

Towards a Regional Trail System



Destination 2045



cto
Summer
2021

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Introduction/Executive Summary

Building a regional trail system *with continuous linkages that connects communities* is a critically important goal for leaders in the OTO area. The long-term vision for the regional trail system was well-established through previous planning efforts and nearly two decades of trail construction. This Destination 2045 trail seeks to identify regional expectations for future trail development, define a successful implementation, and establish a clear goal and target. Ultimately, an action plan is also developed to outline specific actions and supports the OTO can complete in an effort support the construction of **45 miles of new trails by 2045**.

Regional Trail Planning History

The region has a long history of important trail planning projects. Springfield's Vision 20/20 comprehensive plan and the OTO's Regional Bicycle and Pedestrian Trail Investment Study created and refined the region's initial, lasting vision for a regional trail system. Nearly every other community Comprehensive or Parks and Recreation plan endorse and supports the region's effort to achieve this historical vision.

Historical Trail Implementation

Implementation of the regional trail network began as soon as the Vision 20/20 planning process was completed. The region was able to start many corridors prior to 2003, and those corridors have continued to develop. Gaps remain, but many neighborhoods, schools, parks, and commercial areas are now connected by the regional system. Utilizing a new infographic, the region will better communicate implementation efforts with citizens and local leaders.

Future Vision for Regional Trail Network

The region's long-term trail vision is a 255-mile network of trails first identified by the region's robust history of trail planning. By the spring of 2021, 52 miles of regional had been built.

Defining Success: Setting a Goal for 2045

The region explored its own expectations and evaluated implementation challenges to better understand what size of trail system it thought should exist in 2045. The expectations and challenges led to a clear understanding of how many miles of new trail needed to be built for the region to see itself as successful. Simple scenarios were developed, and the region set a goal to build **45 miles of new trails by 2045**.

Action Plan

The action plan includes direct and supportive actions. The OTO must identify sustained and expanded trail funding, support the trail development pipeline, and create a strong project selection process to achieve this 45-mile target. The OTO must also offer its full support to local funding initiatives and any efforts to development trail maintenance programs.

Regional Trail Planning History

The region's long history with comprehensive planning has played a critical role in the development of the OTO's regional trail vision. Three key documents play a foundational role in the establishment of an integrated trail network, and broad inclusion of trails in recently developed plans have formalized individual community commitment to this vision.



The following sections will explore these key plans and highlight the many ways our communities have planned for trails.

Key Documents and Planning Processes

Three key planning processes have laid the groundwork for the OTO's regional trail vision. The initial vision for a regional trail network was developed in Springfield's Vision 20/20 comprehensive plan in the late 1990's. Implementation costs for many unbuilt corridors from the Vision 20/20 plan were developed in the Regional Bicycle and Pedestrian Trail Investment Study (RBPTIS) in 2017. An addendum was developed for the RBPTIS in 2018 that proposed connections that would finally integrate Nixa into the region's trail vision. Future implementation efforts will draw heavily from these important planning exercises.

Vision 20/20 - Springfield/Greene County, 1998

Of all the regional trail planning efforts, Springfield's Vision 20/20 is the foundational document for the region's trail system. Residents envisioned their park system as critical to structuring the land use patterns of their community. Their vision is described as a 'community as a park' mentality. Using the region's many drainage ways, i.e. rivers and streams, as linear parks, new trails would allow people to move throughout the community. The Vision 20/20 process also took a regional prospective and recognized the ability of the region's trails to impact the quality of lives for everyone in Greene County and in surrounding counties.

Today, many Vision 20/20 trails have been started. Segments of the South Creek, Galloway Creek, Jordan Creek and Fullbright Springs trails, amongst others, have all been built. Work continues to implement the system envisioned in *Vision 20/20*. For more details, please review the *Historical Implementation* section of this plan.

Most of the trails included in *Destination 2045's* Bike and Pedestrian Plan were first proposed and formalized in the Vision 20/20 process. In fact, the region's dedicated trail non-profit, Ozark Greenways, came into being to implement the Vision 20/20 trail plan. Figure 1 is a map from Vision 20/20 that shows the earliest concepts of trails that exist on the ground today.

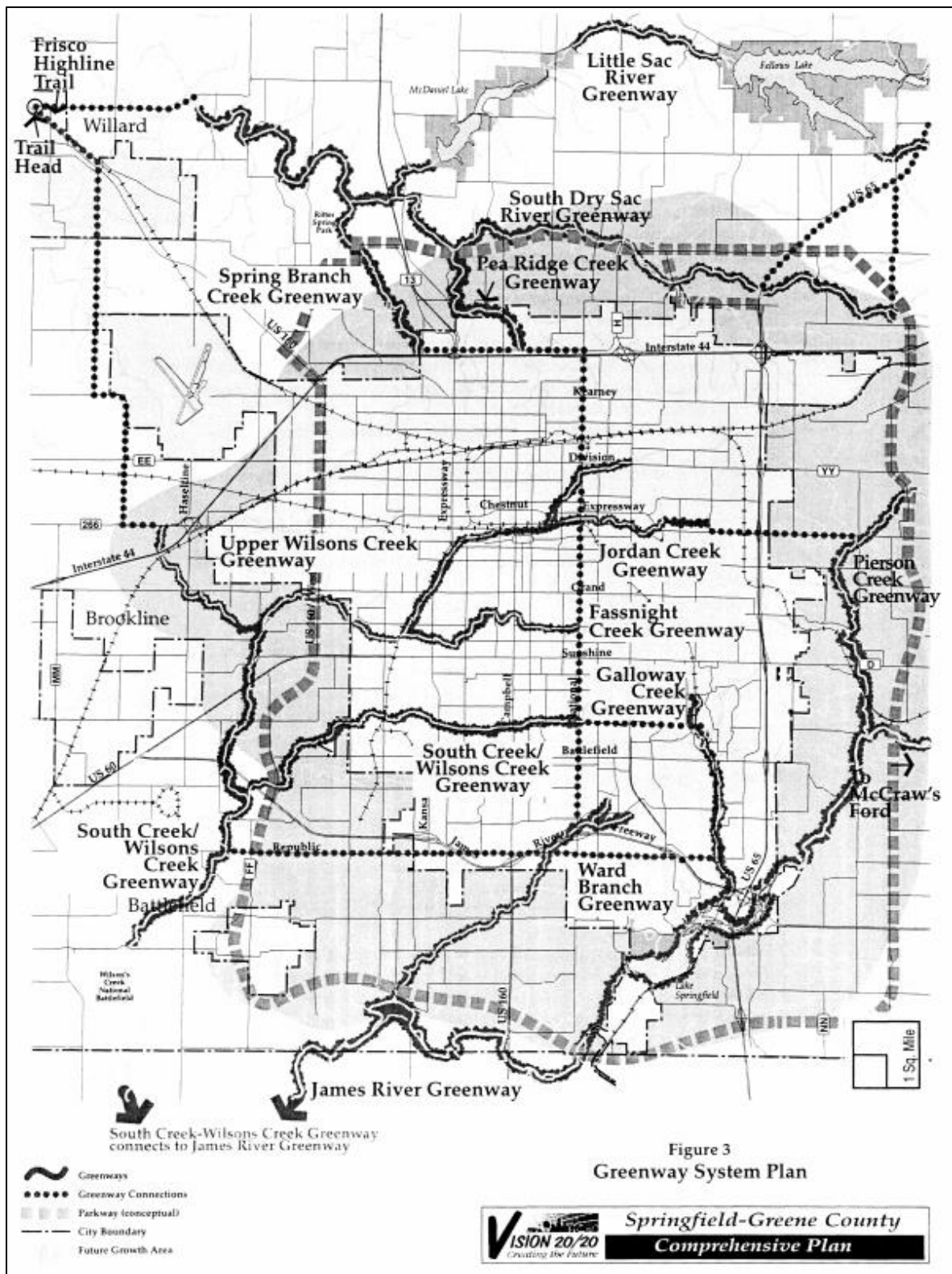


Figure 1 Vision 20/20 Greenway System Plan

Regional Bicycle and Pedestrian Trail Investment Study (RBPTIS) & Nixa Addendum - OTO Region, 2017 & 2018

The Regional Bicycle and Pedestrian Trail Investment Study was the region's first effort to quantify the cost associated with the buildout of a truly regional trail system. This study looked at the remaining unbuilt trails identified in the Vision 20/20 process and at other corridors that could the rest of the OTO's communities. Trails evaluated in the RBPTIS were considered *transportation trails*, trails that connected people to jobs, schools, and other daily destinations. Planners looked for the most strategic alignment within each corridor and estimated costs using two methodologies. For the approximately 76 miles of trails evaluated in the RBPTIS, construction costs were estimated to be \$100 million. For the first time, the region had hard numbers they could share with the community.

