. A single gravel route might include multiple paved and gravel roads, portions of existing trails, and even residential streets. Someone creating a route and posting it on Ride with GPS might start from their own front door, taking side streets



until they get to a paved road. This then takes them to a gravel or dirt road. After a while, they hop onto a rail-trail, which they know will connect them to another gravel road, and so forth. The “route” makes use of all these facilities in a way that creates a fun, challenging, and multi-sensory experience.

Just as “visitors don’t recognize county or municipal lines” and are simply looking to enjoy an area’s best offerings, gravel route creators piece together different roads and trails to achieve their ideal ride. Because a lot of Pennsylvania’s gravel and dirt roads are located on public lands, routes tend to go through state parks, state forests, state game lands, and national forest property. Essentially, the routes take adventurous cyclists to some of the most scenic locations.

## ABOUT THE AUDIENCE

People tend to gravitate to gravel because it is a fun, exploratory, and relatively safe form of cycling. Gravel culture is often centered on camaraderie and togetherness more so than racing or competition. Add to this, the approachable challenges the sport affords – building endurance and learning the feel of riding over unpaved surfaces, for example – and the appeal becomes quite clear. The audience is comprised of a mix of gender and age groups. Men are the primary demographic for gravel riding, but rides are becoming increasingly more gender balanced. Some events reserve half the spaces for women, resulting in a more intentionally-balanced environment. The most known event (Unbound in Kansas) created a non-binary category for the first time in 2021, a signal to what may be to come in terms of inclusion. Women and non-binary riders are showing up in other spaces as well. For example, the [Women Gravel Cyclists](#) Facebook group amassed nearly 12,000 members in its first two years, and the [Girls Gone Gravel](#) page is liked by 2,400 people.

The outdoor industry has taken note of the growing sport, as have tourism and economic development professionals. [Stan's No Tubes](#), which creates tubeless tires, sealants, and other gravel-focused products, has observed and responded to consumer trends. A Pennsylvania company founded in 2000, Stan's was represented at the Gravel Summit and offered insights on the trends. As observed by Stan's, gravel riders are:

- Attending races, rides, and festivals geared toward fun
- Embracing the outdoor lifestyle
- Finding gravel riding to be generally safer than most other cycling options
- Purchasing gravel-specific products

Put differently, consumers know what they are looking for and companies are responding with gravel-specific products. Tourism organizations, heritage areas, and other entities are responding as well with their own form of product – tourism “product” in the form of marketed routes and supporting information.



## A MORE COMPREHENSIVE LOOK AT GRAVEL

Learn more about gravel cycling in PEC's report, [GRAVEL: Another Great Cycling Option in Pennsylvania](#). It covers the history of gravel, audiences, myths, tourism potential, and more, drawing on the insights of gravel experts from around the country.

# PA Gravel Summit Summary and Key Takeaways

The April 28 Gravel Summit brought together public land managers, route planners, event planners, industry representatives, bike shop owners, tourism professionals, and others to consider the future of mixed-surface cycling in Pennsylvania. The stated purposes of the event were to:

- Bring together stakeholders to discuss issues and opportunities for gravel riding in PA
- Align the goals of gravel ambassadors and public land managers
- Lay a foundation for follow-up discussions

The summit began with introductions followed by presentations offering different perspectives on gravel riding, including those of riders, industry representatives, event planners, route planners, land managers, and tourism professionals. Small group conversations about challenges and opportunities followed. Over lunch, participants “voted” (via a stickering exercise) on the most pressing challenges and best opportunities. Finally, a facilitated large-group conversation identified aspirations and further prioritized challenges and opportunities.

When asked what kind of statewide gravel climate they desire, responses focused on improved coordination and communication, improved rider experiences, health and wellness, and responsible use of the land.

While completely aligning the goals of gravel ambassadors and public land managers may have been an unrealistic expectation for the day, increased understanding and improved communication certainly was achieved. Conversations between land managers and gravel advocates resulted in a deepened awareness of issues and opportunities from both sides.



# RECOMMENDED ACTIONS

The following recommendations are based on issues and opportunities identified at the Gravel Summit as well as PEC's research and organizational priorities. Ways in which the recommendations can be achieved (and entities that might become involved) are included and should be treated only as examples at this early stage. Additional thought, planning, research, and dialogue will be needed to act on these recommendations.

