

Presented By:
Nathaniel Darling
Judd Baumann

SheboyganCountyCycling.org



EVERGREEN PARK

SCC Vision: A Wholistic Approach



For Sheboygan County to be a place where cycling is ubiquitous.

- Communities are connected through safe cycling routes and Greenways encouraging people to cycle for trips 5 miles or less. Ride-to-Ride instead of Drive-to-Ride
- Increase access to recreational opportunities so all age groups can engage in fun, healthy activities in nature
- Bolster Sheboygan's Outdoor Recreation Economy
- Renewed awareness of Human-Environment Interconnectedness

Recreational bicycling as a “gateway” to utility bicycling: The case of Charlotte, NC

Robert H. W. Boyer • Published 2 January 2018 • Geography • International Journal of Sustainable Transportation

ABSTRACT Riding a bicycle for utility purposes in US cities is rare, especially in historically automobile-dominated cities. Using data from a transportation survey administered to 406 residents of Charlotte, NC, this paper reports on the results of a logistic regression model that predicts the influence of an individual's recreational cycling frequency on the odds of that individual riding a bicycle for utility purposes on a weekly basis. The odds of an individual riding for utility purposes at least once a week increases dramatically as an individual rides more for recreation. Recreational cycling appears to offer a space in which individuals can acquire a threshold level of skills and materials necessary to ride their bike for utility purposes. Results suggest that plans to increase utility cycling in an automobile-dominated city like Charlotte ought to emphasize and fund opportunities for residents to ride recreationally, and consider how experience riding a bike in the temporally- and spatially- flexible context of recreation can encourage more individuals to ride to and from errands, school, or their place of work. [Collapse](#)

Study Shows \$7.8 Million Economic Impact of Mountain Bike Trails



A study conducted by the University of Wisconsin River Falls Research Center (UW-RFRC) and Chequamegon Area Mountain Bike Association (CAMBA) has shown that mountain bike trails brought \$7.8 million a year to Bayfield and Sawyer Counties in Northwest Wisconsin.

Building the next generation of environmental advocates

With Trek's support, NICA is expanding its influence — and having a generational impact on the environment

The National Interscholastic Cycling Association (NICA) is the governing body for middle and high school mountain biking — and they're on a mission to transform lives, revolutionize youth sports, and build the next generation of cyclists.

They're making a real and compounding difference that benefits communities and the planet. Since 2009, when NICA began with a single league in California, the organization has expanded clear across the United States and beyond. There are now 32 leagues with 962 teams in the US

serving over 38,000 student-athletes and coaches. With pilot programs in Australia and soon Canada, NICA is ready to make an impact around the world.

The success of NICA is rooted in the program's values. From the beginning, they've focused on fun, inclusivity, equity, respect, and community, with an emphasis on both camaraderie and inclusive competition. Through this approach, NICA fosters an environment where kids learn to love bikes and wellness — and this translates to a lifelong love of the sport.

**People don't need
trails,
the Land does.**

TONY BOONE



Evergreen Stewardship

SCC has partnered with the City of Sheboygan to maintain the trails over the last three years, logging over 323 hours for 2024.

Our focus is to create a more pleasant outdoor experience by:

- Reducing User Conflict
- Repairing and Building Trails and Infrastructure and Decommissioning Worn, Damaged, or Rogue/Social Trails
- Protecting Nature through designated trail routes, erosion mitigation, invasive species control, planting native trees, grasses, and forbs, educating users and volunteers on land stewardship

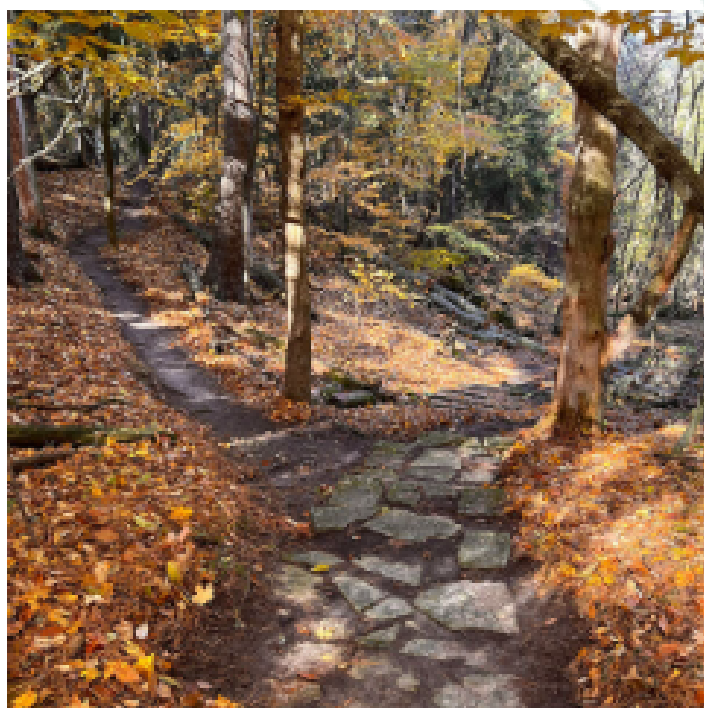






TRAIL CONDITION REPORTING

Evergreen & Quarry Parks
-Sheboygan-



Evergreen Park

● OPEN

Powered by Trailbot

Get the Android or iOS app for notifications

- **Safety** - Inform users of unsafe conditions and closures
- **Maintenance** - Trail users can report issues
- **Preservation** - Closing trails online limits trail use visitors.

Greenbush Trails
-Glenbeulah-



Greenbush

● OPEN

Powered by Trailbot

Get the Android or iOS app for notifications

Sheboygancountycycling.org

DANIEL B. EVERGREEN PARK – BIKE PARK FEASIBILITY REVIEW

EVERGREEN PARK CONCEPT PLAN

SHEBOYGAN, WISCONSIN

MAY 2021

Prepared For:



Prepared By:



2021 Concept Plan Takeaways

#1 Manage and Improve Existing Trails in Evergreen Park

#2 Develop Trails and Bike Facilities That Deliver High-Quality Trail Experiences To The Community *

