

# DEATHBALL MOUNTAIN BIKE TRAIL SYSTEM FEASIBILITY REPORT

June 2025

McKenzie River Area, Oregon

TRAVEL



OREGON





Rich Bacon

## Acknowledgements

This feasibility report for the Deathball Mountain Bike Trail System project would not have been possible without collaboration and participation from the following organizations:

Cascade Volunteers

McKenzie Community Partnership

McKenzie River Ranger District, Willamette  
National Forest, United States Forest Service

McKenzie River Trail Run

McKenzie Trail Volunteers

Travel Lane County

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## Executive Summary

The Deathball Mountain Bike Trail System feasibility report, prepared for Cascade Volunteers/McKenzie Trail Volunteers as part of Travel Oregon's Recreation Ready program, proposes a 35- to 45-mile premier mountain biking destination near Blue River, Oregon, welcoming all abilities with a focus on accessibility, inclusion and community. This Recreation Ready: Phase I study assessed feasibility by engaging stakeholders, analyzing conditions and trends, evaluating disability and inclusion provisions, and identifying opportunities and constraints. Key findings show strong community support and high demand for diverse trails that cater to adaptive and electric mountain biking, and to beginner/intermediate riders who view Oregon as a preferred destination. Disability and inclusion review feedback emphasized accessible infrastructure, transportation and information.

Opportunities include enhancing the local economy and positioning Oregon as a leading biking destination. Constraints include a lack of accessibility services in the destination, environmental review requirements, terrain suitability and staffing capacity. Recommendations include ensuring diverse representation, prioritizing accessibility in requests for proposal, hiring disability consultants and developing an accessibility maintenance plan. Precedents such as The Driving Range and Whistler, two world-class adaptive mountain biking destinations, offer insights. The project is viable for Phase II with a draft action plan emphasizing inclusive design and community engagement. The Deathball Mountain Bike Trail System project promises economic benefits, recreation and greater outdoor accessibility for the McKenzie River area.

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## PREPARED FOR

Cascade Volunteers/McKenzie Trail Volunteers

## RECIPIENT OF

Travel Oregon Recreation Ready Program

## PREPARED BY

C2 Recreation

Empowering Access

Travel Oregon

# RECREATION READY BACKGROUND







D Sanders

To support Oregon communities in developing new outdoor recreation visitor experiences that enhance local communities, grow economic opportunities, respect natural environments and increase access and equity in the outdoors, Travel Oregon launched the Recreation Ready program in 2024.

Designed to provide communities with early project planning, technical assistance and investments, Recreation Ready is delivered over two phases. First, Travel Oregon staff and a consultant team work with a local project steering committee over a six-month period to assess project feasibility through a series of key steps. In the second phase, feasible projects are eligible to receive additional technical assistance and financial investment to further advance projects.

### PHASE I: Assess project feasibility

(over six- month period)

- Convene local project steering committee
- Receive *Access and Belonging in Outdoor Recreation* training
- Examine existing conditions
- Analyze visitor trends and potential visitor profiles
- Perform disability and inclusion evaluation
- Engage community and receive feedback
- Identify opportunities and constraints
- Provide action planning for Phase II
- Culminate steps into this feasibility report

### PHASE II: Investment

- Fund action plan to advance project forward (up to \$100,000 to be executed by December 31, 2026)

The Recreation Ready program was available to rural communities and to tribal communities within the nine federally recognized Tribes of Oregon. Successful program applicants identified an outdoor recreation visitor experience project in early stages of development and planning; at the time of application, these projects were not yet ready to seek traditional infrastructure investments and were in need of assistance to get to that position in the future. Twenty-four applicants applied to the program through a competitive statewide process in fall of 2024. The Deathball Mountain Bike Trail System was one of four projects accepted into the program.

Program participants that successfully complete Phase I with a viable project — determined through the feasibility report — are eligible and invited to participate in Phase II. Applicants are required to submit a detailed project scope of work, including a budget and timeline, to Travel Oregon to receive the Phase II investment award.



# ACCESS AND EQUITY IN THE OUTDOORS





## Access and Equity in the Outdoors

**Access** in outdoor recreation ensures people have the *ability* to physically reach and participate in outdoor spaces and activities by removing barriers. **Equity**, however, goes further: It acknowledges that different groups face unique challenges and have varying needs, focusing on *fairness* and addressing historical inequalities. The Recreation Ready program aims to prioritize both access and equity in the outdoor projects it supports. In Phase I, Travel Oregon retained an accessibility consultant with lived disability experience to provide guidance to program participants, addressing outdoor recreation disparities and highlighting the importance of intersectionality. Creating truly inclusive outdoor experiences requires intentional outreach to disability communities, hiring expert consultants and exceeding current standards. Ongoing community investment and partnerships are vital for genuine outdoor access and inclusion. This report presents findings and recommendations from Empowering Access to further these goals.

### About Empowering Access

Empowering Access provides expert consultation in disability, equity and inclusion, drawing on both professional knowledge and personal experience. They partner with stakeholders to develop comprehensive and inclusive solutions that go beyond standard practices. Through research, best practices and a deep understanding of lived experiences, they prioritize and elevate the voices of individuals with disabilities. Their goal is to foster inclusion across all settings, offering clients innovative strategies for accessible outdoor engagement.

### OSU Training on Access and Belonging

To support program participants in framing their outdoor projects with access and equity, project leads took Oregon State University's Elevate Outdoors training on access and belonging, followed by an Empowering Access-led debrief. Discussions covered inclusion, equity, historical exclusion and current research for equitable outdoor experiences. Projected learning outcomes included understanding access, inclusion and belonging; self-awareness; appreciating diverse identities; understanding barriers; and creating inclusive outdoor experiences. The debrief addressed history, Native lands, inclusive spaces/marketing, safety/allyship, dismantling privilege, strengthening partnerships and expanding opportunities.



# STEERING COMMITTEE





Sam Ruder

The Recreation Ready program was designed for destination management/marketing organizations (or other organizations working closely with destination managers). The program required each DMO applicant to identify a local steering committee that would shape and guide their project and to submit a letter of commitment from each member. Recreation Ready: Phase I steering committee members for the Deathball Mountain Bike Trail System project included:

- **Alyssa Brownlee, President, McKenzie Trail Volunteers (lead)**
- **Chip Coker, Executive Director, Cascade Volunteers**
- **Chris Lavoie, Executive Director, McKenzie Community Partnership**
- **Connor Nolan, Destination Development Manager, Travel Lane County**
- **Gregg Sasek, Recreation Management Specialist, McKenzie River Ranger District**
- **Stacy Rudisill, Volunteer Coordinator, Cascade Volunteers**
- **Tim Hooton, Executive Director, McKenzie River Trail Run**



# PROJECT DESCRIPTION AND BACKGROUND





The Deathball Mountain Bike Trail System aims to create a new, premier 35- to 45-mile mountain biking destination near Blue River, Oregon, welcoming riders of all abilities. The project prioritizes:

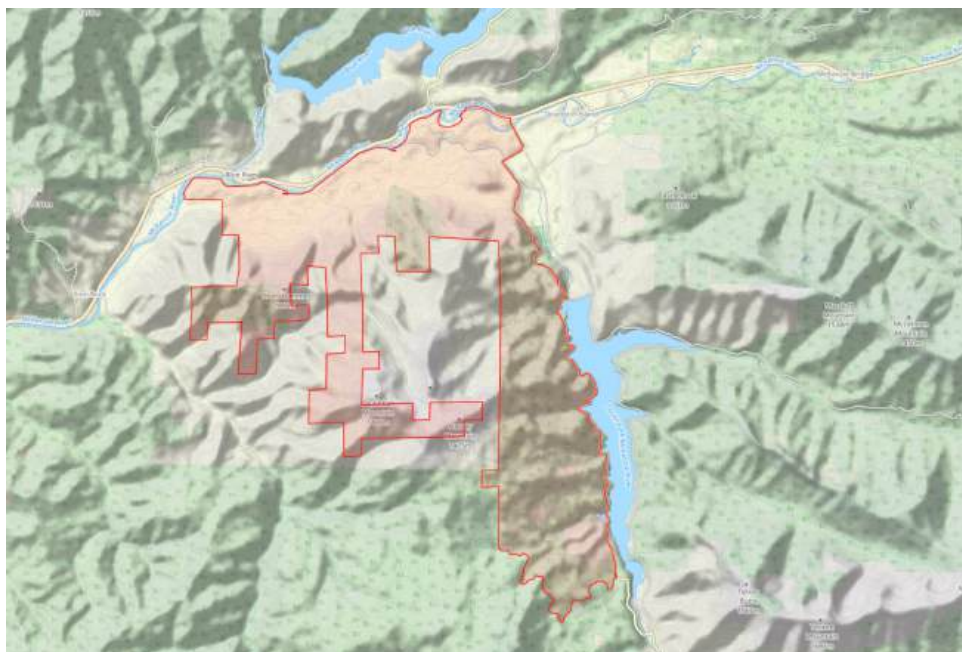
- Honoring local First Nations — the Molalla, Kalapuya and Chinook — through site infrastructure, programming and interpretive kiosks.
- Year-round accessible, low-elevation trails.
- Trails for all levels (beginner to expert), including electric mountain bike (eMTB) and adaptive mountain bike (aMTB) access.
- Flexible shuttle options (self, commercial, out-and-back).
- Public transit access via Lane Transit District Route 91.