The 2017 RBPTIS process did not include trails connecting to the City of Nixa. The region had never developed trail concepts that extended to this portion of Christian County. Thanks to the Nixa Addendum, an additional 12 miles of trails were added to the region's trail vision. These trails connected Nixa to Springfield and to Ozark.

The overall RBPTIS process evaluated 88 miles of new trails and estimated a build-out cost of approximately \$125 million.



Other Planning Support for Trails

The OTO region also benefits from a wide range of other planning efforts that include support for the region's trail vision. These plans may formalize a community's support for a conceptual regional trail corridor or show support for the development of a strong local trail system. They ensure the intercity trails are integrated in the various intracity trail networks. Figure 2 below outlines the many community level plans that support the development of a strong trail system.

These plans illustrate the many ways OTO communities support trails. Willard has committed to capitalizing on the presence of an established intercity trail, the Frisco Highline Trail. Ozark recognized its role in developing a strong trail system for Christian County. This wide support for trails helps ensure the region's vision is implemented.

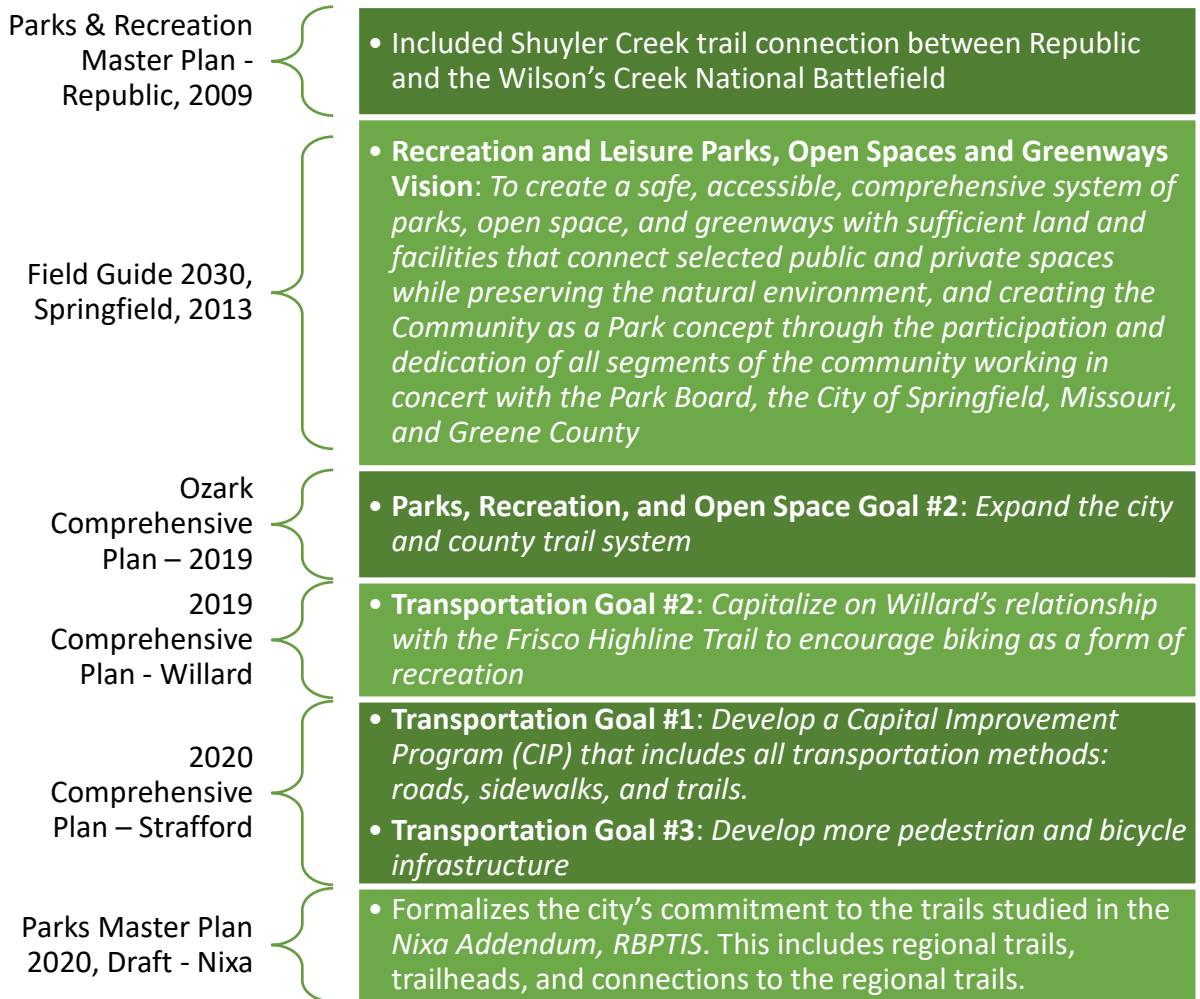


Figure 2 Planning Processes with an Impact on Trails

In addition to formally adopted plans, the region also has several plans currently under development that will also support the development of a strong trails system. The inclusion of trails in developing plans, in addition to existing plans, shows the region is still interested in building trails.

Ongoing Plan Updates
<ul style="list-style-type: none"> • Battlefield Comprehensive Plan • Republic Comprehensive Plan • Christian County Plan • Forward SGF Comprehensive Plan • Springfield/Greene County Parks Master Plan

Historical Trail Implementation

The region began implementing the ideas developed during Vision 20/20 immediately after the plan was adopted. Implementation has steadily continued over the last two decades. Early implementation primarily occurred in Springfield and its immediate surroundings. Within the last couple years, significant investments have been made by the cities of Ozark and Republic to build a truly regional system. Despite a strong history of implementation, many important connections and linkages have not been completed.



The following sections will explore trail implementation efforts, describe current and recently filled trail gaps. These sections do not describe every trail constructed in the OTO region. Rather, these sections describe trails that form a system with continuous linkages that connects communities.

Historical Implementation

Trail construction started shortly after the adoption of the Vision 20/20 plan. Galloway Creek, South Creek, and the Frisco Highline Trails were some of the earliest trails to be started. Figure 3 on the following page shows a basic timeline of trail implementation through 2020.

An important funding source for much of the early trail construction was a Springfield/Greene County Parks Tax. A portion of this tax provided important capital funding for all kinds of park, recreation, and trail projects. This tax provided the Springfield/Greene County Park Board a dedicated funding source for implement many elements of the Vision 20/20 comprehensive plan. However, the capital improvements aspect of the tax was allowed to sunset as part of commitments made to address the Springfield's underfunded Police and Fire Pension Plan. The remaining portion of the tax shifted to debt service, maintenance, and staffing of park facilities. The loss of this capital funding significantly impacted the availability of local funds for trail construction. State, federal, and foundation grants became the primary source of trail funding for the Springfield/Greene County Park Board.



Figure 3 Trail Construction Over Time



OTO Focus on Trail Funding, 2018-2020

The OTO Board of Directors chose to boost its regular investments in the region's bicycle and pedestrian system thanks to additional funding allocations included in the FY 18, 19, and 20 federal omnibus budget bills. The FY 18 funds allowed existing monies to be reallocated to sidewalks and trails, while the FY 19 funds allowed existing monies to exclusively be invested into the region's trail system. The FY 20 funds, a substantially smaller allocation, allowed the region to shift funding to a project awarded design and right-of-way funding in FY19. This

Construction Awards

The OTO Board of Directors' decision to allocate additional funds 2018-2020 allowed several high profile trail projects to continue, as shown in Figure 4. The project in Ozark included pedestrian underpasses at Rt. 14 and the Fassnight Creek project helped to implement the Springfield Art Museum's new Master Plan. Republic will finally have a direct pedestrian connection to the historic Wilson's Creek National Battlefield. The region wouldn't typically be able to fund projects of this scale across different communities with its annual trail funding allocation. The focus on trail funding helped the region create significant momentum, funding over 3.8 miles of new trail.

Regional Trail Planning Services

The OTO chose to invest in the project development pipeline for trail projects during the focus on trail funding in 2018-2020. A steady stream of available trail projects helps ensure the region can best match funding opportunities with appropriately sized trail projects. These funds will be used to work with local communities to identify trail opportunities, outreach to landowners and the public, and refine plans based on new opportunities and information. These activities will help the region's communities have plans on the shelf that can be submitted when various grants become available.