#3 Provide Healthy Activities for Residents With a Focus On Attracting Youth

#4 Provide A Training Facility for NICA Teams *

#5 Re-Engage Volunteer Groups to Assist with Advocacy And Maintenance

EVERGREEN PARK TRAIL ASSESSMENT

SHEBOYGAN, WI

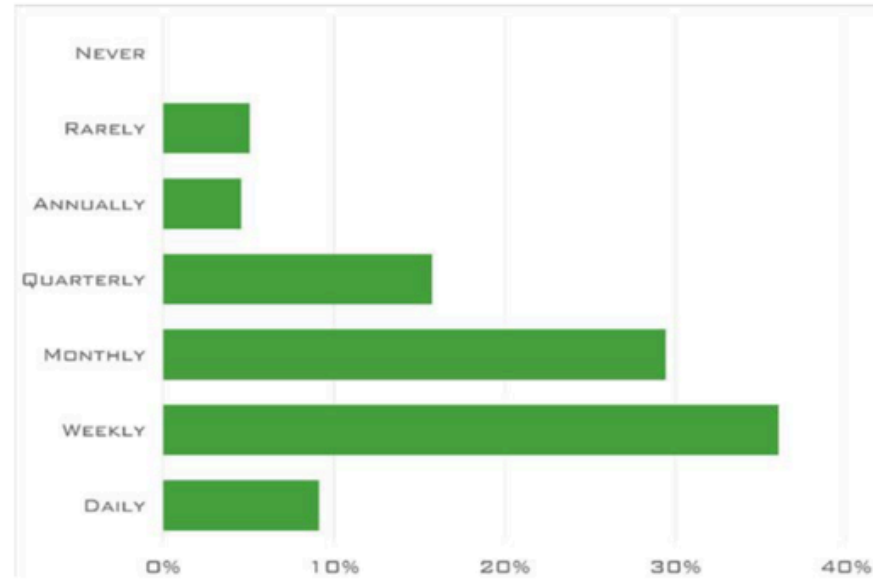
SPRING 2024



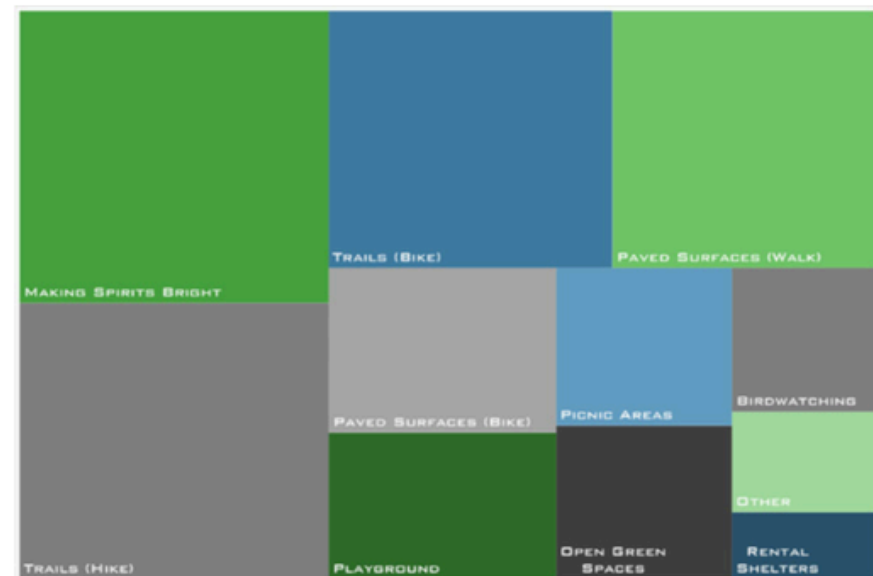
COMMUNITY SURVEY RESULTS

 197 ONLINE SURVEY RESPONSES

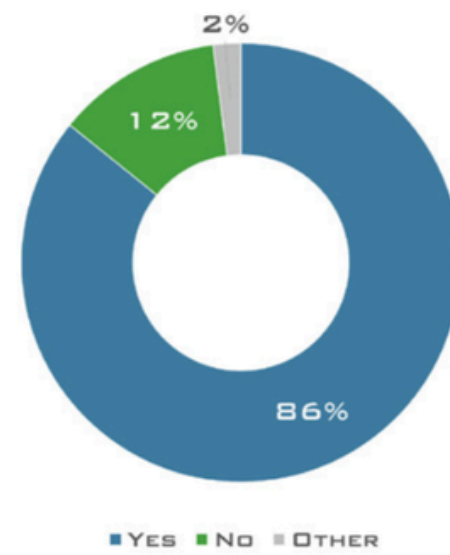
VISITATION FREQUENCY



HOW DO YOU USE THE PARK?



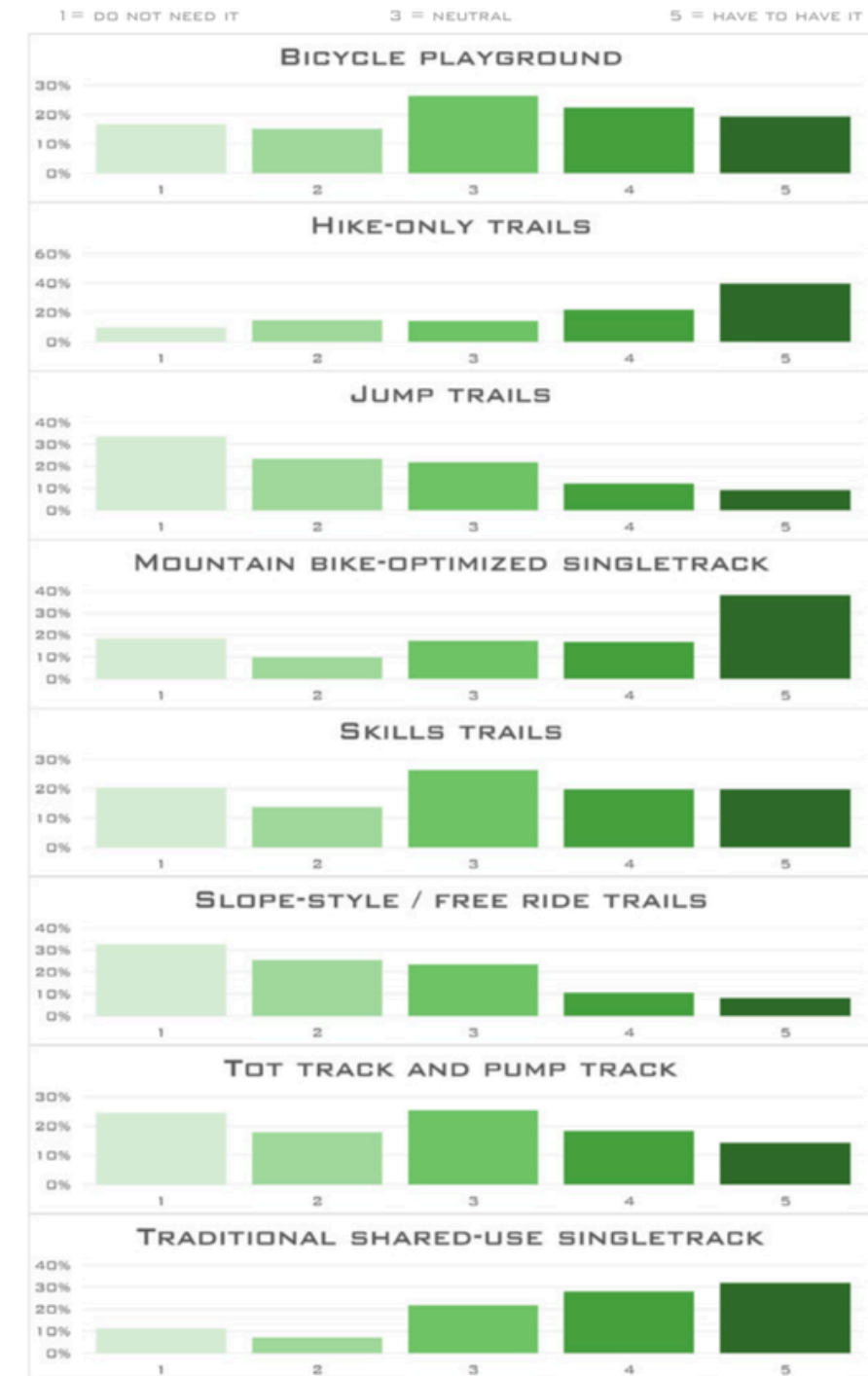
DO YOU RIDE BIKES?