The McKenzie River area, historically renowned for various outdoor activities, has become a significant mountain biking destination. It features the challenging McKenzie River Trail and the rugged Olallie/O'Leary/King Castle network (an IMBA EPIC designated trail). The Santiam Wagon Trail, with its rich history, also attracts riders.

The 2020 Holiday Farm Fire devastated the region, impacting recreation and the local economy. However, ongoing redevelopment efforts such as the Blue River Complete Community Plan aim to revitalize the area, including enhancing pedestrian and bicycling experiences.

Despite the area's appeal, existing mountain biking trails are mostly challenging, leading to overcrowding and frustration among less experienced riders. The McKenzie River Ranger District identified the need for more diverse trails to accommodate current and future visitation while increasing equity and access.

In 2024, the ranger district engaged community partners to explore a new trail system in the fire-affected Deathball Mountain/Thor's Hammer area. This sparked enthusiasm for sustainable tourism growth, supporting Blue River's development and enhancing local connectivity. Coinciding with this, partners secured support from Travel Oregon's Recreation Ready program to advance the project.





A woman wearing a pink knit beanie and a green swimsuit is sitting in a shallow stream, looking up at the tall trees. The water is calm, reflecting the surrounding forest. The scene is misty and sunlit, with the sun visible in the upper right corner. The text "EXISTING CONDITIONS" is overlaid on the left side of the image.

# EXISTING CONDITIONS



EXISTING CONDITIONS

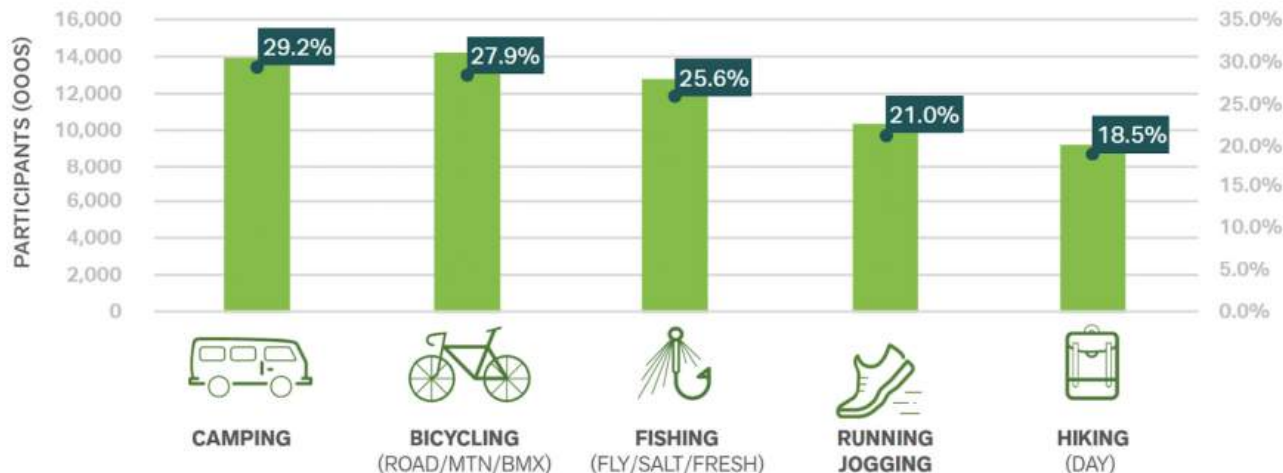
The McKenzie River area faces high demand for mountain bike trails, yet existing options are overwhelmingly geared towards advanced riders. While over 50 miles of trails exist, just only five miles cater to beginners/intermediates, leading to overcrowding and frustration from visitors and locals alike. Trails often feature challenging terrain with steep grades, rocks, narrow paths, loose surfaces, and exposed drop-offs, further impacting visitor experience.

The McKenzie River area faces high demand for mountain bike trails, yet existing options are overwhelmingly geared toward advanced riders. While over 50 miles of trails exist, just five miles cater to beginners/intermediates, leading to overcrowding and frustration from visitors and locals alike. Trails often feature challenging terrain with steep grades, rocks, narrow paths, loose surfaces and exposed drop-offs, further impacting visitor experience.

This represents a missed opportunity, as mountain biking is a popular U.S. activity with over 9.2 million participants, and growing most quickly among casual riders who are diversifying the sport.<sup>1,2</sup> In Oregon, the sport generated over \$209 million in economic activity in 2022,<sup>3</sup> and is expected to grow, with cycling remaining the most popular outdoor activity for children.<sup>1</sup> Adaptive mountain biking is also increasingly sought after, but existing trails often lack accessibility. A significant portion of potential visitors to the area have accessibility needs (16.8% current, 18.4% projected).<sup>4,5</sup>

A 2014 report by ECONorthwest noted the scarcity of mountain bike trails in the Willamette Valley, with high user rates per mile and frequent participation.<sup>6</sup> These conditions have worsened as mountain biking popularity has increased alongside population growth, at a rate of 2.5% annually.<sup>1</sup> Therefore, while there has been some new trail development in the area over the years — 25 miles added — it has failed to meet demand.

Latent demand is high, with lack of nearby trails cited as a major reason for inactivity.<sup>7</sup> PinkBike.com community surveys indicate people would ride three to five times per week if trails were accessible. Children, the next generation of riders, particularly favor cycling.<sup>1</sup> Due to the McKenzie River Ranger District's resource constraints and focus on wildfire management, new trail development has been slow. An independent 2024 assessment funded by the Willamette Valley Visitor Association confirmed existing trails are mostly inaccessible to adaptive mountain bikes. However, Oregon Adaptive Sports provided 871 adaptive bike experiences in Bend in 2024, indicating a growing need for trails that accommodate all abilities.



1. 2024 Outdoor Trends Participation Report, Outdoor Industry Foundation.

2. 2022 Economic Analysis of Outdoor Recreation in Oregon.

3. 2025 Deathball Trail System Background Report.

4. 2025 Deathball Trail System Potential Visitor Profile

5. Outdoor Recreation Scarcity and Abundance in Western Oregon: A Spatial Analysis, ECONorthwest, 2014.

6. Statewide Comprehensive Outdoor Recreation Plan (SCORP), Oregon Parks and Recreation Department.

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# RESEARCH

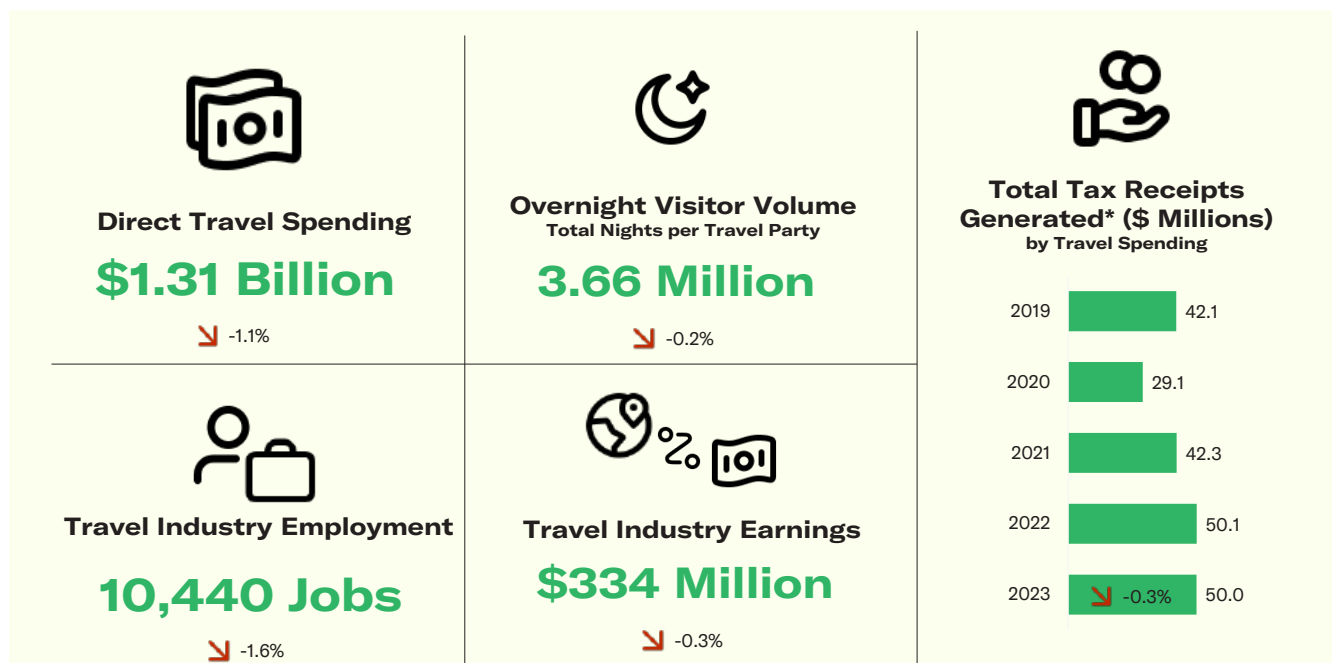




Dylan VanWeelden

To understand the potential and need for the Deathball Mountain Bike Trail System, Travel Oregon commissioned Future Partners to conduct two visitor-focused studies: one analyzing current local and regional visitor trends, the tourism economy, and resident sentiment; and another assessing regional outdoor recreation travelers' interest in the project and their perceptions of Oregon as an outdoor destination compared to competitors such as Washington, Idaho, Nevada and California. Furthermore, to gather specific feedback on accessibility and inclusion, Empowering Access facilitated disability and inclusion focus groups in both Portland and Central Oregon in March 2025. These sessions aimed to identify accessible recreation interests and barriers, providing crucial insight to ensure the trail system meets the diverse needs of all potential users.