Fassnight Creek Trail

- Through Phelps Grove Park and Springfield Art Museum

Shuyler Creek Trail

- Extended to Wilson's Creek Battlefield

Trail of Tears

- In Trail of Tears Park to Somerset Dr.

Chadwick Flyer

- From the OC to Clay St.

Galloway Creek Trail

- Rebuild segment south of Sequiota Park
- New connection across Lone Pine at Greenwood

Figure 4 Key Funding Awards During 2018-2020



Completed Connections and Closed Gaps

Existing trails connect many important destinations throughout the region. Trails connect schools, regional parks, colleges, universities, cultural institutions, and many neighborhoods. The only existing intercity connection is made by the Frisco Highline Trail between Springfield and Willard. In fact, this trail connects Springfield to Bolivar, MO, some 35 miles to the north.

Important connections have been made throughout the system's two-decade long history, as shown in Figure 5. Early trails, such as South Creek, Galloway, and the Frisco demonstrated the types of connections and positive benefits trails could bring

to the region. These were long trails that connected important destinations. More recent projects, such as the new Grand Street Bridge and the completion of the Fullbright Springs trail across the old Fullbright Land fill closed gaps that had existed in the system for many years.

The public sector are not the only ones building new trails. As new neighborhoods are built, private developers are also constructing key trail segments. For example, private developers have built portions of the *Chadwick Flyer* along 22nd St. in Ozark and portions of the *West Wilson's Creek Trail* west of Rutledge Wilson Farm Park in southwest Springfield. Private developers will continue playing an important role in the build out of the region's trail system.

When intercity connections are made and gaps are filled, trail users can access more of their own region and the community can focus on the next project. For example, Willard has been connected to Springfield with the Frisco Highline Trail. The next issue is finding a way to connect the Frisco to the other existing trails in Springfield. This reality explains why Willard is not included in some of the mapping exercises discussed later in this report. The planned connection to Willard has been completed, so Willard will not bear any future implementation costs for the buildout of the region's trail system through 2045.

Frisco Highline Trail

- Springfield, Willard (Walnut Grove, Bolivar)

Fassnight Creek Trail

- Parkview High School, Fassnight Park, Phelps Grove Park, Springfield Art Museum (est. 2021)

South Creek Trail

- Carver Middle School, Sherwood Elementary, Horton Smith Golf Course, Nathaniel Greene/Close Memorial Park, McDaniel Park

Galloway Creek Trail

- Pershing Elementary, Lone Pine Bike Park, Sequiota Park, Galloway Village, Missouri Department of Conservation Nature Center, Missouri Veteran's Cemetery

Wilson's Creek / Jordan Creek Trails

- Ewing Park, Cruze Dog Park

Wilson's Creek Trail

- Rutledge Wilson Farm Park, Tal's Trail Head, Round Tree Public Access Area

Jordan Creek / North Jordan Creek Trails

- Founder's Park, Jordan Valley Park, OTC, Drury University, Silver Springs Park, Boys and Girls Club of Springfield-Stalnaker Unit, Smith Park

Fullbright Spring Trail

- Truman Elementary, Lost Hill Park, Ritter Springs Park, David C Murray Trail Head

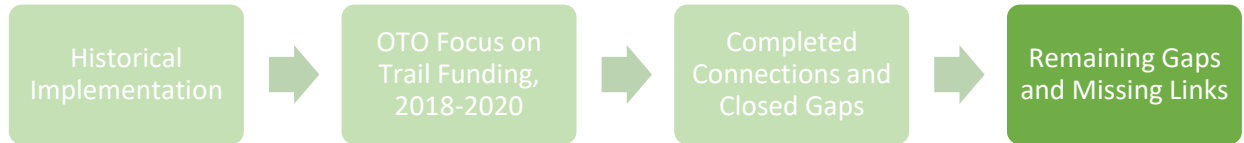
Ward Branch Trail (North)

- Cox Hospital, Burrell Behavioral Health, Twin Oaks Substation Park, The Library Center

Ward Branch Trail (South)

- Gray Elementary, Missouri Institute for Natural Sciences

Figure 5 Key Destinations Connected by Regional Trails



Remaining Gaps and Missing Links

The region's trail system has several gaps along existing trails and a handful of entirely new trails that need to be constructed. New trails are needed to connect the existing network to Nixa, Strafford, and to the Frisco Highline Trail to Willard. These are important missing links that represent significant challenges moving forward. Gaps within the existing system, while no less challenging to complete, are often shorter in overall length. There are currently nine gaps within the existing system that are less than one mile in length, as shown in Figure 6. Approximately 0.04 miles of trail is needed to connect the existing eastern terminus of the North Jordan Creek Trail to existing paved surfaces and paths within Smith Park, as seen in Figure 7. At just under one mile, the gap between Nathaniel Greene Park and Ewing Park is another critically important missing piece in the existing trail network.



Figure 7 Smith Park Trail Gap

Existing Gaps: Less than 1 mile



Figure 6 Locations of Gaps less than one mile in length

North Jordan Creek Trail

- Within Smith Park - 0.04 Miles

MO 174 Trail

- Lindsey to US 60 - 0.36 Miles

West Wilson's Creek Trail

- Silo Hills to Wilson's Creek Greenway - 0.4 Miles

Jordan Creek Trail

- Grant to Campbell - 0.43 Miles
- Mt. Vernon to Fort - 0.51 Miles

Trail of Tears

- Silverleaf to Marcella - 0.52 Miles

South Creek Trail

- ~Battlefield to Tal's Trailhead - 0.59 Miles

Trail of Tears

- Battlefield to Mt. Vernon - 0.68 Miles

Trail of Tears

- Ewing Park to Nathaniel Greene/Close Memorial Park - 0.98 Miles

Future Vision for Regional Trail Network

The *Destination 2045* Trail Plan seeks to show support for the regional trail vision that has been developed over the last 20 or 25 years. While this vision may not be fully realized by 2045, it does represent the overarching vision to which the region is committed. It represents a network of trails that provide connections between workers and jobs and between workers and the amazing natural landscape that is the Ozarks. The future includes a trail system with continuous linkages that connects communities. Scenarios representing the region's goal for the trail network in 2045 will be explored later.

The Hard Surface Trail Network includes a wide range of trail types that qualify for a wide range of potential funding sources. Some trails connect jobs and neighborhoods and are great candidates for funding from the OTO. It also includes recreational trails that provide important connections to the region's many natural amenities and are excellent candidates for programs such as the Recreational Trails Program administered by the Missouri Department of Natural Resources. The Hard Surface Trail Network is comprised of approximately 255 miles of trails, 52 of which exist today. Figure 8 shows the 255-mile network.

The specific alignments for some trails included in the Hard Surface Trail Network have evolved since Vision 20/20. The Pearson Creek Trail is now shown as primarily an on-street trail. The Wilson's Creek Trail between the Round Tree Branch Public Access and the Wilson's Creek National Battlefield is now shown as a multi-use sidepath along Rt. M and Rt. ZZ. Some trail gaps, such as along the Wilson's Creek or Jordan Creek Greenways, are still shown to follow the same alignments proposed in the Vision 20/20 process. It is always important to remember the region is more committed to the broader corridor than any specific alignment. The corridors represent the key connections the region wants made. Alignments can be determined based on the opportunities with which the region is presented.