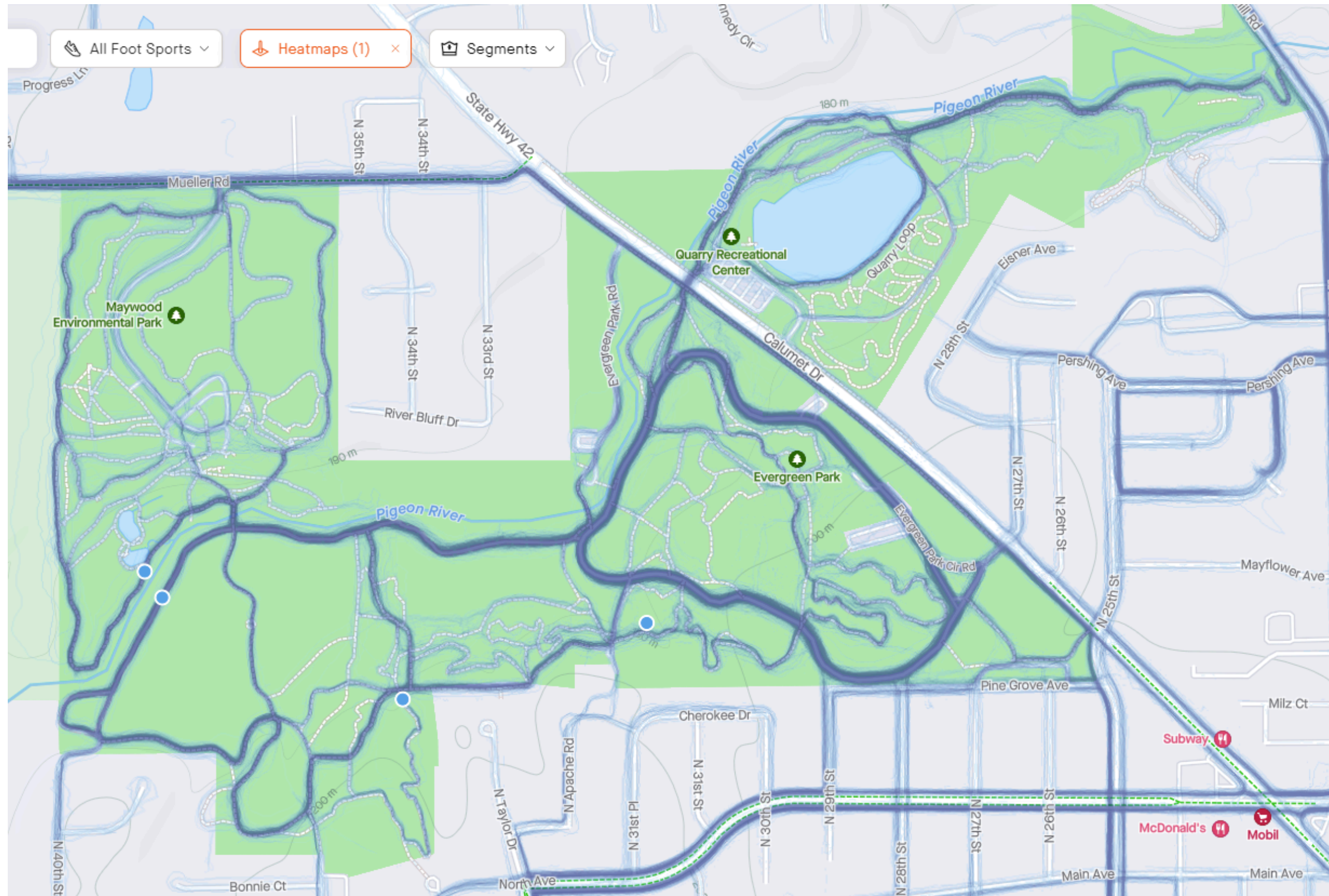
WHERE DO YOU RIDE?