## #1. CONDUCT GRAVEL-SPECIFIC RESEARCH TO IMPROVE UNDERSTANDING OF THE GRAVEL DEMOGRAPHICS AND ECONOMIC IMPACT.

While preparing the [GRAVEL: Another Great Cycling Option in Pennsylvania](#) report, finding economic impact, demographic, and other quantifiable information on the impact of mixed-use cycling was quite challenging. At least one expert consulted believes this is because there is no over-arching organizing body that advocates for gravel cycling. Without an organization to solicit formal research, gravel advocates, reporters, and others rely upon the limited data that has been collected by the outdoor industry, event organizers, and others. The rapid growth of gravel is widely recognized, but this growth needs to be further understood and quantified. Pennsylvania has often been on the leading edge of outdoor research (the 2020 research on the pandemic's impact on trails, for example). Conducting gravel-specific economic research would be an appropriate initial step.

## #2. ESTABLISH STATEWIDE COORDINATION THAT IMPROVES COMMUNICATIONS BETWEEN LAND MANAGERS, ROUTE PLANNERS, THE RIDING PUBLIC, AND OTHER STAKEHOLDERS, RESULTING IN INCREASES IN RESPONSIBLE GRAVEL CYCLING ON PUBLIC LANDS.

The most pressing challenge identified during the summit related to educating route planners and users of public land regulations and best practices. There are hundreds of state parks, forests, and game lands across the state, as well as the Allegheny National Forest and local municipal parks. While there was some discussion at the summit concerning the merits of both centralized and decentralized efforts, statewide coordination is needed to improve public awareness in a meaningful way.

Beyond making gravel ambassadors and users aware of land use regulations, opportunities exist to foster public land stewardship among riders. Riding through parks and public lands tends to increase people's appreciation for these spaces. Consistent, coordinated messaging with a call to action can leverage this appreciation. State and Federal agencies, nonprofit organizations, industry representatives, event coordinators, and others can be organized as a statewide committee or coalition to facilitate increased awareness.

The planned 2023 Gravel Summit can be used to either introduce the coalition concept or build consensus among attendees.

### #3. CREATE A STATEWIDE RESOURCE FOR GRAVEL RIDERS THAT RECOMMENDS VETTED ROUTES THAT SUPPORT HIGH-QUALITY EXPERIENCES, RESPONSIBLE LAND USE, AND THE OUTDOOR RECREATION ECONOMY.

In one eye-opening moment of the summit, a few of the riders in the room shared that they have hundreds of routes stored on their own Ride with GPS accounts. The volume of mapped routes through that platform alone is staggering. But the existence of routes says little of their quality. Now imagine a one-stop, statewide resource called Key(stone) Routes (or any other name) that recommends vetted routes. The digital resource would enable both state residents and out-of-state visitors to select rides with confidence, knowing that the routes have been vetted and additional contextual information has been provided. Providing good, helpful information is an important part of hospitality. A statewide resource would better serve the riding public while increasing the sport's ability to contribute to the outdoor recreation economy.

Special attention could be given to positioning new riders to plan their rides and trips. (Engaging new users ranked high during the summit's prioritization exercise.)



Routes meeting certain criteria would qualify for inclusion. They could be sorted by benefits, with some routes “checking all the boxes” of offering scenic, well-resourced rides, bringing economic benefit to route-adjacent communities, and contributing to stewardship and conservation efforts. This recommendation reflects the desire for quality resources and consistent amenities, as well as the commitment to ensuring that communities (many of them rural and in need of an economic boost) benefit from gravel cycling.

The resource itself will not suffice. A marketing campaign that includes marketing and blend of digital and print materials, ongoing promotion, and tying the resource to responsible land use messaging will be necessary to successfully reach existing and would-be riders.

Either the routes could be determined internally or via a coalition, or similar to the Bicycle Friendly America program, communities could apply to have local routes included.



Gravel riding experts should be consulted to help vet routes and make improvement recommendations. Routes not accepted could be given feedback and the opportunity to re-apply. A marketing campaign and statewide resource would require a financial investment and a lead entity. (The lead might be an existing organization or potentially an entirely new entity.)