Regional Hard Surface Trail Network

The Ultimate Long-Term Goal

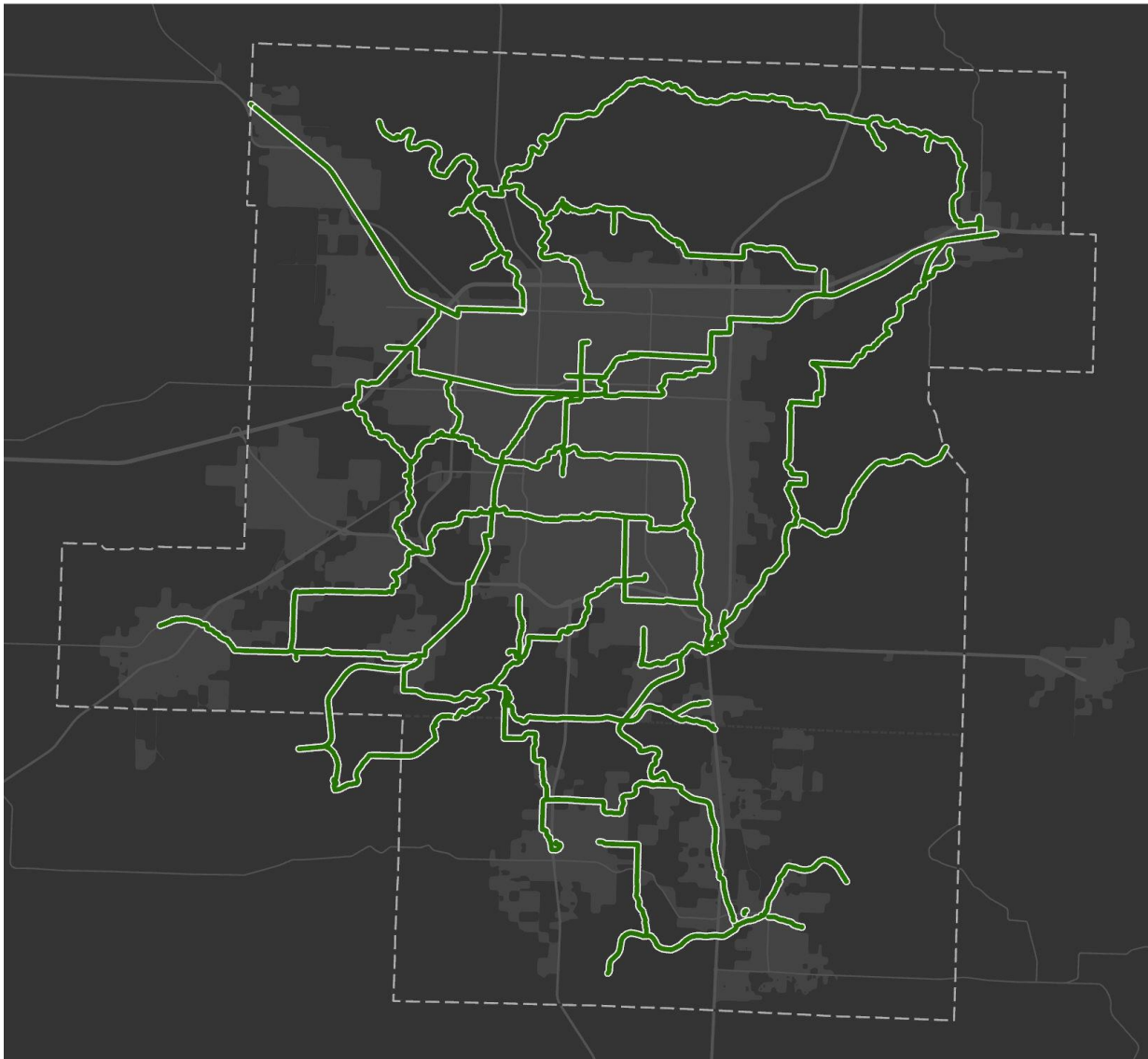


Figure 8 Regional Hard Surface Trail Network

Defining Success: Setting a Goal for 2045

The region has demonstrated a strong commitment to building a trail system with continuous linkages that connect communities. The *Destination 2045* planning process has allowed the region to define what is achievable over the next 25 years and define what success might look like.

The region used two future scenarios to understand what implementation success might look like. These future scenarios were also considered in light of four key implementation challenges. Utilizing all this information, the region defined success and set a goal for 2045. Ultimately, the scenarios including higher investment levels revealed future trail systems with fewer gaps and meaningful connections throughout the region, a trail system with continuous linkages that connects communities. Success can be described as continuing the focus on trail funding that occurred during 2018-2020 and setting a goal for **45 miles of new trails by 2045**.



The following sections explore how the scenarios allowed the region to recognize expectations, consider implementation challenges, and ultimately define success and set a trail construction goal.

Understanding Expectations: Two Future Scenarios

Understanding your expectations is an important first step in many planning processes. By knowing what is expected, the region can determine if it is on track to meet those expectations or if it needs to increase its efforts. Using two scenarios, the region was able to visualize the amount of trail new trail, and the resulting trail network, they expected to see in 2045. Overall, the region expects to build a trail system with continuous linkages that connects communities. These scenarios revealed significant investments are needed to meet the region's expectations for new trails

These scenarios explored what was possible and allowed the region to decide which scenario met its expectations of a trail system with continuous linkages that connect communities. Scenarios explored two investment scenarios: investments on par with the last decade and investments on par with the focus on trail funding that occurred during 2018-2020¹. Scenario 1 resulted in the investment of \$32 million and

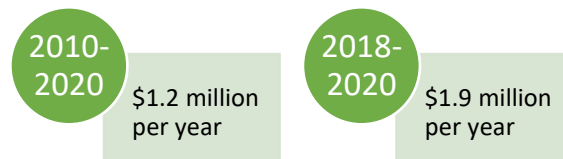
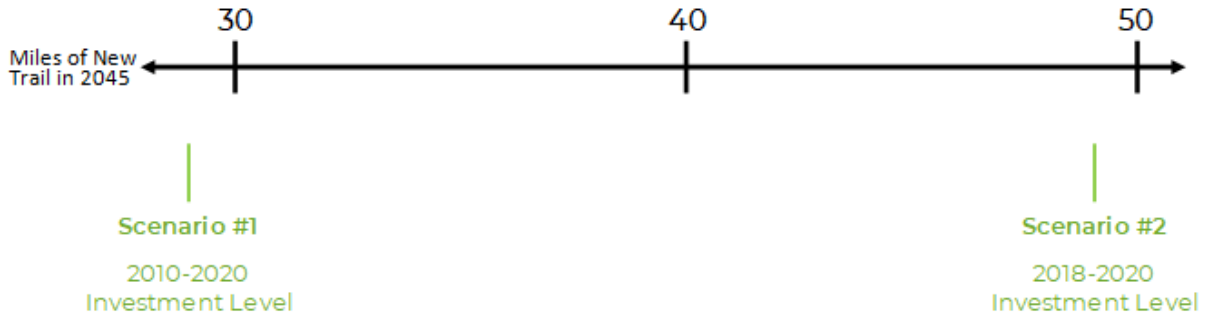


Figure 9 Historical Annual Investment Levels

¹ These scenarios calculated new trail construction over the Destination 2045 planning horizon by utilizing high- and low-cost estimates and assuming a continuation two historical investment trends.

the construction of approximately 27 miles of new trails by 2045, while Scenario #2 resulted in \$48 million invested in the construction of approximately 48 miles.

Understanding Expectations: How Many Miles Does the Region Expect?



Scenario 1: Continuing the historical Trend - 27 miles of new trails

Assuming the future will look like the past is never a bad starting point for these types of conversations. Scenarios based on the long-term investment average assumed the construction of 27 miles of new trails during the *Destination 2045* planning horizon. Twenty-seven miles is not an insignificant amount of new trail, but the maps shown in Figure 10 reveal many existing gaps are left unfilled and only one or two new communities were likely to be integrated into the region's trail system.

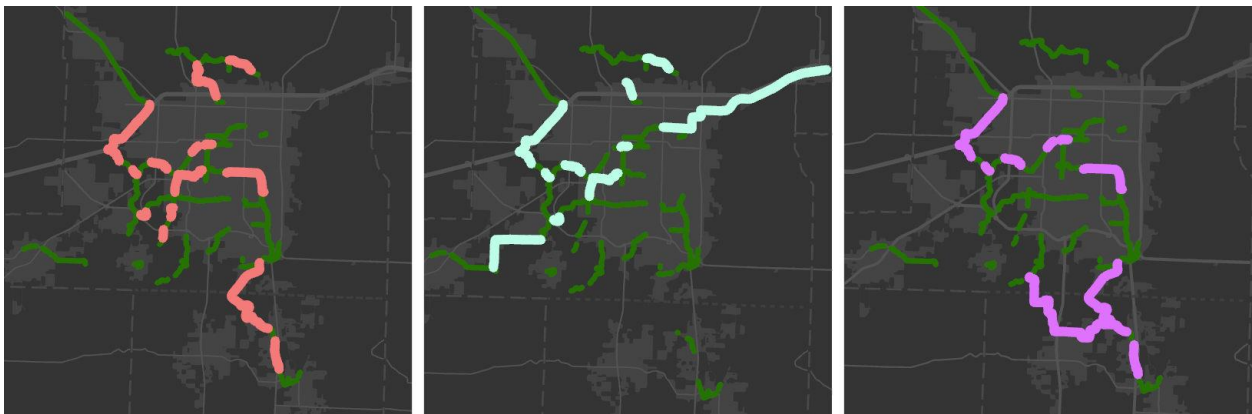


Figure 10 Range of Future Trail Networks with 27 New Miles of Trails

Strengths	Weaknesses
<ul style="list-style-type: none"> • Some corridors completed • A few communities are connected 	<ul style="list-style-type: none"> • Many critical gaps remain • Footprint is not 'regional'

Multiple maps were constructed based on the resulting total of new trail construction. These maps illustrated the many different combinations of new trails could be developed in each investment scenario. The goal was not to identify the best map, rather it was to identify an investment scenario that was most likely to create a trail system the region would deem successful.