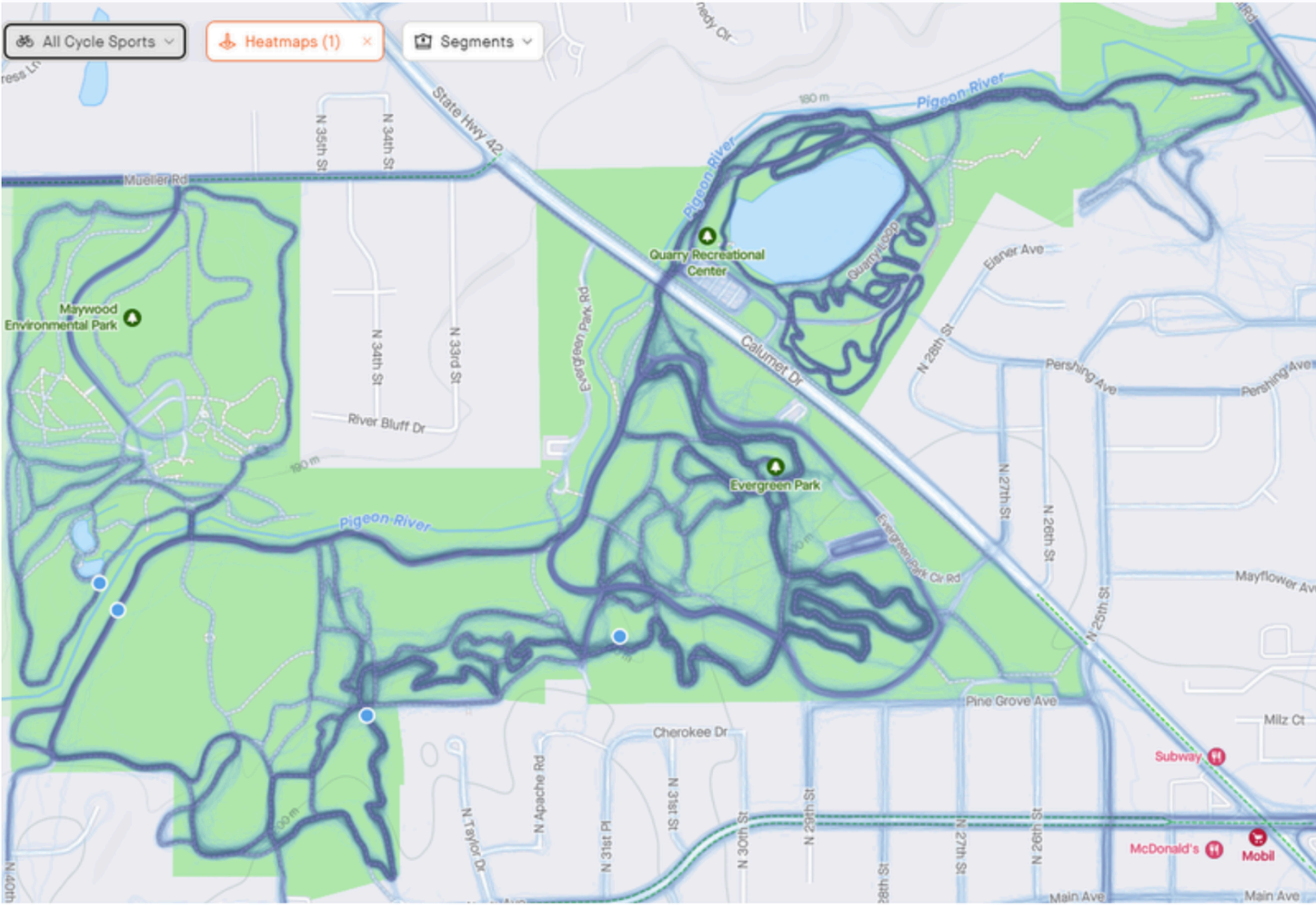
RANK TRAIL AND AMENITY TYPES

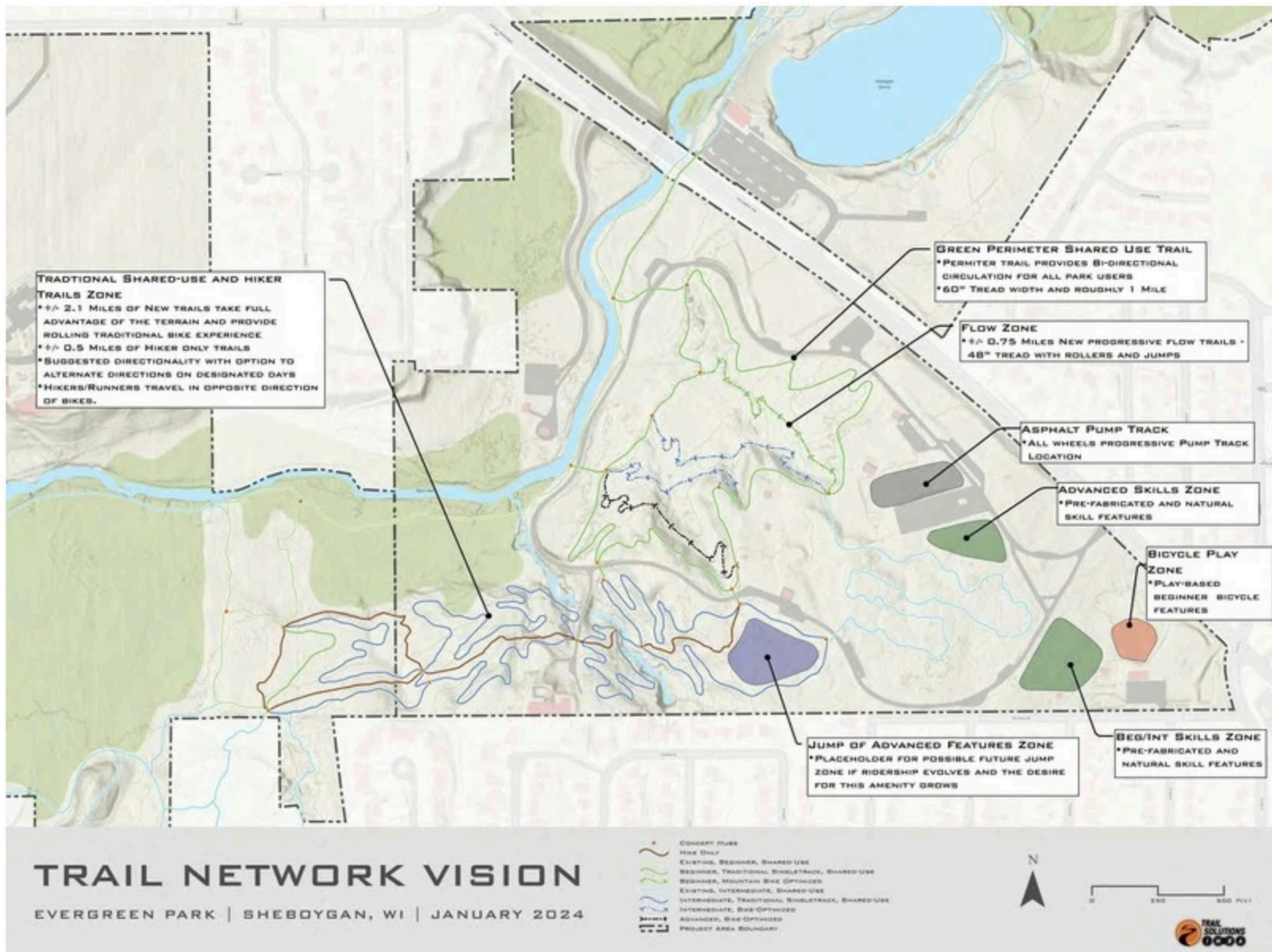


STRAVA REC. FOOT TRAFFIC

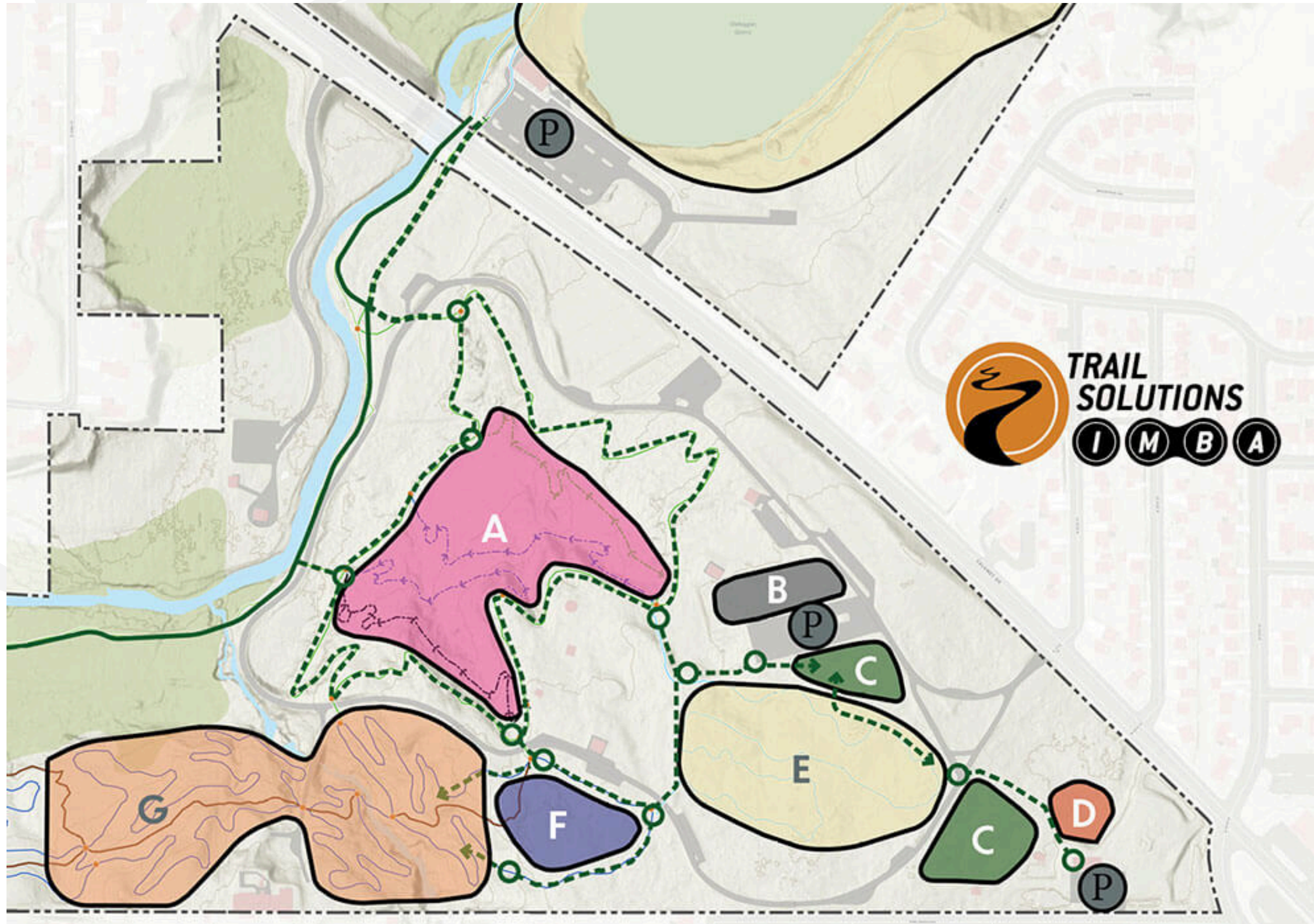


STRAVA REC. CYCLE TRAFFIC





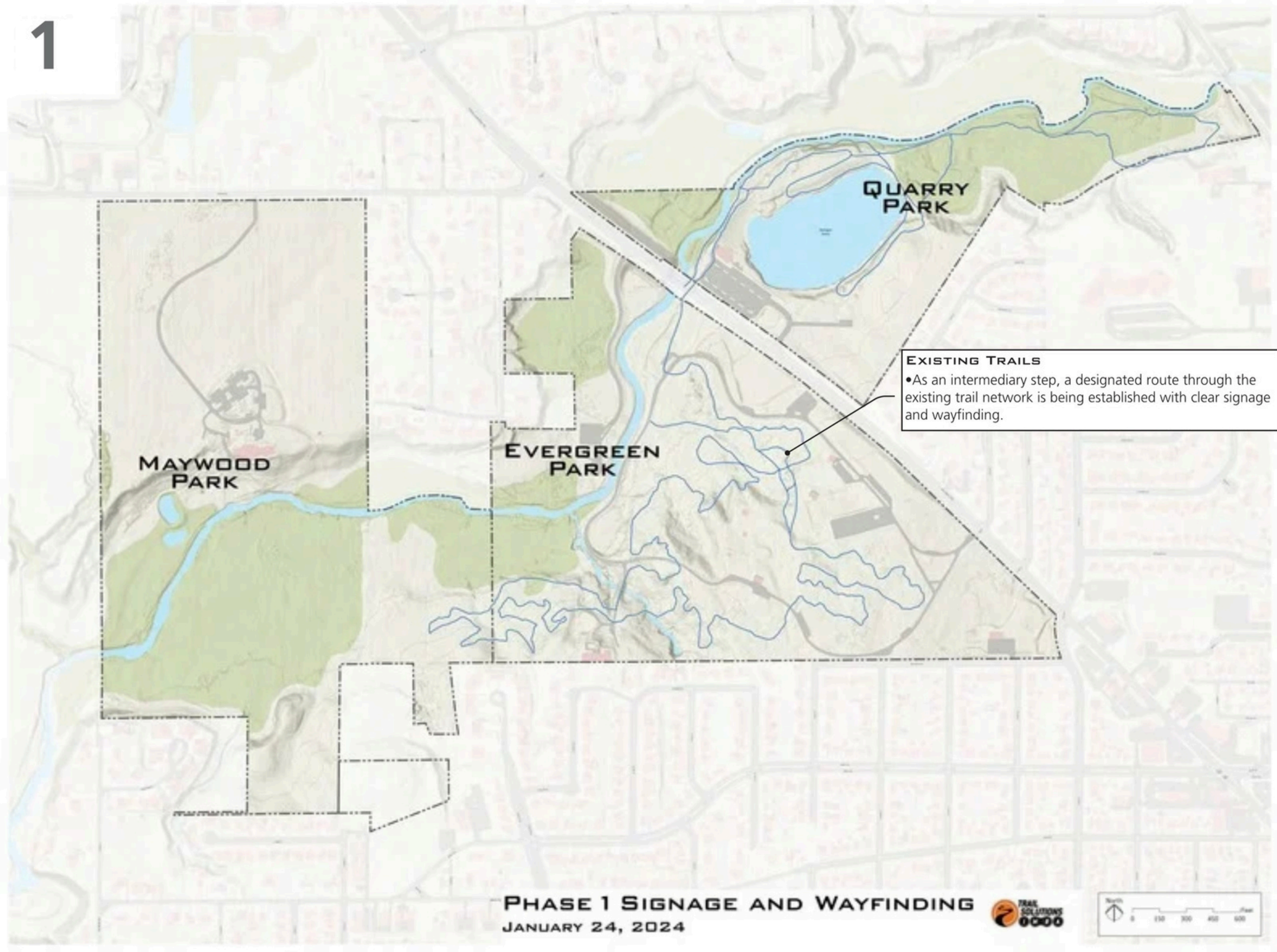
CONCEPT PLAN PROJECT AREA

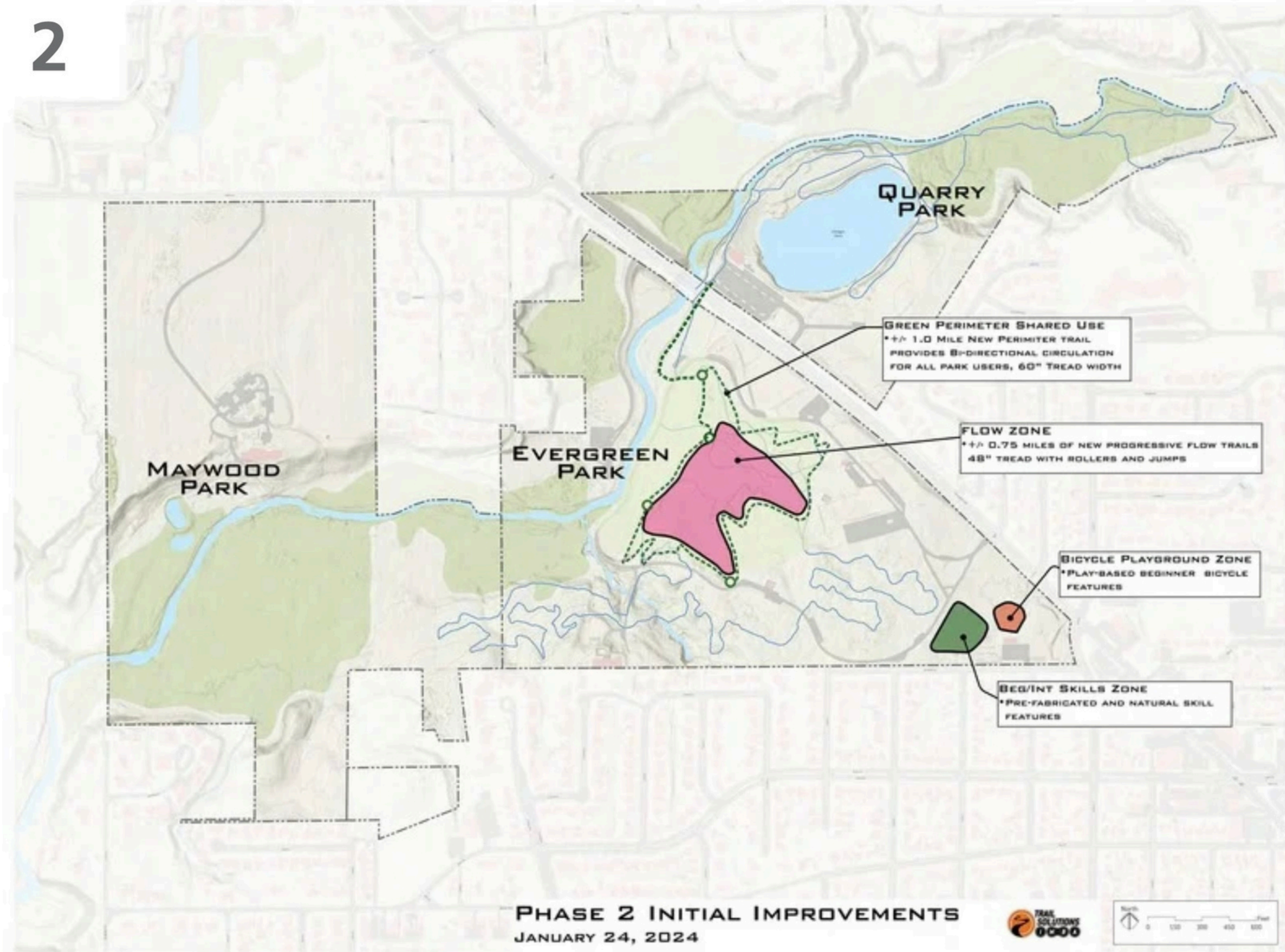


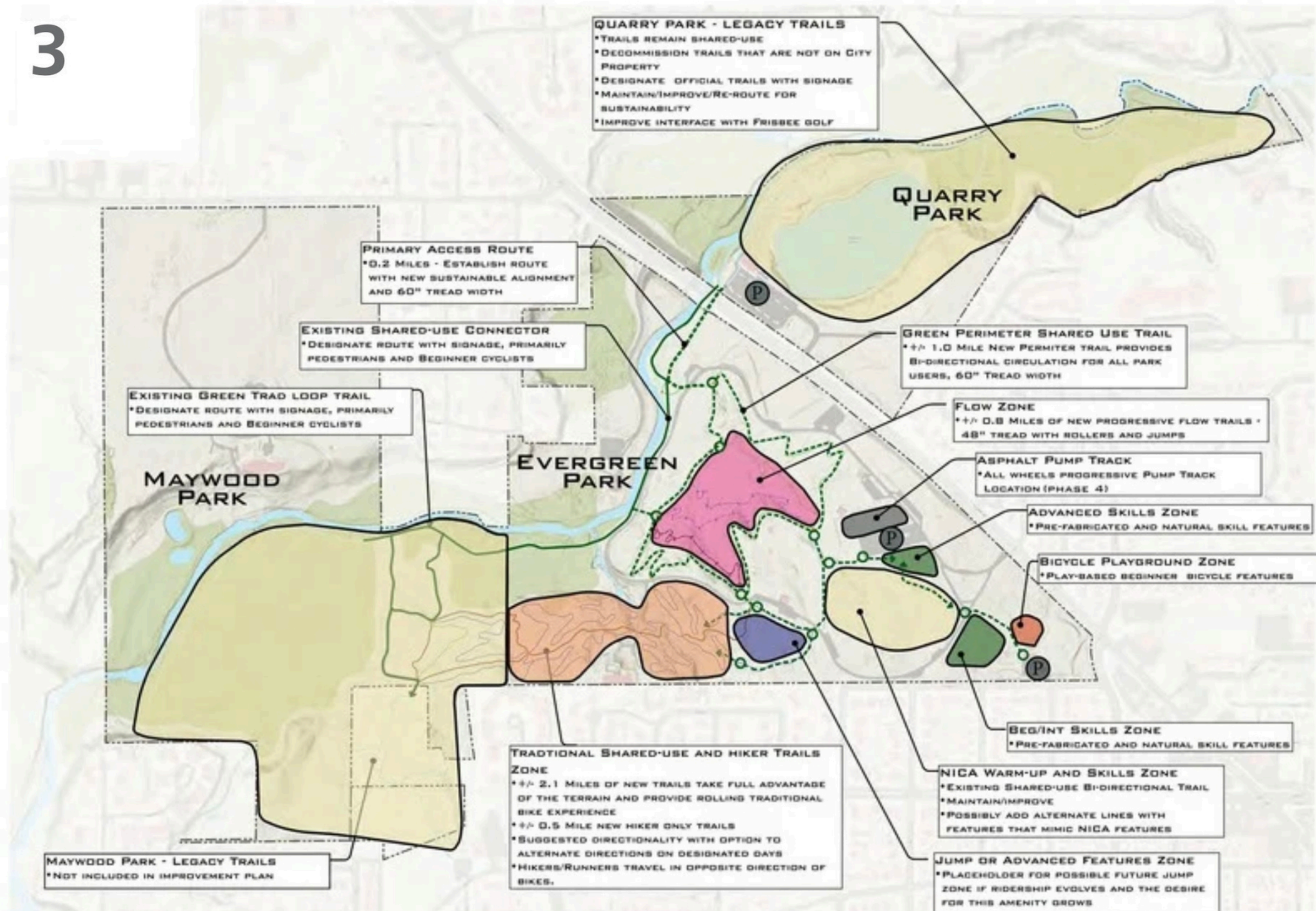
- Shared Use Perimeter Trail
- A Mountain Bike Flow Trails
- B Asphalt Cycle Pump Track