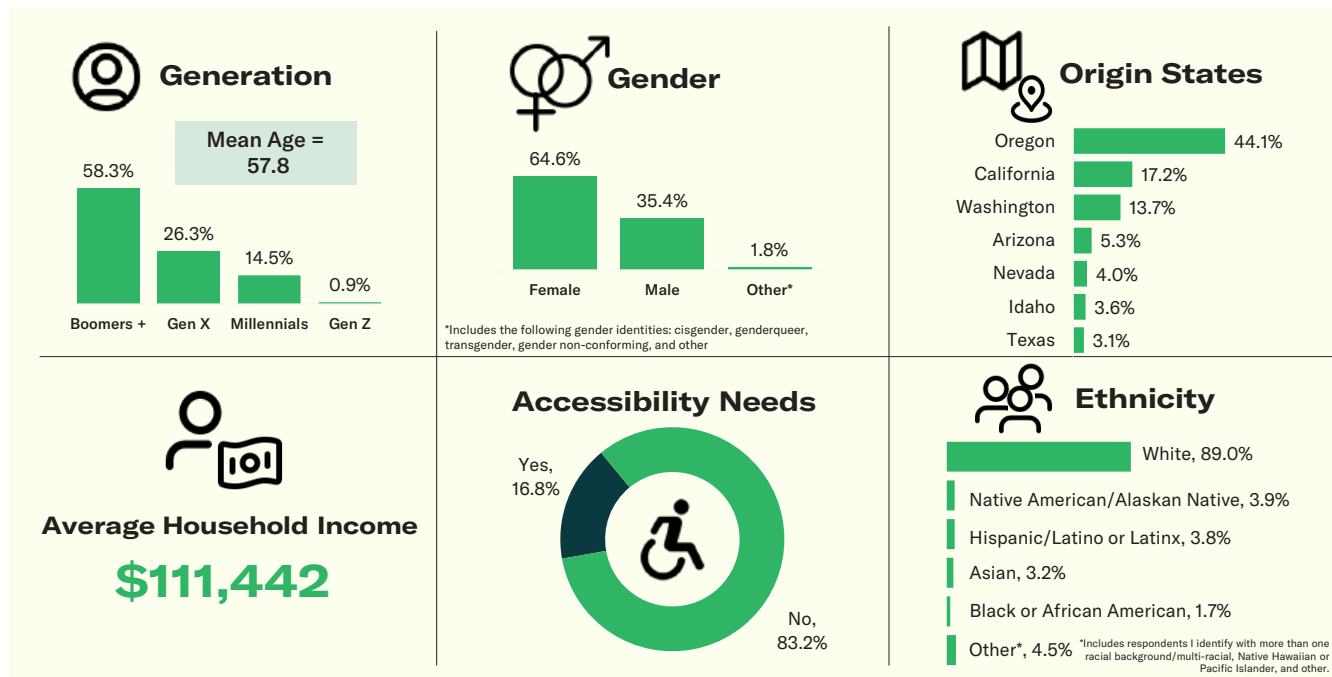
## Economic Snapshot



\*The Total Tax Receipts Generated includes both state and local taxes  
Source: The Economic Impact of Travel in Oregon – 2023 preliminary data, Lane County.



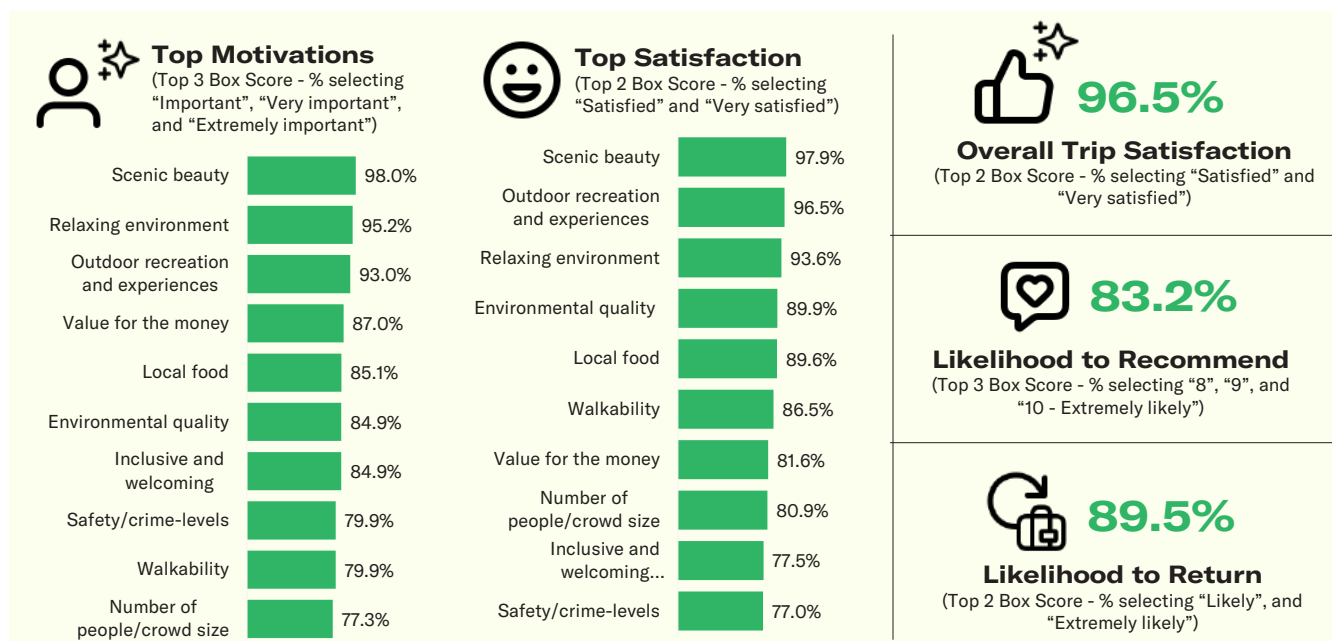
## Visitor Demographics Snapshot



Source: Travel Oregon, 2022 Visitor Profile Study.

Deathball Trail System includes Vida, Blue River, McKenzie Bridge, Eugene/Springfield.

## Outdoor Recreation Snapshot



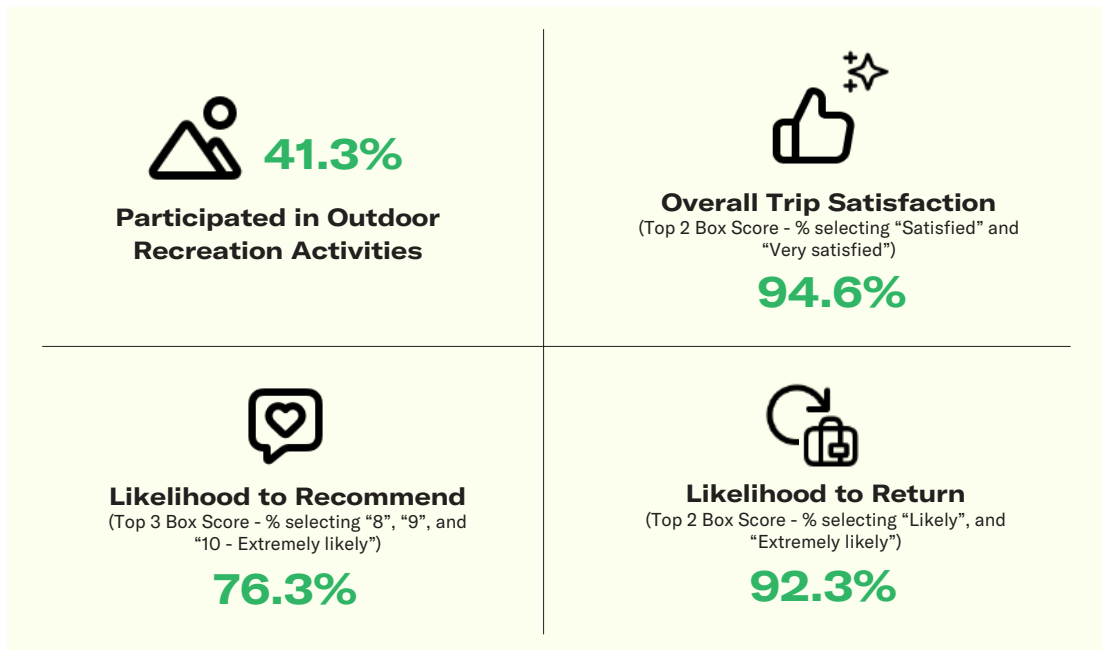
Source: Travel Oregon, 2022 Visitor Profile Study.

Sample: Visitors who participated in an outdoor recreation activity on their last trip to Oregon.

Deathball Trail System includes Vida, Blue River, McKenzie Bridge, Eugene/Springfield.