Scenario #2: Maintaining Focus on Trail Funding - 48 miles of new trails

Attempting to maintain recent momentum towards achieving a goal is another good way envision what the future might look like. Scenarios based on the region's trail focus on trails in 2018-2020 assumed the construction of 48 miles of new trails. The scenarios shown in Figure 11 included over 75% more new trail than were assumed in Scenario Set 1. The extra mileage allowed many existing trail gaps to be filled and for several regional connections to be made.

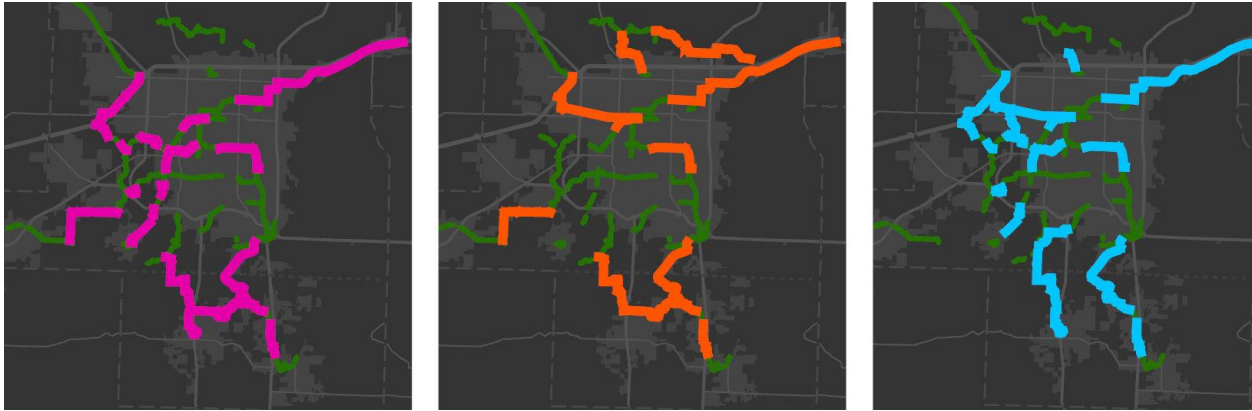


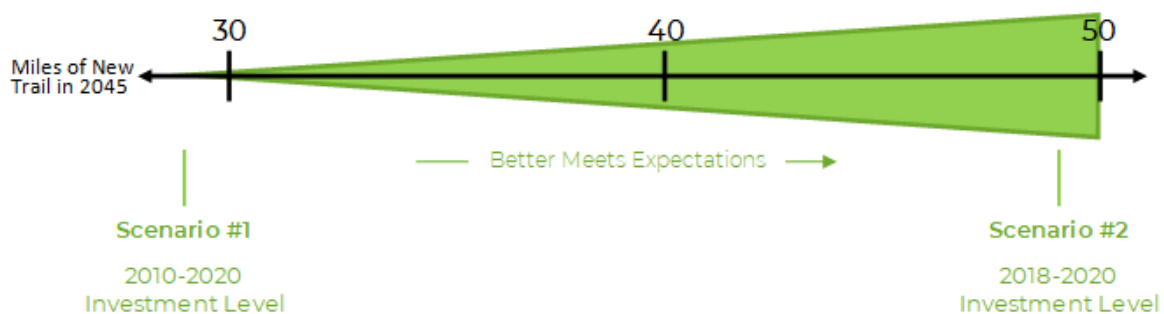
Figure 11 Range of Future Trail Networks with 48 New Miles of Trails

Strengths	Weaknesses
<ul style="list-style-type: none"> • Many corridors completed • Most communities are connected 	<ul style="list-style-type: none"> • Gaps Remain • Not every community connected

Expectations Defined

These scenarios reveal the region expects a future more akin to Scenario #2 than to Scenario 1. More corridors will be completed, and more communities will be connected. A future that looked like Scenario #2 would have a trail system with continuous linkages that connects communities. Many events could prevent this future from happening, so four key challenges are explored next.

Recognizing Expectations: How Many Does the Region Expect?





Challenges to Meeting Expectations

The ability of the region to maintain the elevated funding levels and build a future that is similar to Scenario #2 will be impacted by at least four key factors: disparate jurisdictional responsibility for trail development and subsequent jurisdictional funding disparities, the need to address deferred maintenance, and rising construction costs. These challenges are shown in Figure 12. Regional leaders believe these challenges are not insurmountable, but these challenges may limit the region's ability to fully achieve the future described by Scenario #2. However, these scenarios were just tools used to understand success, and a trail system with continuous linkages that connects communities is possible with fewer miles of new trails.

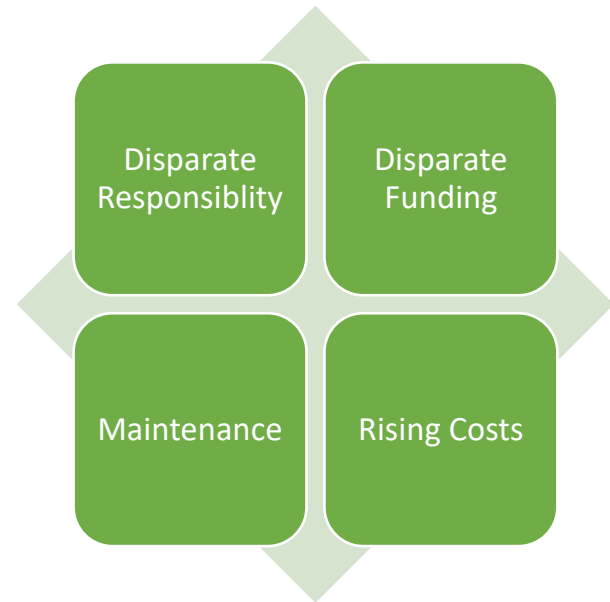


Figure 12 Challenges to achieving Scenario #2

Disparate Jurisdictional Responsibilities

Naturally, the responsibility for building out the region's trail system is not evenly distributed across the region. The table below shows how each community shares in the responsibility for building the trail systems outlined in Scenario #2. The table includes a range of trail mileage shown within each community's boundaries and includes a range of new trail costs based on different inflation considerations.

Summary of Jurisdictional Breakdown of New Trails				
Jurisdiction	Mileage		Cost Range	
	Low	High	Low	High
Battlefield	0.0	0.6	\$ -	\$ 790,000
Christian County	3.8	8.0	\$ 4,830,000	\$ 8,010,000
Greene County	9.2	12.2	\$ 10,810,000	\$ 13,640,000
Nixa	0.0	4.9	\$ -	\$ 4,940,000
Ozark	1.1	1.1	\$ 1,150,000	\$ 1,440,000
Republic	0.0	1.8	\$ -	\$ 2,270,000
Springfield	13.5	23.8	\$ 16,900,000	\$ 23,890,000
Strafford	3.6	3.6	\$ 3,600,000	\$ 4,520,000

Many of the existing gaps are located within the City of Springfield. Some communities, such as Nixa or Republic, may bare none of the regional cost burden if additional trails are not extended to those communities.

Disparate Jurisdictional Funding

Funding sources available for new trail construction vary amongst the region's communities. It is vital that each community feels it is possible to meet the financial responsibilities described in this plan. Some communities only have general revenue, their gas tax allotment, and the opportunity to apply for federal funds to fund trail construction, while other communities have several additional local sales taxes that could be put towards trail construction or maintenance. Figure 13 below highlights the range of revenue sources available to each of the region's communities.

Summary of Trail or Transportation Funding Sources							
	Capital Improvements Sales Tax	Transportation Sale Tax	Road Property Tax	Parks Tax		Parks Impact Fee	Fuel Tax Revenue
				Park Board Operational Component	Municipal Allocation Component		
Battlefield		x			x		x
Christian County		x					x
Greene County			x	x			x
Nixa		x					x
Ozark	x	x				x	x
Republic	x	x	x		x		*
Springfield	x	x		x			x
Strafford					x		x
Willard	x				x		x

* The City of Republic directs fuel tax revenues to the city's police department.