This user-friendly resource should tie to the coalition effort noted in the previous recommendation. State agencies such as DCNR (through its new Outdoor Recreation office) and DCED can be solicited for support, as can companies within the outdoor industry, which is already accustomed to supporting events and gravel athletes. Tourism organizations and heritage areas in areas with ample gravel routes should be solicited for support and involvement as well. Finally, Federal sources (Appalachian Regional Commission and the USDA) could be sought. (In Vermont, the Northeast Kingdom Gravel website was constructed with a USDA Rural Business Development grant.) In Arkansas, funds were locally raised to support the creation of two Adventure Cycling Association routes in the state, essentially establishing two long-distance destination routes.

Here in Pennsylvania, there are already plenty of great routes being created and promoted, but these efforts could benefit from a centralized, coordinated approach and one-stop resource.

#### **#4. LEVERAGE THE GROWTH IN GRAVEL CYCLING TO FURTHER SUPPORT PENNSYLVANIA'S INVESTMENT IN MULTI-USE TRAILS.**

Gravel routes put people onto some of Pennsylvania's favorite rail-trails. Route creators include trails when they are convenient, compelling, and keep people off roadways. Strategically placed rail-trails (and multi-use trails, generally) can provide great scenery, history, and vantage points. Riders tend to appreciate that the nearly level trails provide a relaxing break from climbs and descents. This all adds up to continued and growing support for rail-trails, helping to protect and leverage Pennsylvania's long-term investment in trails. Rail-trails are wildly popular, as is gravel riding. State agencies and other stakeholders can work together to ensure that the growth of gravel means further support for trails.

Rail-trails can be incorporated into the vetted, promoted routes. Further, information about the trails and the groups that manage them can be highlighted, as well as how cyclists can support these organizations.

Gravel routes can also provide connections between rail-trails, potentially leveraging funding for trail development by providing a contiguous connection or route. The Pennsylvania Trails Advisory Committee and other trail advocates can be engaged to map possible connections.



Credits: Rails-to-Trails Conservancy, Renee Rosensteel

## #5. POSITION COMMUNITIES TO FLOURISH BY TAKING PART IN THE OUTDOOR RECREATION ECONOMY.

Supporting local communities emerged as a priority during the gravel summit. The specific items prioritized included “community connections along routes” and “economic development in small, rural communities” (although the economic potential expands beyond rural communities). In addition to marketing routes that are proximate to communities, those leading the effort should look for ways of proactively ensuring a strong connection between gravel routes and audiences and the communities through which they pass. Tactics might include:

- Engaging the [Community Development Financial Institution \(CDFI\)](#) community around supporting local businesses looking to accommodate the gravel market.
- Exploring the possibility of helping bicycle industry businesses open, expand, or relocate to locations along established gravel routes. Companies are actively investing in research and development for gravel-specific products. Having such companies located in these communities would increase the economic potential beyond the tourism component.
- Revamping [PEC's Outdoor Towns toolkit](#) to offer support and guidance to communities located along gravel routes (and those considering establishing routes).



# **ACKNOWLEDGMENTS**

## **2022 GRAVEL SUMMIT ATTENDEES**

REPRESENTATIVES FROM THE FOLLOWING ENTITIES WERE PRESENT AT THE 2022 GRAVEL SUMMIT:

Allegheny National Forest

Cycle Forward

Department of Conservation and Natural Resources, Bureau of Forestry

Department of Conservation and Natural Resources, Bureau of State Parks

Department of Conservation and Natural Resources, Bureau of Recreation and Conservation

Endless Mountains Heritage Region

Happy Valley Adventure Bureau

Happy Valley Women's Cycling

PA Route 6 Alliance

Pennsylvania Environmental Council

Pennsylvania Game Commission

Stans NoTubes

SweetWater Bikes

TransVirginia Bike Route / Village to Village Press

UnPAved of the Susquehanna River Valley

## PA GRAVEL SUMMIT & GRAVEL RECOMMENDATIONS REPORT TEAM

Amy Camp, Cycle Forward

Helena Kotala, Pennsylvania Environmental Council

Zhenya Nalywayko, Pennsylvania Environmental Council (Design)

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