- C Mountain Bike Skill Zones
- D Youth Bicycle Playground
- E NICA* Warmup & Skills Zone
- F Jump & Advanced Features
- G Shared Use & Hiking Trails

*National Interscholastic Cycling Association Student Athletes

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MILEAGE AND FEATURES PHASE
 JANUARY 24, 2024





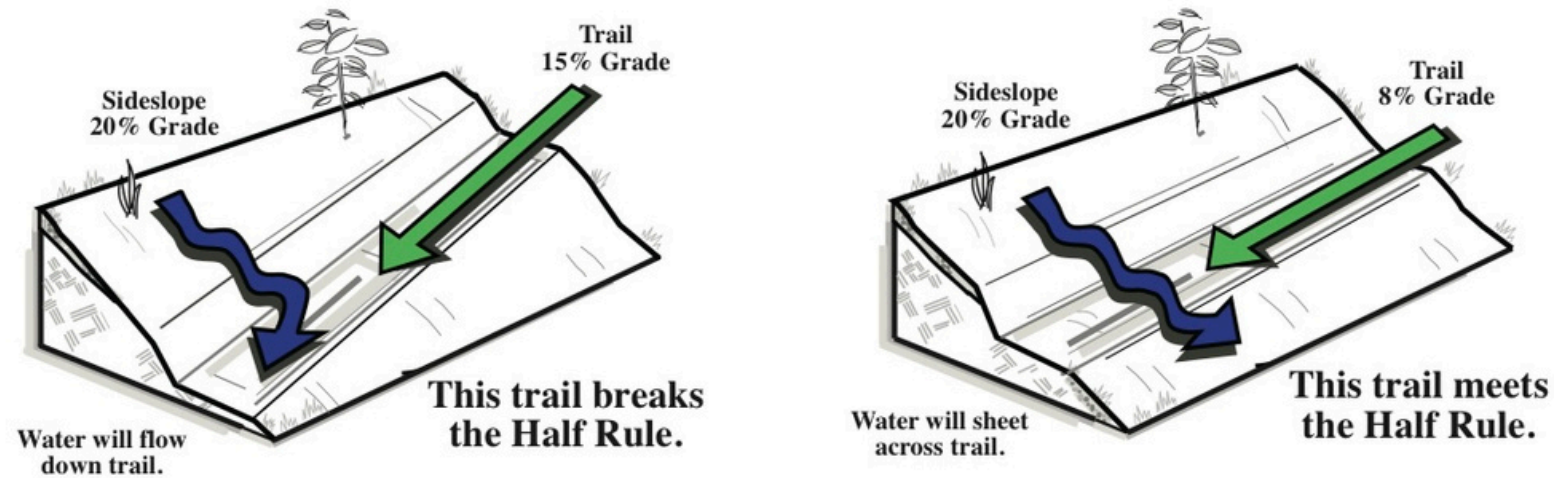






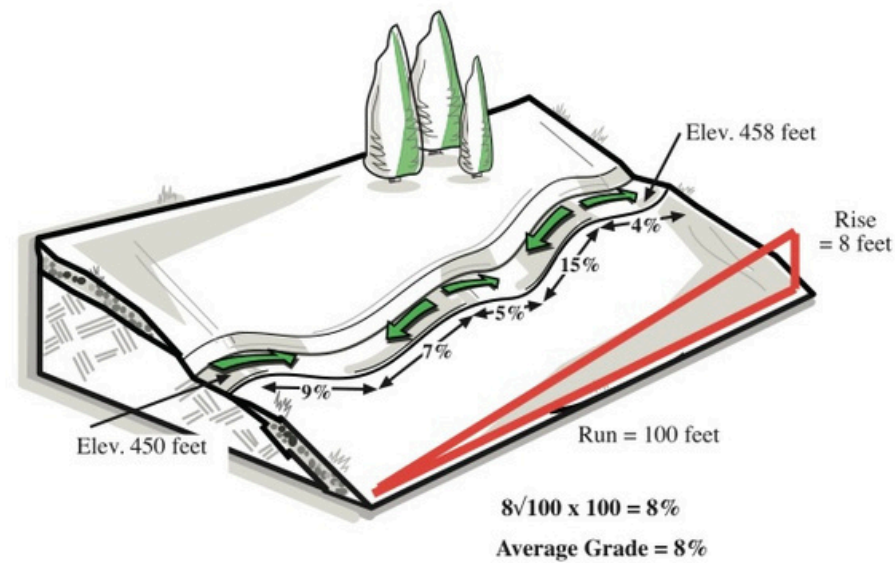
1) The Half Rule

A trail's grade should not exceed half the grade of the hillside or side slope that the trail traverses. If the trail *does* exceed half the side slope, it is considered a "fall-line trail." Water will flow down a fall-line trail rather than run across it, and therefore cause significant rutting and erosion. There are exceptions to this rule, but those types of trails require significant expertise to execute and should be left in the hands of qualified professionals.