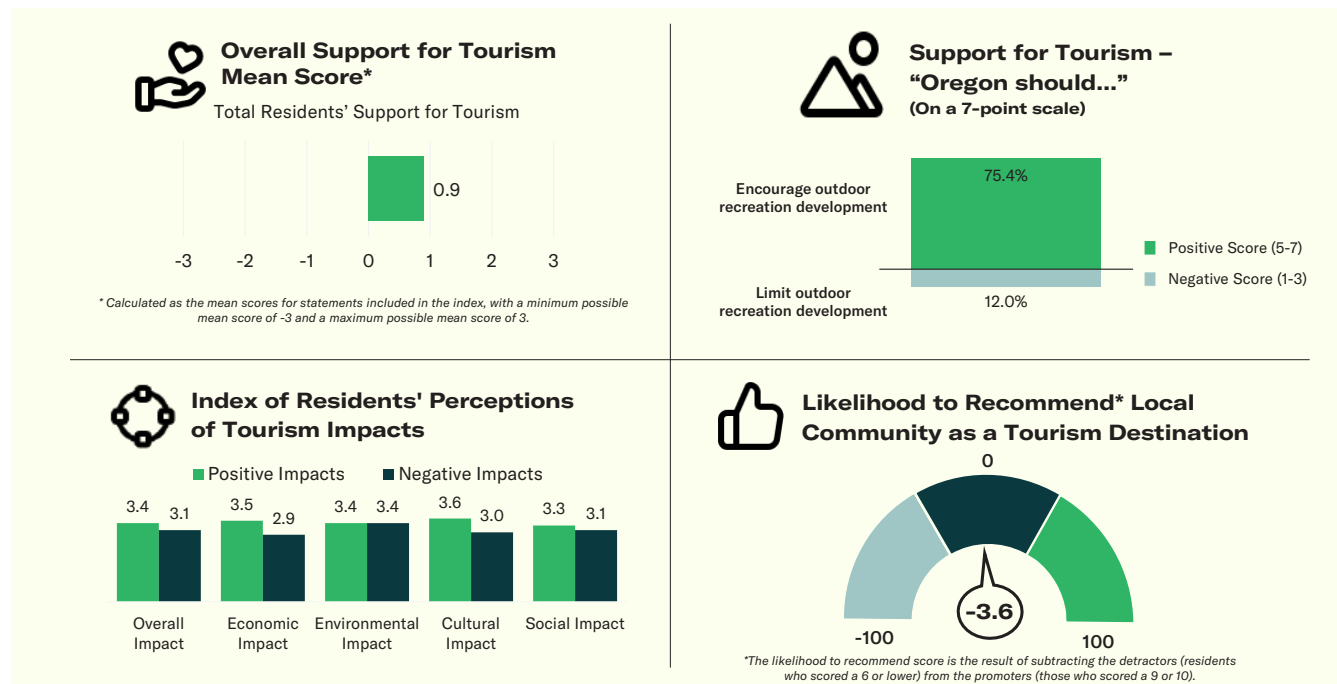


## Visitors with Disabilities Snapshot – Key Metrics



Source: Travel Oregon, 2022 Visitor Profile Study; Willamette Valley Tourism Region, Visitors with Disabilities.

## Lane County Resident Sentiment Snapshot



Source: Travel Oregon, 2023 Resident Sentiment Study, Lane County.



Dylan VanWeelden

## Potential Visitors

### KEY INSIGHTS

**Key Markets:** White travelers, older travelers and travelers with disabilities are most likely to view Oregon as a top biking destination. The Deathball project should appeal to these groups emphasizing accessibility, as it benefits a broad range of users but should not exclusively focus on serving this market at the expense of casual riders.

**Opportunity:** Out-of-state travelers who identify as Black, Indigenous and people of color (BIPOC) show the highest potential for overnight outdoor leisure trips, averaging more trips than non-BIPOC out-of-state travelers. This finding presents a significant opportunity to provide offerings for and market to this group.

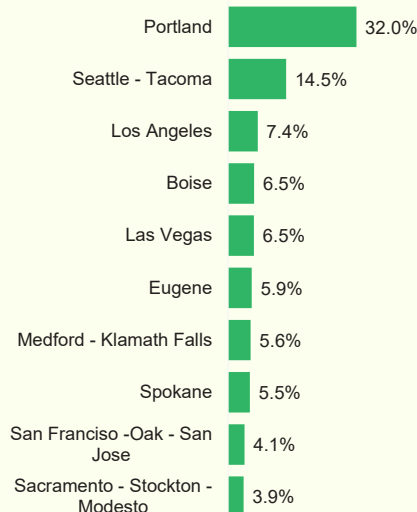
**Competition:** California is a major competitor for outdoor recreation trips, especially among BIPOC and younger travelers. Oregon must highlight its unique natural landscapes and relaxing environments to persuade California-minded visitors.

**Inspiration Sources:** Word of mouth, internet search and prior experience are the top travel inspiration sources. However, travelers with disabilities are more likely to use traditional media, while younger travelers tend to rely on social media. Marketing efforts should consider these varied preferences.

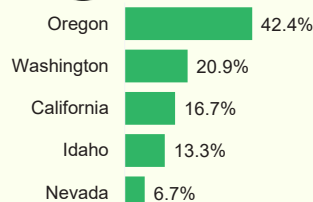
## Travel Profile Snapshot



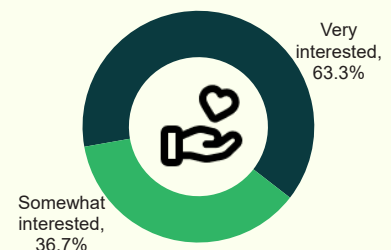
### Top Origin by DMA (Designated Market Area)