Figure 13 Summary of Trail Transportation Funding Sources

Trail Maintenance

A backlog of maintenance activities must be addressed in addition to building new trail over the coming decades. Many of the region's earliest trails were constructed of asphalt. These trails have not received consistent maintenance and are beginning to deteriorate. The region will have to decide what to do with these deteriorated trails. Additionally, each community in the region needs to implement a strong routine maintenance program.

Maintaining Asphalt Trails

Many of the earliest trails were constructed with asphalt as shown in the Figure 14 below. These early trails have not received regular surface maintenance, and many need serious rehabilitation. Asphalt was an easy, less expensive option when construction of the network first began. It is also a trail surface favored by many runners. These trails can be resurfaced with fresh asphalt or be replaced with concrete. Concrete trails are more expensive to build but require less annual maintenance and have a longer useful life span. Communities within the region seem to be taking different approaches.

Trail Maintenance

Trail Surface Type and Age

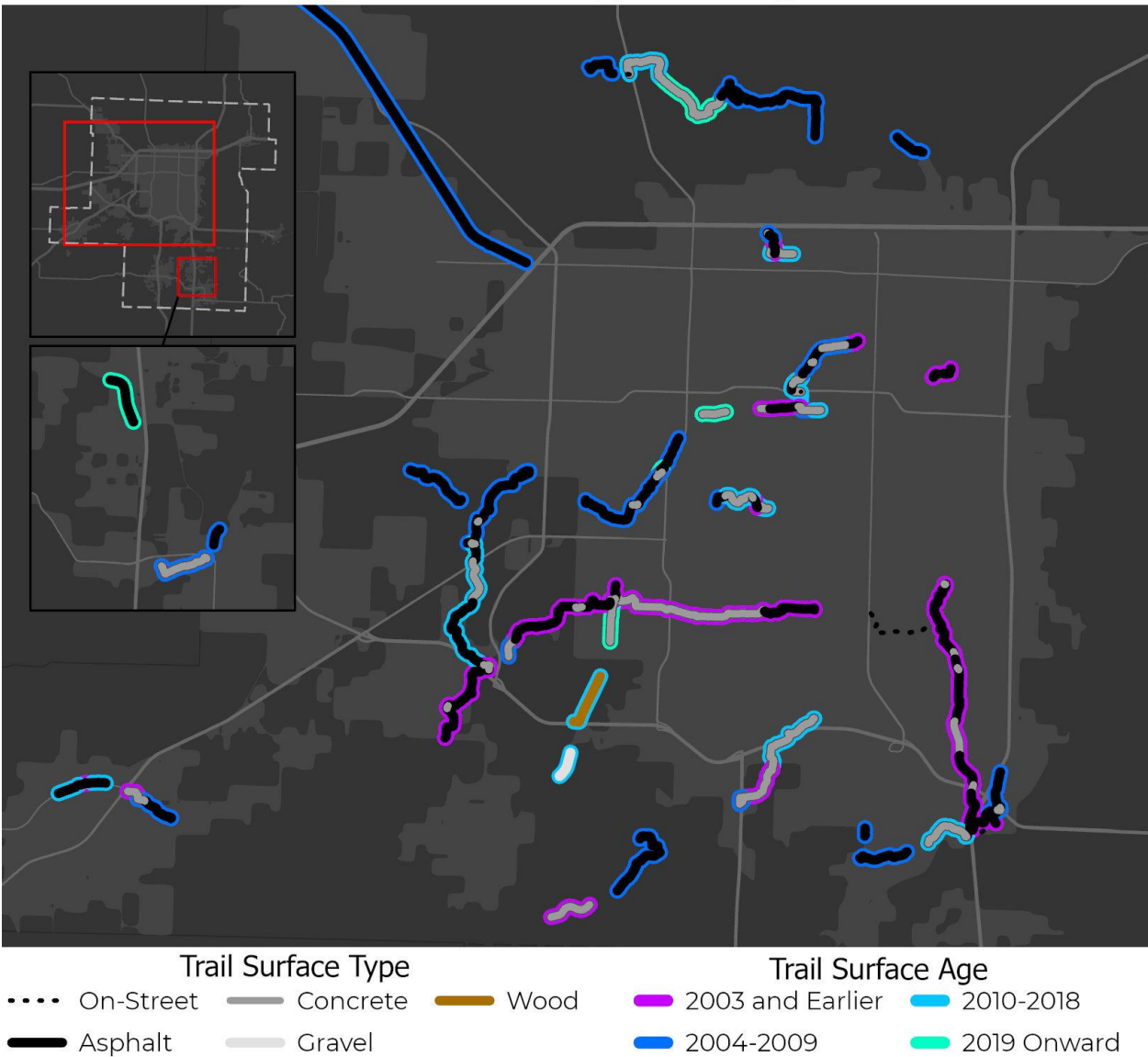


Figure 14 Trail Maintenance

Simplified maintenance estimates for the region's approximately 29 miles of asphalt trails suggest the region will need to spend between \$2.2 and \$6.5 million to address the asphalt trails, including options to repair the asphalt surface or replace with concrete. The lowest cost option over the *Destination 2045* planning horizon seems to be maintaining the asphalt trails as asphalt. This low-cost estimate includes a sealcoat every five years and a basic resurfacing every 10 years². The higher cost option assumes asphalt trails will be replaced with concrete trails. However, across the 50-year lifespan of concrete trails, the price of replacing trails with concrete vs maintaining the asphalt becomes very similar.

Regional communities are taking different approaches to this issue. Currently, the City of Springfield is replacing asphalt trails with concrete and constructing new trails with concrete. On the other hand, Ozark and Republic are opting to maintain existing asphalt trails and build new asphalt trails. Each approach has its own short-term and long-term cost implications.

Annual Routine Maintenance

Annual routine maintenance is a critically important element of the region's trail system. These maintenance activities include minor repairs, mowing, litter cleanup, clearing dirt and debris from trails, and addressing vandalism or illegal dumping. The system currently does receive annual maintenance.

Routine annual maintenance is performed throughout the region. The Springfield/Greene County Parks Department has a dedicated trail crew that addresses trail maintenance activities on trails managed by department. Ozark Greenways regularly organizes volunteer workdays to address upkeep, in addition to the regular work of its Frisco Highline Trail Manager. Individual public works and parks and recreation staff maintain trails owned by the region's other communities. The costs of these activities are often absorbed by the community's overall park, grounds, and road maintenance budgets. However, it is estimated that annual routine maintenance will cost between \$6.4 and \$6.8 million over the Destination 2045 planning horizon.

Overall Maintenance Costs

It is important to point out the maintenance costs discussed above will be in addition to the costs associated with building new trail. Annual routine maintenance is likely absorbed into existing maintenance budgets, but the needs associated with the region's asphalt trails will require explicit funding. Combined, these two maintenance costs could total as high as \$13.3 million over the Destination 2045 planning horizon. It is critically important the region to plan for range of maintenance activities described above and identify sustainable funding sources.

² LTAP, Indiana and Development Commission, Ohio River Greenway, "Best Practices in Trail Maintenance" (2014). Indiana Local Technical Assistance Program (LTAP) Publications. Paper 8. <http://docs.lib.purdue.edu/inltappubs/8>

Rising Costs

Scenario #2 did not include the cost inflation regional leaders knows will occur in the future. The scenarios were simplistic tools for gauging success. Cost inflation could threaten the ability of the region realize Scenario #2 and build a trail system with continuous linkages that connects communities. However, a deeper dive into the impact of rising costs suggests the investments included in Scenario #2 could still meet the region's expectations for new trails in 2045. Inflation reduces the amount of possible new trail in 2045 by about 10 miles. Figure 15 shown below demonstrates a 10-mile reduction to Scenario #2 would still result in a trail system with continuous linkages that connects communities