2) Average Trail Segment Grade

Historically, the thought has been that an average grade of 10% or less minimizes erosion. This guideline has evolved and while a 10% average or less may be acceptable for an expert-level trail, the industry practices have become more specific to trail difficulty level: Beginner trails range from 0-5% average grade, intermediate trails range from 5-7% average grade, and advanced trails average 7-9% (or higher) grade. Trail segment grades are directly related to the amount of exertion required when climbing, as well as the speeds that can be reached when descending. This is extremely important for planning rider experiences, as an average 7% or higher grade on a climbing trail can be excruciating for a newer, less fit rider and potentially turn them off completely from riding again. The same can be true for having a descent that is too steep for a less-skilled rider, also potentially scaring them away from mountain biking.

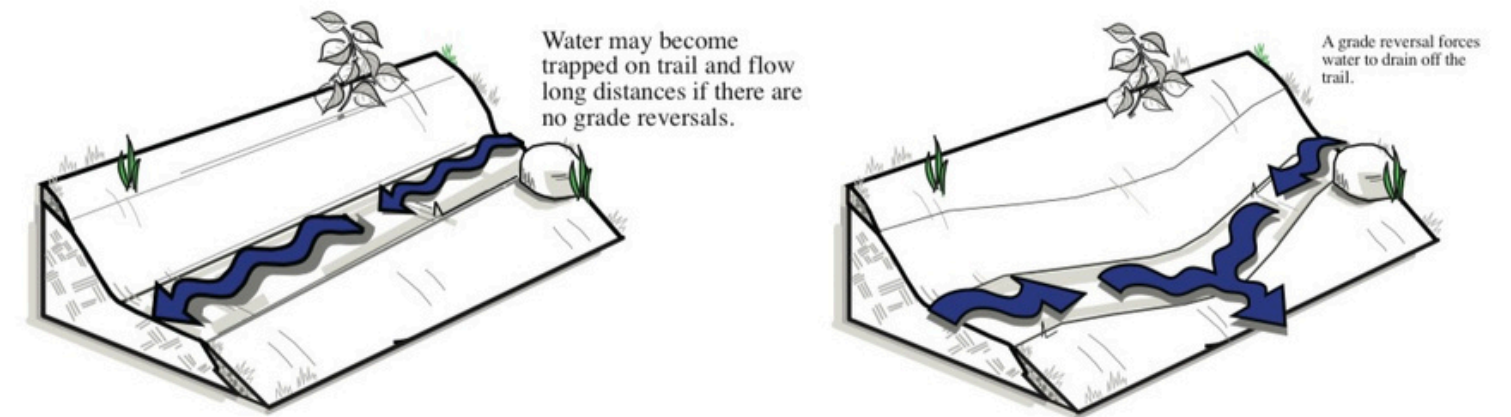


3) Maximum Sustainable Trail Grades

Maximum grade is the steepest section of trail that is more than 10 feet in length. This grade is soil composition dependent, but 15-20% maximum grade is considered typical. These grades can be exceeded if trail tread reinforcement techniques such as rock armoring are used.

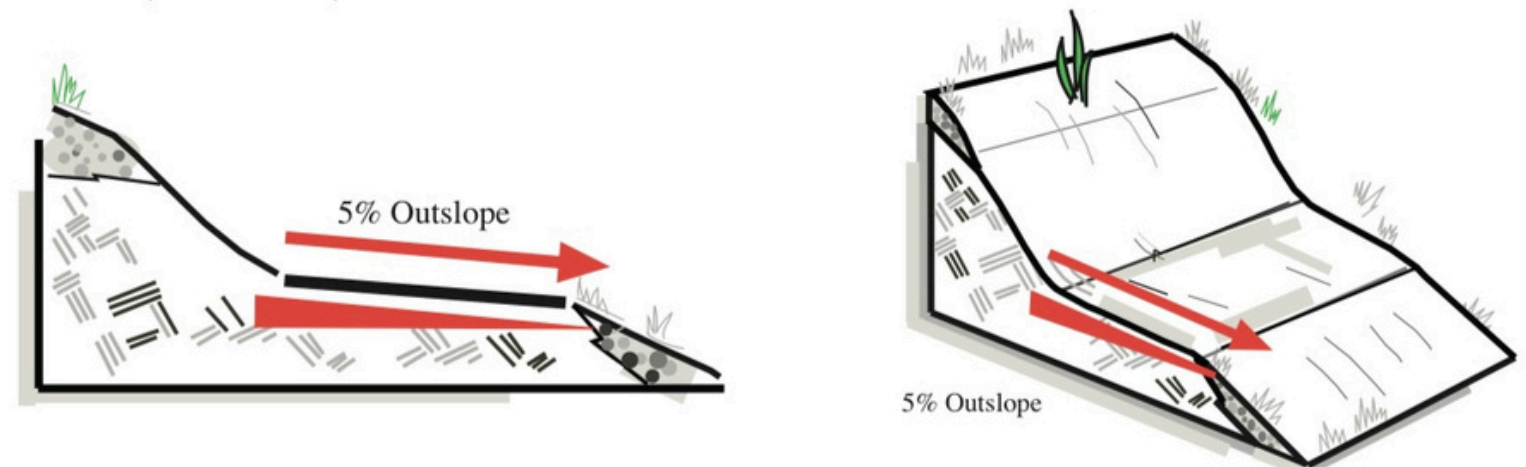
4) Grade Reversals

Grade reversals occur when a trail that is going down (negative grade) transitions into a trail that is going up (positive grade). This results in a low spot on the trail, which is commonly referred to as a drain, because this is where water exits from the trail. Frequent grade reversals every 20 to 100 feet are critical for a healthy trail system to ensure water can flow from the trail as frequently as possible. Grade reversals are also a critical element of the overall user experience.



5) Outslope

As the trail contours across a hillside, the downhill or outer edge of the tread should slope slightly down and away from the inner/high side at about a 5% slope. This tilt is called "outslope," and it encourages water to sheet across and off the trail. Modern mountain bike trail building techniques focus heavily on insloped trails to maximize fun, but still rely on outslope at drains and any part of the trail where an inslope is not required to keep the rider on the trail.