### Origin States



### Leisure Travel Interest in Outdoor Recreation



### Average Overnight Leisure Trips Taken Including Outdoor Activities (Past 12 Months)

**3.9 Trips**

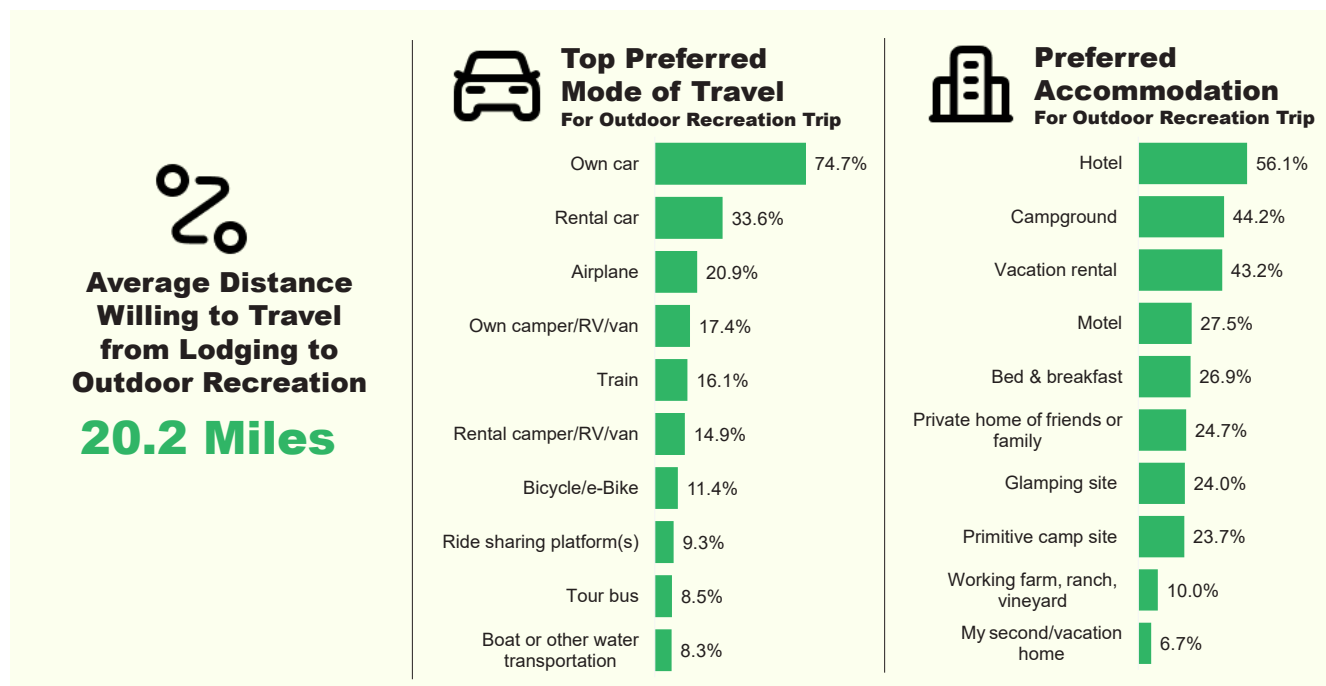


### Average Length of Stay of Most Recent Outdoor Recreation Trip

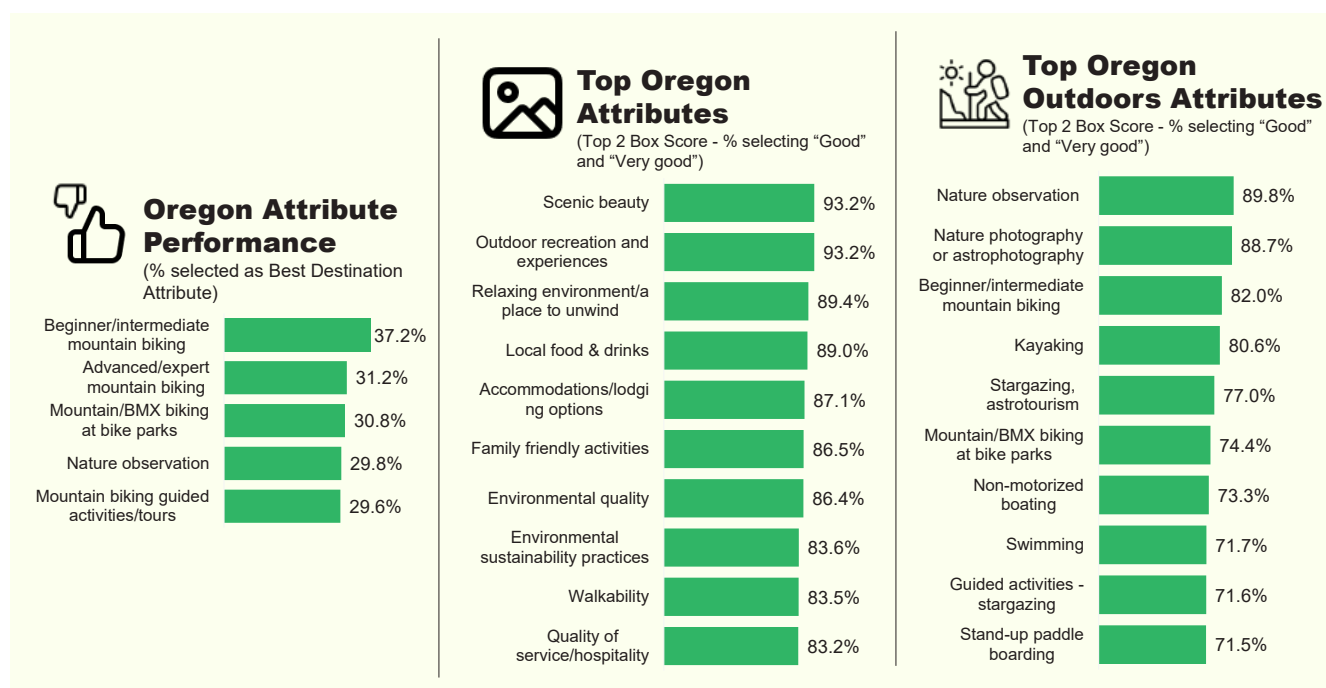
**3.9 Nights**



## Outdoor Trip Snapshot

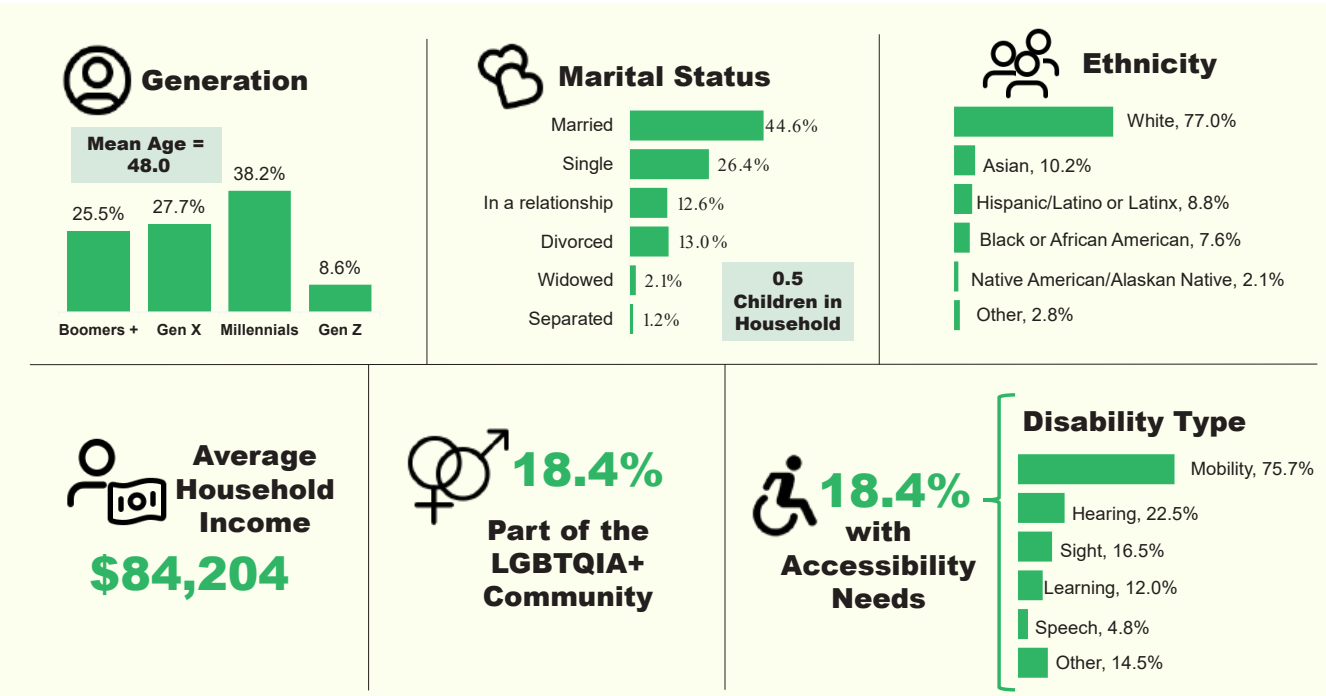


## Oregon Perceptions Snapshot





Demographics Snapshot

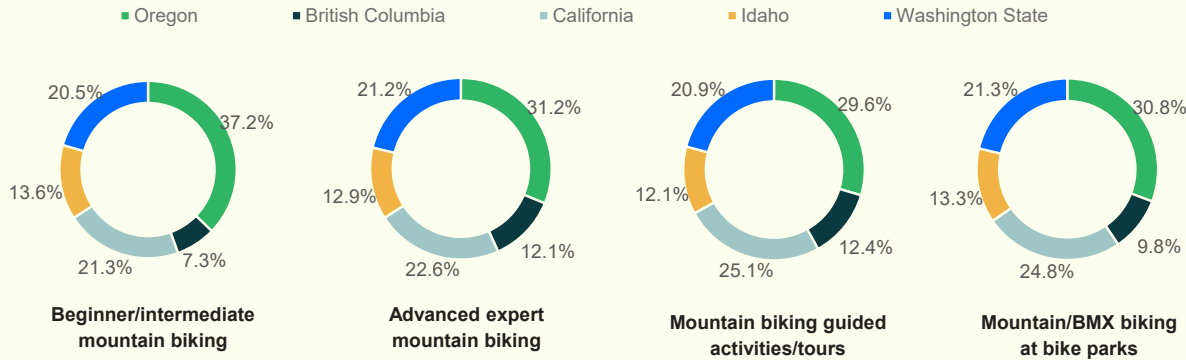


Oregon is considered the best destination for biking recreation activities

When asked to select which regional destination is best for various biking recreation activities, Oregon was consistently selected over competitor destinations by potential Deathball Trail System visitors. While more than three in ten chose Oregon as the best destination for all four biking activities, the largest share (37.2%) said Oregon was the best destination for beginner/intermediate mountain biking.

Competitor Destinations Attribute Performance

% Selected as Best Destination for Attribute



Base: Total respondents. 403 completed





Dylan VanWeelden

## Disability & Inclusion Focus Groups

Two focus groups, representing potential visitors from different Oregon regions who would travel at least 50 miles, participated in this study. The participants represented a diverse range of disabilities and interests, and they engaged through in-person conversations or group Zoom calls, followed by detailed surveys. Snapshots of the findings are below, with full survey responses available in the *Appendix*.

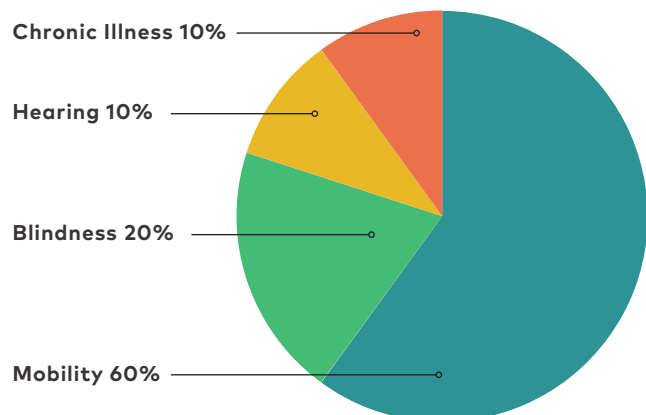
### IN-PERSON FINDINGS

Groups from the Portland metro area and from Central Oregon expressed enthusiasm for another adaptive biking opportunity. The Portland group appreciated the closer proximity and easier access compared to Central Oregon, the current hub for aMTB. The Central Oregon group liked the idea of more diverse terrain nearby that would provide new experiences and the feeling of getting away without having to go too far. Both groups valued the potential for a destination that, while not too distant, offered a sense of escape and a variety of activities and services, considering it a worthwhile investment of time and money. Both groups provided insight into aMTB access needs and desires from the disabled perspective.

### SURVEY RESPONSES

The 11 participants, aged 41 to 77 and from the Portland metro and Central Oregon areas, were surveyed about their outdoor recreation experiences. The group included individuals identifying as white and as people of color, as well as a range of gender identities (she/he/they). Participants reported a variety of disabilities — primarily mobility-related, along with blindness, chronic illness, hearing loss and chronic pain.

#### DISABILITIES EXPERIENCED







Alyssa Brownlee

## KEY THEMES AND DIRECT EXPERIENCES

**Safety & Inclusivity:** Perceptions of safety varied, with concerns raised about personal safety due to race, gender and lack of support. Privilege was noted as a factor affecting safety perceptions.