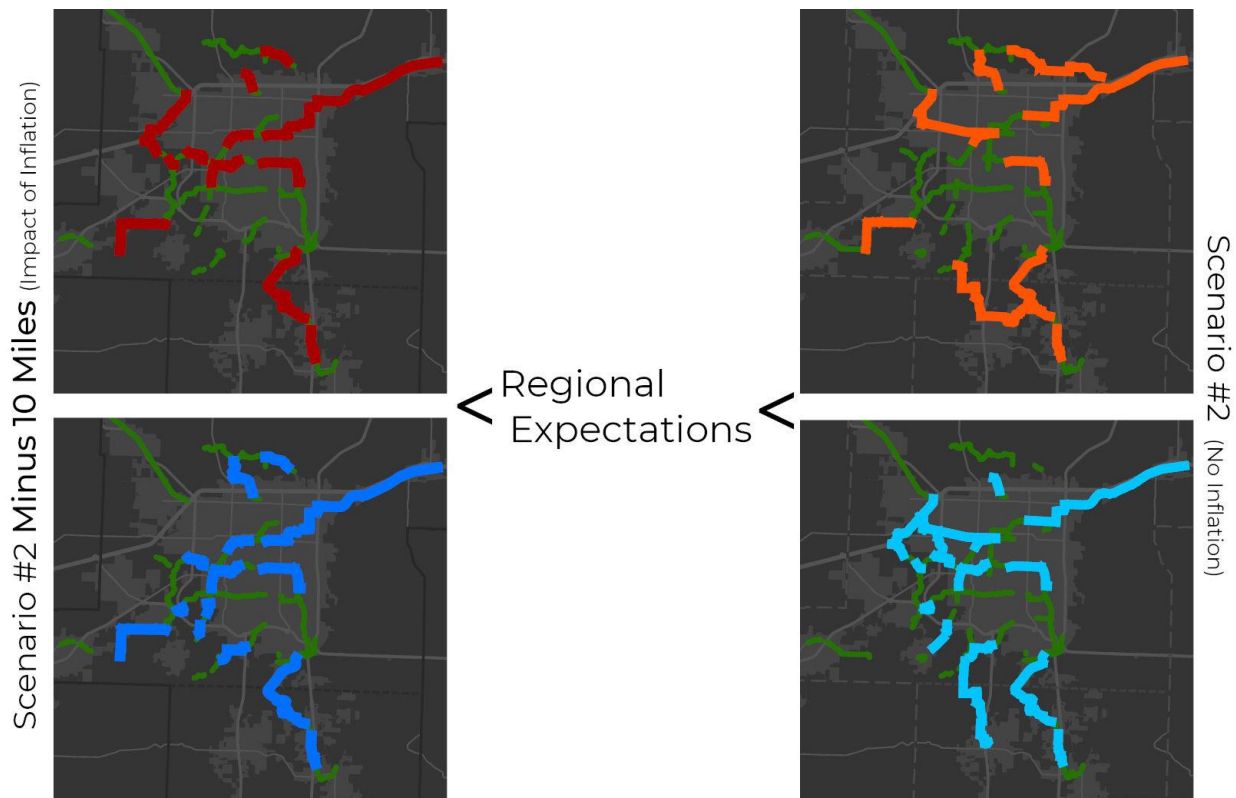


Figure 15 A comparison of Scenario #2 with and without Rising Costs

This graphic show that if the OTO continues allocating additional funds towards trails, the future could meet the region's expectations for new trails. Fewer gaps may be filled, or fewer connections made, due to rising costs, but the resulting networks could still be described as *continuous* and *interconnected*.

Addition, the public sector can mitigate rising construction costs by continuing to shift some trail development costs to private developers. Development regulations can be modified to include trails as part of the required infrastructure in new subdivision. Developers benefit from having trails in their subdivisions and the public sector can direct funds towards segments in built-out neighborhoods.

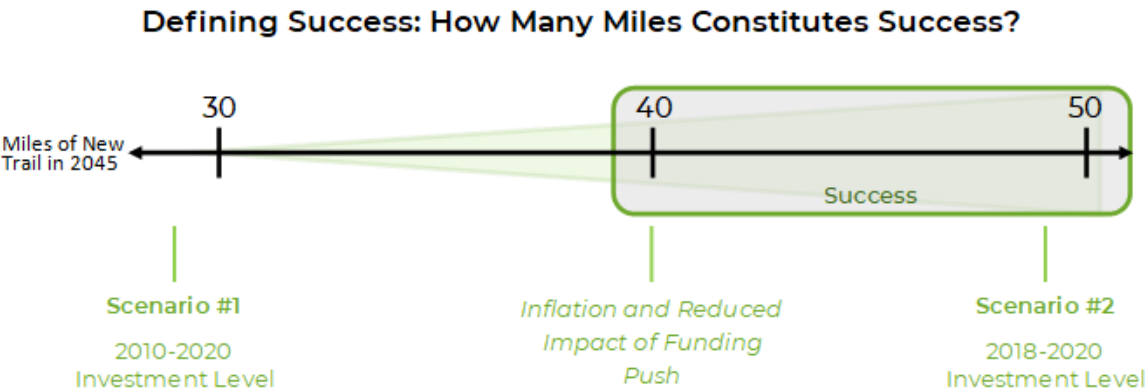
Impact of Challenges

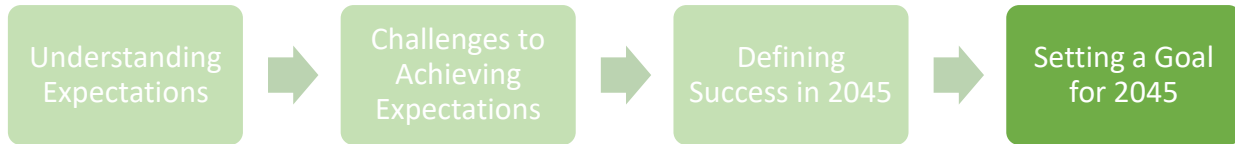
The availability of funding sources and the magnitude of each community's trail responsibility do not always match. Communities such as Greene County and Christian County have sizable project burdens but have limited funding sources. On the other hand, Springfield's funding and trails burdens are better balanced. Over the last decade or so, Springfield has averaged around \$1 million a year in trail related investments, including infrastructure on and off the highlighted regional trail network. With this annual investment, Springfield has a reasonable chance of investing the \$16 to \$19 million to build its share of the regional trail system. As a region, maintenance costs could impact the ability of some communities to dedicate funds to new trail construction. These challenges suggest achieving a future like Scenario #2 may be difficult, but expectations could be met even if the region comes up a little short.



Defining Success in 2045

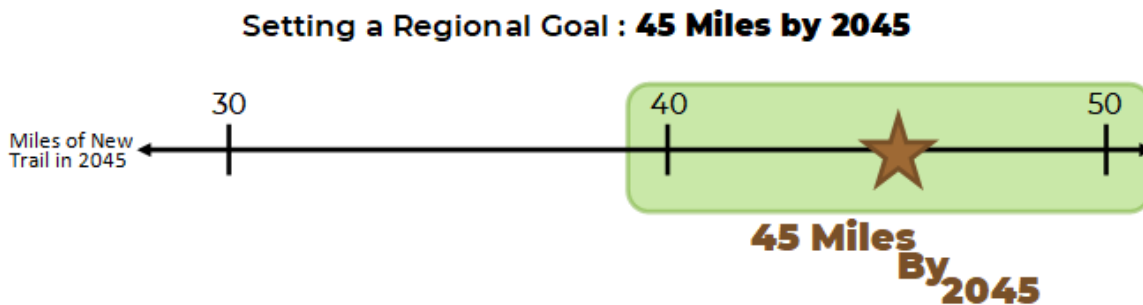
The OTO will have successfully implemented the *Destination 2045* plan if the region has between 40 and 50 miles of new trails by 2045. Regional expectations would be met with this amount of new trail construction. The future shown in Scenario #1 did not meet the region's expectations a trail network that truly connected our region. Scenario #2 illustrated a future trail system with continuous linkages that connects communities. Even if the challenges described above limits the impact of regional investments, the sustained focus on trail underlying Scenario #2 can still result in a network that connects the OTO region, meets regional expectations, and can be called successful.





Setting a Goal for 2045

The region must set a specific target for trail construction so it can track its progress over the next two and a half decades. Successful implementation of the *Destination 2045* plan will result in the construction of **45 miles of new trails by 2045**. This target will cost the region between \$45 and \$50 million. With this investment, the region will build a trail system with continuous linkages that connects communities. This goal will allow the region to meet its expectations and achieve success, success as defined in this plan.



Users of the regional trail system in 2045 will be able to move between trails and communities without needing to frequently leave the trail system. Individual trails will have few gaps and will be connected to other trails. Most communities will be connected to the regional trail system, and these intercity connections will rarely rely on on-street connections. On-street connections will be important for movement with individual communities, but those long, intercity connections rely on the trail system. Finally, residents will have followed along with the development of the truly regional system thanks to clear and consistent communication from the OTO and its trail partners.

Achieving this goal will require the region to make permanent the increased trail funding introduced during the focus on trail funding of 2018-2020. The region must continue to leverage local, state, and federal monies to achieve this goal. The cities of Springfield, Republic, and Ozark used receipts from transportation and capital improvements taxes. The region must ensure these funding sources continue to be available. The private development community must also play a part as new development intersects proposed trail corridors. Ultimately, the OTO must continue directing additional STBG-Urban funding to trail construction. The reallocation of STBG-Urban funding made possible by the Omnibus funds was a critical driver of the 2018-2020 push.