Rolling Contour Trail

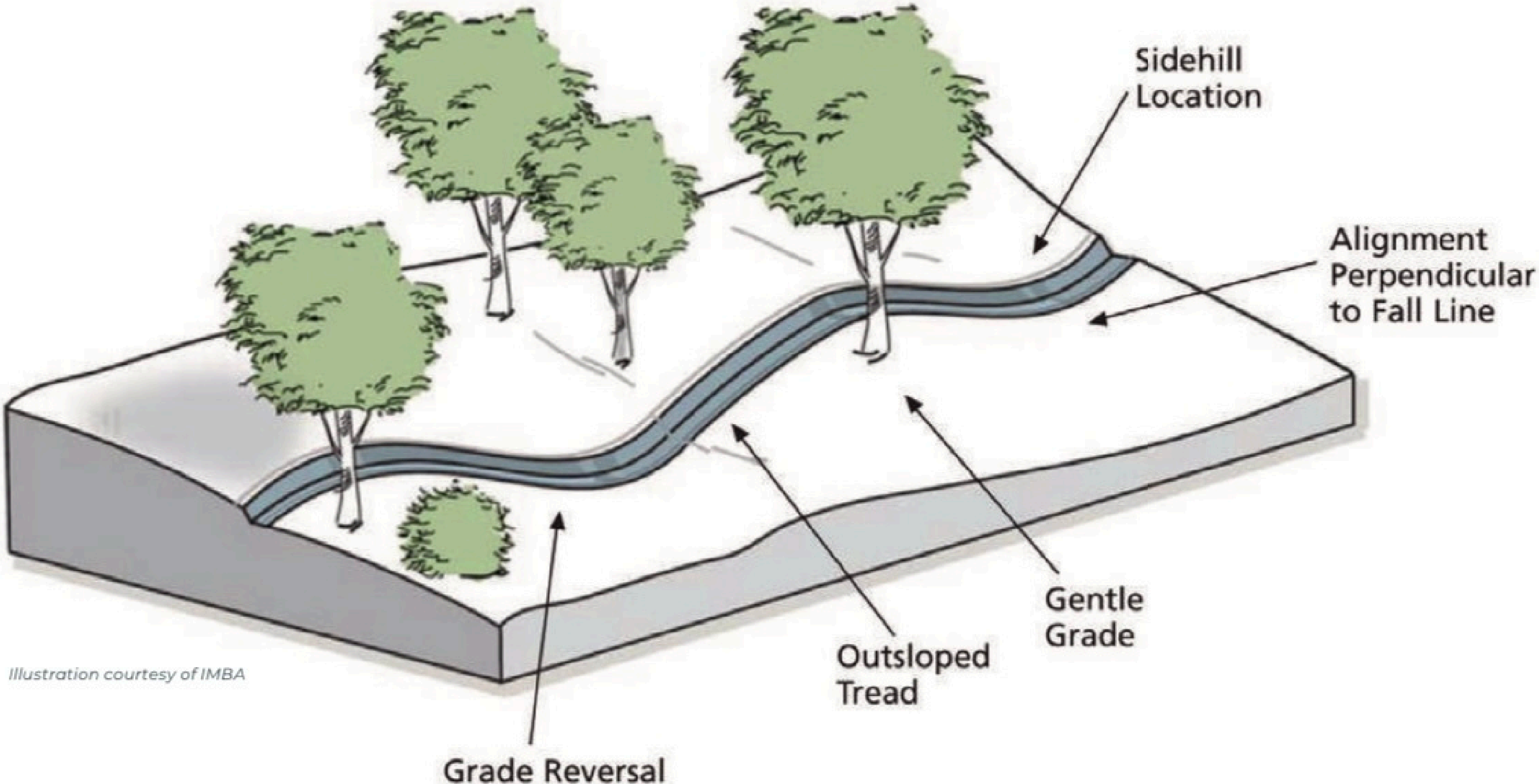


Illustration courtesy of IMBA

Evergreen Bike Park: Phase 1 Signage and Wayfinding

Item	Description	Cost
Bike Amenities		
Signage	Trailhead and wayfinding signs (work underway)	Funded by SCC

Evergreen Bike Park: Phase 2 Initial Improvements Conceptual Cost Opinion

Item	Description	Cost
Bike Amenities		
Bike Playground	350-450 feet with 7-10 features	\$60,000
Beginner / Intermediate Skills Zone	0.33-mile trail with 13-16 features	\$100,000
Green perimeter shared-use trail and Quarry connection	1.2 miles - 60" tread width	\$60,000
Flow Trails	0.8 miles bike optimized flow / features trails	\$80,000
Trail Design Services		
Field flagging of trails	2.0 miles of trails	\$10,000
Schematic design of bike playground and skills zone	Schematic documents that would support a design build level of construction	\$17,000
Trail and Bike Amenity Implementation costs		
Signage	Main kiosk; wayfinding, information, and bike park amenity signs	\$35,000
Permitting, compliance and monitoring	Various local, state, and/or federal permits	\$6,000
Mobilizations for construction	Cost of mobilizing build team to/from project site	\$10,000
Estimated Phase 2 Bike Park and Trail Construction		\$378,000
Total Estimated Contingency		\$22,000
Total Estimated Phase 2		\$400,000

Notes: This conceptual cost opinion provides a high level opinion of the costs of construction and serves as a tool for planning purposes only. It is expected that actual costs may fluctuate +/-20% from the amounts provided in this cost opinion. The cost opinion does not serve as a bid. Costs for site preparation, utility connections, and stormwater infrastructure are not included in this estimate. Permitting costs assume a variety of local, state, and federal regulations apply (i.e. stormwater, land disturbance, etc.). Construction costs assume professional trail contractors perform the work. Contingency is assumed to allow for adjustments during design and permitting. Cost opinion reflects current prices and does not account for future cost escalation.

Evergreen Bike Park: Phase 3 Mileage and Features Conceptual Cost Opinion

Item	Description	Cost
Bike Amenities		
Advanced skills zone	0.25-mile trail with 10-15 features	\$120,000
NICA warm up and skills zone	Maintenance and improvements	\$25,000
Jump or advanced features zone	4-5 progressive jump / features lines	\$175,000
Traditional shared-use trails	2.1 miles traditional machine built singletrack	\$100,000
New shared-use bridge	Construct new bridge at current crossing (traditional shared-use trails)	\$20,000
Hiker only trails	0.5 mile hiking trails	\$500
Trail Design Services		
Field flagging of trails	2.6 miles of trails	\$15,000
Design development of advanced skills zone	DD documents that would support a bid and contractor procurement process	\$25,000
Schematic design of jump or advanced features zone	Schematic documents that would support a design build level of construction	\$17,500
Trail and Bike Amenity Implementation costs		
Signage	Main kiosk; wayfinding, information, and bike park amenity signs	\$20,000
Permitting, compliance and monitoring	Various local, state, and/or federal permits	\$18,000
Mobilizations for construction	Cost of mobilizing multiple build teams to/from project site	\$20,000
Estimated Phase 3 Bike Park and Trail Construction		\$556,000
Total Estimated Contingency		\$31,000
Total Estimated Phase 3		\$587,000

Evergreen Bike Park: Phase 4 Pump Track Conceptual Cost Opinion

Item	Description	Cost
Bike Amenities		
Asphalt pump track	+/- 18,000 square foot pump track	\$600,000
Trail Design Services		
Design development of pump track	DD documents that would support a bid and contractor procurement process	\$13,000
Bike Amenity Implementation costs		
Signage	Pump track amenity sign	\$2,000
Permitting, compliance and monitoring	Local, state, and/or federal permits	\$5,000
Mobilizations for construction	Cost of mobilizing build team to/from project site	\$10,000
Estimated Phase 4 Pump Track Construction		\$630,000
Total Estimated Contingency		\$35,000
Total Estimated Phase 4		\$665,000

Notes: This conceptual cost opinion provides a high level opinion of the costs of construction and serves as a tool for planning purposes only. It is expected that actual costs may fluctuate +/-20% from the amounts provided in this cost opinion. The cost opinion does not serve as a bid. Costs for site preparation, utility connections, and stormwater infrastructure are not included in this estimate. Permitting costs assume a variety of local, state, and federal regulations apply (i.e. stormwater, land disturbance, etc.). Construction costs assume professional trail contractors perform the work. Contingency is assumed to allow for adjustments during design and permitting. Cost opinion reflects current prices and does not account for future cost escalation.



THANK YOU