- "I fear for my personal safety [as a person of color]."
- "As a woman, I don't always feel comfortable going out alone ... I can't find the right information online to know if I can use [the area] safely as a power wheelchair user."

**Transportation & Assistance:** Most participants needed personal vehicles to transport equipment. Roughly half required loading/unloading assistance, and those without equipment still needed support.

- "I use my truck ... I do bring at least one person for assistance."
- "I do not ... have a bike to load and unload, [but I need assistance]."

**Trail Preferences & Equipment:** Trail preferences ranged widely (single-track, flowy, no elevation gain), catering to various equipment (aMTBs, e-assist). Rental options for adaptive bikes were highly desired.

- "I would be interested in something ... more flowy and not super technical."
- "I would love to be able to rent an accessible mountain bike and would probably need one that is e-assist."

**Experiences & Barriers:** Positive experiences came from camaraderie, challenge and accessibility. Negative experiences involved unwelcoming interactions, physical barriers and a lack of accessible information or services.

- "Best attributes are ... accessible bathrooms, accessible lodging and a website that provides detailed information. ... Worst experience: a location not having any of those."
- "Worst experiences generally have to do with interactions with sh\*\*ty people and being challenged for my right to participate."

The complete reports are available in the *Appendix*.





# COMMUNITY ENGAGEMENT





## Inclusive Stakeholder Mapping & Outreach Strategy

Prioritizing inclusivity and accessibility, Empowering Access guided the project steering committee to proactively engage underserved local communities (including adaptive athletes, BIPOC, LGBTQIA+, women, economically disadvantaged groups and disability groups). Through intentional and transparent outreach, the committee focused on building authentic relationships, acknowledging past exclusions and emphasizing shared goals. Communication prioritized empathy, connection and trust over immediate requests, ensuring a safe and welcoming engagement process. Communities were also invited to the in-person community gathering.

## Community Gathering and Survey

A public gathering was held in Blue River on April 9, 2025, inviting residents to learn about the project, participate in a Q&A session, and provide feedback via verbal comments and an online survey. The 25 collected survey responses revealed strong community support:

- **Support:** 91% of respondents were very supportive, while only 4% were very unsupportive.
- **Access:** 100% agreed the project would enhance local recreation access.
- **Sentiment:** While overall sentiment was overwhelmingly positive, some residents expressed concern about environmental impact and negative effects of increased visitation..

### Quotes Illustrating Support

- "I am a third-generation McKenzie River resident and intimately familiar with every ridge ... and this would be a good use of the area."
- "Excellent opportunity for diversification of recreational activities and associated economic benefits."
- "We already have a lot of visitors ... This project would spread them out and take pressure off."

### Quotes Reflecting Concerns

- "[It's] always a concern to bring additional visitors to a rural community ... needs to be monitored and [have] proper oversight/maintenance."
- "My concerns with additional visitors [are] congestion of the highways and environmental impacts."





Dylan VanWeelden

## PRIORITIES

The top three community-prioritized features were ADA compliance and accessibility, public restrooms, and sufficient public parking. These priorities emphasize inclusivity, convenience and accessibility for all participants and spectators. When asked to elaborate, the community identified the following themes:

- **Economic & Community Growth:** Support for using trails to revitalize local businesses post-fire, attract tourism and build community pride.
- **Trail Design Diversity:** Desire for trails of varying difficulty (beginner to expert), including features such as jump parks and ADA access, with clear signage.
- **Network Connectivity:** Interest in linking trails across regions, integrating historical routes and providing directional/shuttle trails.
- **Site & Environment:** Concerns about sensitive areas; suggestions for alternative locations with ecological sustainability and minimal natural impact.
- **Events & Experience:** Enthusiasm for races, events, and quality trails to serve as a regional recreation hub.
- **Fees & Equity:** Mixed opinions on user fees, highlighting the need for transparency and concern for accessibility.
- **Volunteer & Local Input:** Strong offers of volunteer support and a desire for local knowledge to shape the project.
- **Preservation & Identity:** A minority view valuing the area's remoteness, advocating balanced growth to maintain community identity.

The complete survey results are available in the *Appendix*.





# OPPORTUNITIES AND CONSTRAINTS



## Opportunities and Constraints

Assessing the feasibility of the Deathball Mountain Bike Trail System project requires a thorough evaluation of potential opportunities and constraints. These were identified through collaboration with the steering committee, site visits and community engagement efforts, including a public gathering and online surveys.

### OPPORTUNITIES

1. **Premier Trail System:** Develop a welcoming, 35- to 45-mile destination-quality mountain bike trail system that aligns with established criteria.<sup>1</sup> This system should:
  - a. Appeal to a broad range of riders, including families, adaptive mountain bikers, electric mountain bikers, casual riders, and those historically excluded from outdoor recreation.<sup>2</sup>
  - b. Alleviate overcrowding on existing trails, particularly the McKenzie River Trail.
  - c. Prioritize accessibility and inclusion through early and continuous engagement with equity-focused advisory groups and consultants with lived experience.
  - d. Offer accessible, close-to-home riding for residents, with connections to local roads and public transit from the Eugene metro area.
  - e. Benefit from the support of leadership at the McKenzie River Ranger District and a dedicated team of advocates.
2. **Local Economic Enhancement:** Diversify and bolster the local recreation tourism economy by providing enhanced infrastructure and attracting a wider range of visitors.
3. **Regional Destination Preference:** A 2025 report indicated that potential visitors consistently favored Oregon over competitor destinations (WA, ID, NV, CA) for various biking activities, with 37.2% citing Oregon as the best for beginner/intermediate mountain biking.<sup>3</sup>
4. **Strong Community Support:** The 2025 Community Engagement Survey revealed that 91% of respondents strongly supported the project, with only 4% strongly unsupportive.<sup>4</sup>
5. **Inclusive Access:** Creating an adaptive and inclusive destination accessible from the I-5 corridor with transit options will welcome disabled users and historically excluded communities from major metro areas. Overcoming mountain pass barriers was identified as a key attraction by the Portland metro disability focus group, while proximity was valued by the Central Oregon group.<sup>5</sup>
6. **Catalyze Accessibility:** Foster an area-wide commitment to inclusive recreation by investing in accessibility assessments and infrastructure improvements for lodging, transportation, public facilities and marketing.
7. **Health and Wellness Benefits:** Provide physical and mental health benefits to residents and visitors. Research shows that spending time outdoors reduces stress, enhances well-being and encourages physical activity, with significant cost savings in the healthcare system.<sup>6</sup>





Sumio Koizumi.jpg

## CONSTRAINTS

1. **Perceived Competition and Prior Experiences:** A 2025 report found that "been there, done that" sentiment (32.7%) and preference for other destinations (31.8%) are primary barriers. Safety concerns deterred younger travelers (24.1%), while expense was a significant issue for travelers with disabilities (25.3%).<sup>3</sup>
2. **Limited Accessibility Infrastructure:** Inadequate accessibility information and infrastructure exist throughout the McKenzie River area, affecting lodging, transportation, public facilities and travel planning for visitors with disabilities.
3. **NEPA Review:** Development on U.S. national forestland requires a rigorous National Environmental Policy Act review, potentially involving a multi-year assessment of impacts. Site relocation may be necessary if proposed areas are deemed unsuitable.
4. **Terrain Suitability:** The terrain in the project area may not be ideal for desired trail experiences, potentially being too steep or too flat.
5. **Ranger District Staffing:** Limited staffing at the McKenzie River Ranger District could hinder project planning, design, permitting and management, especially given other priorities such as wildfire management.
6. **Wildfire Impacts:** Areas affected by wildfire may present challenges for trail development and maintenance, including erosion, weed growth and tree fall, leading to added costs and potential site exclusions.
7. **Public Transit Access:** Potential trail access points are not immediately adjacent to public transit stops, requiring cyclists to ride a distance to reach staging areas.

<sup>1</sup> Destination-Quality Mountain Bike Trails Criteria and Local Evaluation (See Appendix).

<sup>2</sup> 2025 Mountain Bike Personas (See Appendix).

<sup>3</sup> Deathball Trail System Potential Visitor Profile, 2025.

<sup>4</sup> Deathball Trail System Community Engagement Survey Report, 2025.

<sup>5</sup> Disability & Inclusion Focus Group Feedback, 2025.

<sup>6</sup> Why Trails (2020 Edition), American Trails.



# RECOMMENDATIONS FOR ACCESSIBILITY & INCLUSION IN PROJECT DEVELOPMENT





The Deathball Mountain Bike Trail System offers a unique opportunity to integrate accessibility and inclusion from the start. Its location near Eugene, with readily available transportation and amenities, makes it ideal for accessible trail innovation and multi-day visits. The project can also serve as a community space and educational resource, potentially partnering with First Nations people for cultural learning, provided their leadership and boundaries are respected.

Recognizing projects often take nonlinear paths, it will be important to pull from these recommendations at the appropriate times throughout the project process. To maximize the project's effectiveness regarding accessibility and inclusion, a deliberate and comprehensive strategy should incorporate the following recommended best practices:

### Holistic Approach to Project Development

#### COMMITTEES

- Establish a steering committee with diverse representation for feedback and guidance in the early stages.
- Proactively engage identified communities early, prioritizing those historically and currently excluded.
- Form a separate, specialized accessibility and inclusion advisory committee.
- Engage an accessibility contractor to establish and engage the advisory group.
- Provide compensation for any historically or currently underserved or under-resourced communities asked to be involved.