Multi-year Benchmarks

The construction of new trail will not happen according to a consistent schedule over the Destination 2045 planning horizon. Several miles of trail may be built in some years, while several miles of trails may be designed or have right-of-way purchased during others. However, it is important to set benchmarks for the development of the region’s trail network to ensure adequate progress is made across multi-year timeframes. Two simple benchmarks are outlined in Figure 16.

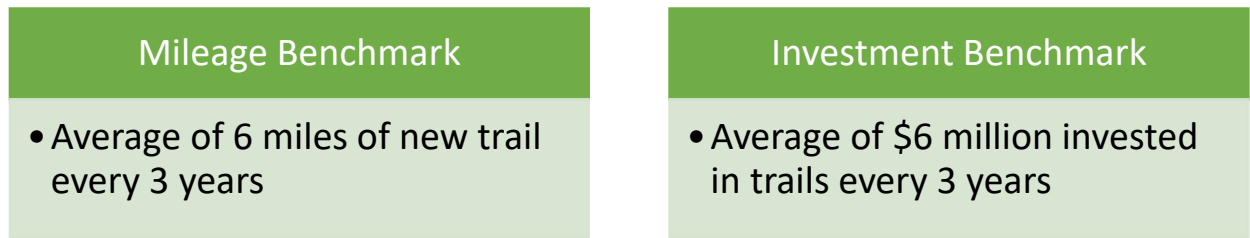


Figure 16 Regional Trail Benchmarks

These benchmarks will help the region monitor the successful implementation of this trail plan while not holding the region to unrealistic annual target. The region may not meet both benchmarks in each three-year timeframe. Some projects will include very costly road or river crossing, while others will include long stretches of reasonable flat trail. The region should seriously evaluate its trail construction activities if it fails to meet both benchmarks during a three-year period. This failure would suggest the region is not on track to achieving the region’s goal of constructing 45 miles of new trails by 2045.

Action Plan

Forty-five miles of new trail will be built by 2045 because the OTO has allocated and prioritized additional regional funding opportunities and supported strong local trail funding mechanisms. This mixture of direct and indirect action will create a financial climate that is supportive of prolific trail construction.



Direct OTO Action

The OTO will directly implement this plan through its bike/ped grant programs. Individual communities will ultimately decide what trail corridors are built out, but it is the OTO's job to ensure funding supports are available and directed to projects with the largest regional impacts. Building 45 miles of new trails by 2045 will require the OTO to maintain the enhanced grant program made possible by Omnibus funds in 2018, 2019, and 2020. The region needs to have hard conversations to identify from where these replacement funds will come. The OTO will also need to maintain its support for regional trail planning activities. Maintaining a pipeline of shovel ready projects is multi-jurisdictional and does not follow a consistent timetable. The OTO is best suited for these times of uncertainties. Finally, the OTO will support the region's mission to build a trail system with continuous linkages that connects communities by ensuring its funding goes to projects with the largest regional impacts. These actions are outlined in Figure 17.

Identification of Sustained and Expanded Trail Funding

The OTO must identify a sustainable source of extra funding for region's trail grant program to maintain the focus on trail funding made possible by the Omnibus funds. The reallocated funds in '18, '19, and '20 were essential to Board of Directors'

Direct OTO Action

- Identification of Sustained and Expanded Trail Funding
- Provide Regional Trail Planning Supports
- Target Specific Corridors and Trails for OTO Funding
- Create Trail System Dashboard

Supports offered to OTO Member Jurisdictions

- Support Expansion of Local Funding Options
- Support Establishment Trail Maintenance Program/funding

Figure 17 Destination 2045 Trails Action Plan

focus on trail funding. The overall investment level achieved during this time must be maintained to build 45 miles of new trails by 2045. The omnibus funds allowed the region to reallocate approximately one million dollars of funding each year to the regional trail system. A sustainable source of expanded trail funding could come from several different sources, including increased federal funding associated with a new transportation bill or by reallocating existing STBG-Urban³ funding, as outlined in Figure 18. These replacement funds could be allocated evenly across the planning horizon or grow based on a fixed percentage of overall funding. While establishing a sustainable funding source is important, the region could begin by identifying replacement funds for a specific time horizon.

Possible Sources for Sustained and Expanded Trail Funding		
Next Federal Transportation Bill Includes More Monies		No New Funds
Increased TAP Funds (STBG-Set Aside)	Additional STBG-Urban Funds	Reallocate STBG-Urban Funds
Any additional TAP/STBG-Set Aside funds included will help replace omnibus funds	Any increase in STBG-U funding could be allocated to trails rather than suballocated using the traditional formula. The amount of STBG-Urban funds needed will be dependent on possible TAP increases	The current distribution of STBG-Urban funds could be modified to direct existing funds towards trails.

Figure 18 Possible Sources for Sustained and Expanded Trail Funding

An increase in regional funding in the next federal transportation bill would reduce the prospect of needing to reallocate existing STBG-Urban funds. New STBG-Set Aside⁴ funds could automatically go towards maintaining the recent focus on trail funding. If additional funds were still needed, a portion of any new STBG-Urban funds also could be allocated to trails. If the next transportation bill does not include additional funding, the OTO Board of Directors could elect to redirect existing STBG-Urban funds to regional trails.

Provide Regional Trail Planning Supports

The OTO should continue providing financial and technical support to communities and organizations engaged in the development of trail projects. These supports will ensure a steady pipeline of shovel-ready projects. The OTO is in a special position to fund this work because the work crosses jurisdictional boundaries and does not follow a predictable schedule.

Target Specific Corridors and Trails for OTO Funding

The OTO should develop a strong project selection process to ensure the trails funded with its grant programs connect people and jobs. The HSTN includes

³ STBG-Urban funds are directly allocated to the OTO area for designing and constructing a wide range of transportation infrastructure, including roads, bridges, trails, and sidewalks

⁴ STBG-Set Aside funds are reserved for Transportation Alternatives, including the construction of trails and sidewalks.

corridors with existing trail segments and trail corridors that exist only on paper. The project selection process should prioritize corridors with existing segments and corridors that connect the region's seven cities. While every corridor included in the HSTN would benefit the region, the project selection process must prioritize projects that build a trail system with continuous linkages that connects communities.

Trail System Dashboard

Communicating the implementation of the region's trail vision is vitally important. As such, a dashboard should be developed to share this information with the public. The Dashboard should outline historical implementation; recently awarded and completed trail segments; and show progress towards constructing 45 miles of new trails by 2045. The dashboard should be updated each Spring and Fall to ensure the public is kept current of recent awards and ribbon cuttings.



Supports offered to OTO Member Jurisdictions

The OTO will indirectly implement this plan by offering its support for local funding initiatives and efforts to increase trail maintenance spending. The region can only sustain its recent funding push if our member communities have local match funds. Diversifying funding options makes it easier for individual communities to come up with project funds. Local funding is also critically important if the region's trail network is to be kept in a state of good repair.

Support Expansion of Local Funding Options

The region must provide support for communities wishing to increase local trail funding sources. Ensuring that all communities have a range of funding mechanisms will be critical to maintain the recent focus on trail funding over the next 20 to 25 years. Some communities, such as Christian County, do not have dedicated trails/parks and recreation funding sources, nor do they have the transportation or capital improvements taxes many other communities have. The City of Ozark has a transportation sales tax, but it sunsets in five years. Greene County has two parks and recreation taxes, but one tax is fully sub-allocated to communities within the county, while the other funds basic operations and debt payments. The City of Springfield has more diverse range of funding mechanisms available to construct its expected portion of the 45-mile regional trail goal, but the city is also responsible for a much larger transportation system than other communities. Maintaining and growing the local funding base is critically important if the region is going to achieve its goal of **45 miles of new trails by 2045** and a trail system with continuous linkages that connects communities. OTO support could include assistance in developing project lists, creation of maps, or providing educational materials or presentations.

Support Establishment Trail Maintenance Program/funding

A properly funded trail maintenance program is necessary to keep the region's trail system in a state of good condition through 2045, and beyond. Maintenance has been deferred along many of the region's oldest trails. Each community must have funds available to repair old trails and maintain any new trails that are built within their jurisdiction. The region cannot be successful in creating a a trail system with continuous linkages that connects communities if many of the trails are deteriorated and dangerous to traverse. OTO support could include conducting trail condition inventories, creation of maps, or providing educational materials or presentations.