#### REQUEST FOR PROPOSAL

- In the hiring/RFP process for experts and designers, specifically require a team member or consultant with lived experience of disability.
- Integrating this perspective from the beginning of a project prevents oversights and leverages unique insights, ensuring the built environment reflects a commitment to accessibility.

#### CONSULTANTS

- Seek professionals with:
  - demonstrable expertise in accessibility assessment, universal design and inclusive planning.
  - technical expertise, especially knowledge of project-specific guidelines and regulations, ADA standards and assistive technologies.
  - both lived experience of disability and technical proficiency, whenever possible.
- When hiring, adopt an inclusive approach — from “for” to “with” people with disabilities — to ensure user-centered solutions.
- Keep in mind that community engagement is vital for diverse perspectives, but not for complex technical tasks.

#### SITE SELECTION

- Consult an accessibility expert to evaluate sites beyond ADA code compliance.
- The accessibility consultant should assess physical, sensory, cognitive and wayfinding aspects, and should recommend inclusive, user-centered solutions.

Continued on next page



### MAINTENANCE

- After the completion of an accessible design, maintenance will be crucial due to the dynamic nature of outdoor environments in order to maintain access.
- A maintenance plan developed during the design phase should identify at-risk accessible features and establish a schedule for regular checks and upkeep.
- Train maintenance staff on the importance and proper care of these features, potentially through accessibility consultant-led workshops. This is essential for long-term accessibility.

### DATA COLLECTION

- Invest in comprehensive data collection on site accessibility and usage.
- Systematically gather data on how individuals with varying abilities use site features.
- Develop a rubric cataloging existing accessible site features, considering physical, sensory and cognitive accessibility.
- Create a practical checklist for regular accessibility evaluations.
- Schedule revisits to maintain standards and promptly address issues.
- Use data to track progress and inform future inclusive development.

### COMMUNITY FEEDBACK/INPUT

- Actively engage the disability community throughout the design process.
- Conduct regular feedback sessions tied to data collection milestones.
- Seek diverse perspectives.
- Provide accessible formats for information and feedback.
- Document how feedback influences design iterations.
- Prioritize a user-centered product design approach.

### MARKETING

- Develop a collaborative, intentional and inclusive marketing plan with community input and feedback from consultants with lived experience of disability.
- Craft welcoming invitations using appropriate language and imagery.
- Reach out to specific communities proactively through relevant channels to provide comprehensive accessibility information.
- Cultivate inclusion by listening actively, providing support, and building trust through ongoing dialogue and responsiveness.





Dan Ruffoni

## User Profiles and Equipment Specifications

When designing outdoor recreation experiences with accessibility at the forefront, it is important to develop a lens for access needs. One way to do this is to examine user groups, user profiles and various adaptive recreational equipment. General categories to evaluate include:

- Types of mobility devices
- Demographics (user age, race, ability, gender identity)
- Preferences (independence, desired level of challenge, safety, exposure, community)
- Facilities and features to support access (restrooms, parking, staging areas, information kiosks, website info, directional signage)

## Adaptive Mountain Bike Specifications

Adaptive riders' bike specifications are as diverse as their needs, reflecting the variety of trails they seek. Integrating adaptive bikes into existing trails presents challenges due to this wide range of bike specifications, as well as prevalent stereotypes and lack of knowledge about adaptive bikes. In the Appendix, find detailed adaptive mountain bike specifications, common issues and regulations supporting their access.

### PRECEDENT EXAMPLES

Prior to designing and developing new outdoor recreation infrastructure and programs, researching existing projects and evaluating their outcomes is crucial. This process helps determine effective design elements and infrastructure investments while highlighting areas where innovative solutions may be necessary.

See the *Appendix* for two precedent examples of adaptive world-class riding destinations that offer key opportunities for evaluation and learning: Bolton, Vermont and Whistler, British Columbia.



Dan Ruffoni



# RECOMMENDED ACTION PLAN FOR PHASE II





Dylan VanWeelden

## Recommended Action Plan for Phase II

The program participant for the Deathball Mountain Bike Trail System project has successfully completed all steps required for the Phase I feasibility assessment and is invited to submit an application for Phase II funding.

Based on the required steps completed in partnership with the project steering committee as part of Phase I, Travel Oregon and the consultant team recommend the following action plan to effectively move the project forward with Phase II funds (to be executed by December 31, 2026).

Additionally, over Phase II, Travel Oregon will provide up to 15 hours of disability and inclusion advising and technical assistance from the consultant, Empowering Access, in key areas of the action plan to support the project in achieving its goals.



**RECOMMENDED ACTION PLAN FOR PHASE II**

#	ACTION	RESPONSIBLE PARTY	TIMELINE	PHASE II BUDGET
1	Identify and retain a project management consultant to oversee the action plan through 2026.	<b>McKenzie Trail Volunteers</b> with input from Recreation Ready Phase I project steering committee, Travel Oregon Technical Assistance (TOTA) and Empowering Access	Sept. 2025	\$20,000
2	Identify and convene Phase II project steering committee (SC) to provide technical support and advise on the action plan as needed. The Phase II SC will likely consist of most of the members of the Phase I SC, but with substitutions and additions as needed to achieve necessary support of the Phase II process and feedback on the trail design as noted below. The Phase II SC will be active for the duration of the action plan.  <b>Recommended:</b> Add a Tribal representative and community member from the stakeholder mapping exercise. Provide a \$500 stipend to each for their time.	<b>McKenzie Trail Volunteers</b> and retained project management consultant	Sept. 2025 - Dec. 2026	\$1,000
3	Engage the following entities to provide technical support and advise the action plan process as needed: <ul style="list-style-type: none"><li>• Lane County Transit</li><li>• Oregon Department of Transportation</li><li>• Adjacent private landowners</li></ul>	<b>McKenzie Trail Volunteers</b> and retained project management consultant	Sept. 2025 - Dec. 2026	
4	Develop and issue a request for qualifications for a mountain bike trail design consultant with experience developing destination-quality mountain bike trails.  <b>Recommended:</b> Include staff or a subconsultant with adaptive mountain bike trail expertise in accordance with this feasibility report.  Include an opportunity for community engagement to solicit feedback on design.	<b>Project management consultant</b> with input from SC, TOTA and Empowering Access	Oct. - Nov. 2025	
5	Retain selected consultants/team to develop a trail concept plan and design in accordance with this feasibility report.	<b>Project management consultant</b> with input from SC and Empowering Access	Nov. 2025 - March 2026	\$50,000
6	Identify and retain environmental engineering firm to perform phase-one NEPA analysis.	<b>Project management consultant</b> with input from SC	Jan. - June 2026	\$29,000
7	Develop and initiate a fundraising plan for: <ul style="list-style-type: none"><li>• Remaining NEPA review and permitting</li><li>• Refined trail design and flagging</li><li>• Design and construction documents for infrastructure (roads, parking areas, restrooms, trailheads, signs, etc.)</li><li>• Destination-wide accessibility assessment (approx. \$100,000)</li><li>• Trail construction</li></ul>	<b>McKenzie Trail Volunteers</b> with support of SC and project management consultant	Jan. 2026 - ongoing	
<b>TOTAL PHASE II FUNDING</b>				<b>\$100,000</b>



# APPENDIX







Dan Ruffoni

## Research

[Deathball Trail System Background Report, 2025](#)

[Deathball Trail System Potential Visitor Profile, 2025](#)

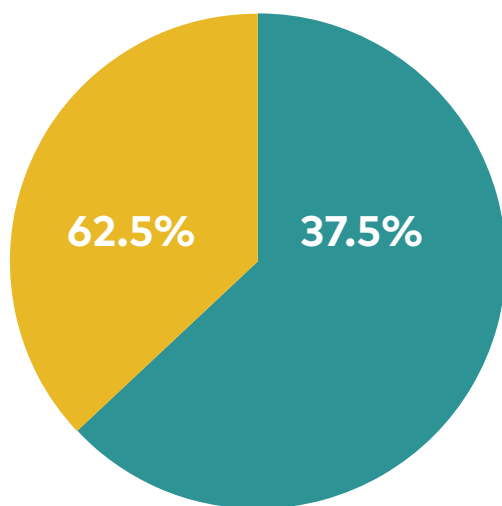
[Deathball Trail System Community Engagement Survey Report, 2025](#)

## Disability & Inclusion Focus Group Survey

### SURVEY RESULTS

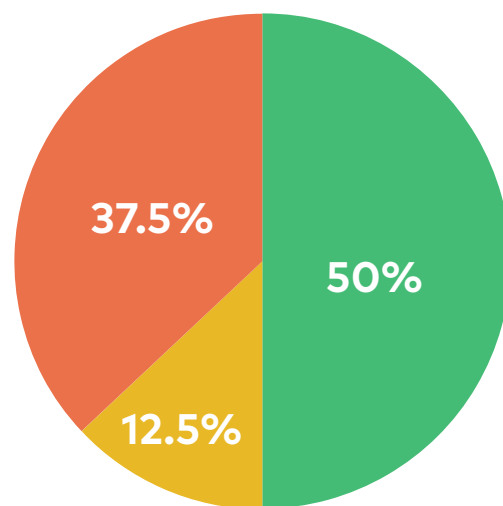
#### Race?

8 responses



#### Gender Identity?

8 responses





## 1. Demographics (disability, age, location, race, gender)

- Respondents represented ages between 41-77 from the Portland metro and Central Oregon regions, identified as white and POC, and included a spectrum of gender identities (she/he/they). Most identified as experiencing mobility disabilities, along with blindness, chronic illness, hearing loss and chronic pain.

## 2. What kind of disability(s) do you have?

- Neurodivergence, chronic illness
- T-10 paraplegic
- Physical mobility impairment
- Physical disability
- Manual wheelchair user
- Paraplegic
- Congenital blindness, hearing loss (aids in both ears), asthma, arthritis through body
- Paraplegic

## 3. Do you feel safe in the outdoors? Please explain.

- Yes.
- I feel like I do, but when I really think about it, I'm not. I recreate solo often and will need to share maps and locations with friends because trailhead signage is poor and there's often poor cell service. More than anything, as a person of color, I fear for my personal safety.
- I do feel safe in the outdoors. I may have a disability, but I am also white and male, which affords me a lot of privilege in the outdoors. I also grew up in the outdoors, so I am very comfortable in those spaces.
- As a woman, I don't always feel comfortable going out alone. I'm always looking for a new place to explore nature, but many times I can't find the right information online or when calling park officials to know if I can use [the area] safely as a power wheelchair user.

- Yes, I feel safe.
- Yes, when I have adequate support with information, cane and, sometimes, a walker.
- Yes and no. My ability to feel safe outdoors depends on a lot of factors. I feel safe outdoors during the day, when I am in an environment that I know I will be able to traverse unassisted. There are certain grades or terrains that I would not try on my own, because if I fall out of my chair and I'm alone, I would be stuck. At night with a headlamp I feel somewhat safe, but as a woman who cannot run, I would probably opt for bringing a friend.

## 4. How do you transport yourself and your equipment? Do you bring assistance?

- My own vehicle or carpool. I do not bring assistance.
- I use my truck to transport myself and equipment. I do bring at least one person for assistance, to help with getting my bike in/ out and on-the-trail assistance if necessary.
- I don't ride any kind of bike.
- I do not bring assistance.
- With my sprinter van, I drive myself and typically ride solo or with a friend.
- I am able to drive. But if I had to transport any equipment such as an adaptive mountain bike, I would need assistance as my vehicle isn't equipped for it.
- I have no mountain biking experience and don't desire it.
- I have a car that I drive, and I usually load up my stuff on my own or with help from family/ friends. Same on the other end — either unload myself, or ask for help from others. I do not, however, have a bike to load and unload.

## 5. What kind of trails/riding are you interested in and why? What type of equipment do you use?

- Single-track, double-track and both of those built to accommodate a range of adaptive MTB equipment.



- I use a Lasher aMTB. In that area, I would be interested in something that is a little more flowy and not super technical. With the big trees and the river, I feel like the vibe lends itself to something more flowy.
- Same as above. ("I don't ride any kind of bike.")
- Trails for mountain biking. I would need an adaptive bike.
- All MTB trails. I use an aMTB/off-road handcycle with e-assist (Bowhead RX and Reactive Adaptations Hammerhead).
- Any trails that don't have too much elevation, because I don't have any equipment with e-assist.
- As a congenital pedestrian I am always concerned about the safety of walkers.
- I would love to get involved in mountain biking, but have only done this one time last spring with the mountain bike demo in Portland. I would love to be able to rent an accessible mountain bike and would probably need one that is e-assist (not really sure if that is the proper term). I do love getting out on the trails just in my wheelchair, and for this I would be looking for probably something that is not very steep, and very compact or even paved. I do have a smart drive that I could use in the right conditions.

## 6. What are the attributes of the best and worst experiences you've had outdoors?

- In MTB, it has the tendency for cliques. There's also a lot of toxic male behavior.
- I think the best experiences for me are some sort of combo of camaraderie, challenge and accomplishment. Going into a space with some level of understanding of what to expect helps as it eases the anxiety. Worst experiences generally have to do with interactions with shi\*\*y people and being challenged for my right to participate.
- I'm answering this from a hiking — not bike-riding — experience, in case it can apply to any other outdoor recreational experience. One of the best is discovering a hidden gem of a park with good parking, an accessible access ramp to a bark-chipped playground, and with paved and natural surface trails leading to many other wonderful features and amenities along the trail. These included a fishing platform with accessible features for people who use mobility features, benches and wheelchair companion seating overlooking the river, a low but raised fire pit, picnic tables, and a fascinating story told along the trail through tactile and interpretive displays. The worst: when I'd driven a long distance to a desirable location and couldn't use the trails or features because of a curb, step or lack of parking that wasn't referenced in any web information.
- Best attributes are when the location has accessible bathrooms, accessible lodging and a website that provides detailed information about accessibility and accommodations. Worst experience: a location not having any of those.
- Impassable barrier — e.g., too narrow bridge, tree gap, trail with dangerous exposure, especially off-chamber. Gates.
- Best outdoor experience is camping or being out on the water.
- I avoid being around bikers. They are quiet, fast and frequently out of control.
- The best experiences I've had outdoors have been when I could do things on my own with minimal help, when I was able to get close to things (big trees, waterfalls, the ocean, stars, plants, see and hear animals). The worst experiences have been when, with a bit more intention, things could have been accessible but were not, or only a very small portion was. Other things that have felt really bad are getting to a place that was supposed to have accessible bathrooms only to not be able to close the stall door (this is true of Silver Falls in places, and some other state parks). And other experiences where people are offering accessible opportunities, but aren't really aware of what kind of equipment might be essential for wheelchair users to feel safe doing a particular activity.



## Mountain Bike Personas and Trails Criteria

### Mountain Bike Personas, 2025

### Destination-Quality Mountain Bike Trails Criteria and Local Evaluation, 2025

## Adaptive Mountain Bike Specifications

### ABILITIES TO CONSIDER (NON-EXHAUSTIVE)

- **Visual Disabilities:** Blindness (complete loss of sight) and low vision (reduced visual acuity not fully corrected by lenses) impacting navigation and interaction with visual information.
- **Auditory Disabilities:** Deafness (profound hearing loss) and hard of hearing (varying degrees of hearing impairment) affecting communication and perception of auditory signals.
- **Neurological Disabilities:** Autism Spectrum Disorder (sensory sensitivities and overstimulation) and Traumatic Brain Injury (balance, coordination and safety awareness issues impacting physical movement).
- **Mobility Disabilities:** Limitations in physical movement affecting the ability to walk, climb stairs or manipulate objects.



### DIMENSION RANGE

- Adaptive bikes are heavy and bulky, with poor turning radius, making transport difficult and requiring large vehicles or strong racks and physical strength. Ample staging and parking are needed for loading and unloading. Common specs:
- Wheelbase — 31" to 55"
- Overall length — 71" to 85"
- Weight — 40 lbs. to 90 lbs.
- Turn radius — around 11'



## STYLES

- Recumbent (reclined, with forward legs and hand cranks, often with suspension)
- Upright (similar to a bicycle, with hand crank propulsion and steering)
- Kneeling/prone (low to the ground, with torso support for stability)

## MANUFACTURERS (MOST COMMON)

- Lasher Sport — <https://lashersport.com/cycles/>
- ReActive Adaptations — <https://www.reactiveadaptations.com/>
- Bowhead Corp — <https://www.bowheadcorp.com/> (fully electric, no pedal option)

## COMMON CONFLICTS

A key challenge for adaptive riders on trails, beyond physical barriers, is a lack of public awareness. Riders often wrongly assume adaptive bikes with e-assist are prohibited, not understanding they are legally classified as mobility devices for accessibility. These encounters can be stressful for adaptive riders already facing daily accessibility hurdles and a scarcity of suitable trails.

- Most modern aMTBs are e-assisted or fully electric with throttle options.
- Other power-driven mobility devices (OPDMDs) are defined by the ADA as battery-, fuel- or engine-powered mobility devices for individuals with disabilities (excluding wheelchairs).
- Public entities and businesses must allow OPDMDs with reasonable modifications, unless unsafe operation can be demonstrated based on legitimate safety requirements.

## PRECEDENT EXAMPLES

### The Driving Range — Bolton, Vermont

The Singletracks website has a noteworthy article titled, [“Is this the first fully adaptive MTB trail network in the world?”](#), which delves into the adaptive trail system in Bolton. It provides ample information and details the process for developing a fully adaptive trail system. Key snapshot:

- “Work on the trail system began in 2022 and was completed in 2024. Over 200 volunteers donated over 5,000 hours of labor, plus \$270,000 was invested in professional trail builders and an expansive paved parking lot with 53 parking spots, including handicap-accessible spots. While we normally gloss over discussion of infrastructure development, the parking lot infrastructure is actually critically important to this project.”

### Whistler Mountain Bike Park — Whistler, British Columbia

Whistler’s website article, [“Whistler: A Premier Destination for Adaptive Mountain Biking,”](#) details their adaptive mountain biking system, processes and partners, and provides extensive accessibility information. As a world-class sports destination with experience developing and refining accessible facilities, Whistler is a valuable case study for research and learning. Key snapshot:

- “Kootenay Adaptive Sport Association is leading the way for adaptive trail design and marking. KASA helped review and make recommendations for the Whistler Mountain Bike Park trails. Adaptive riders were able to review and give their feedback directly to Patrol — an important piece that helps ensure authentic disability experiences are included.”



TRAVEL  OREGON