

SECTION V: PUBLIC PROCESS

The public and stakeholder involvement efforts for the Maryville-to-Townsend Greenway Master Plan were tailored to meet the needs of the communities. We created multiple avenues by which citizens, municipal officials and others could be involved. Four distinct, but related, efforts were incorporated to gather input on the study. They consisted of:

- Three Technical Advisory Committee meetings;
- Four Opportunities & Challenges workshops in April 2013;
- Two Open Houses in July 2013; and
- Two rounds of online and paper surveys (in conjunction with public involvement activities).

Technical Advisory Committee

A project Technical Advisory Committee communicated regularly throughout the planning effort and reviewed materials for public meetings and the draft plan. The committee included government and private sector representatives from Blount County and the Cities of Alcoa, Maryville and Townsend; the Blount County Chamber of Commerce; the Great Smoky Mountains Regional Greenway Council; the Tennessee Department of Transportation; and the Knoxville Regional TPO.

The committee convened three times during the study effort to provide preliminary input to the planning and design consultants, review proposed public involvement materials, refine design recommendations, and review the final plan document. The committee members also supported the Workshop and Open House efforts.

Workshops

A series of four workshops were conducted over two days in April 2013 to gather ideas from citizens and stakeholders about opportunities and challenges along or near the U.S. Highway 321 corridor from Maryville to Townsend. Two evening workshops were held—one each in Maryville and Townsend—along with two day-time workshops in Maryville. More than 80 citizens, municipal officials, planning board members and other stakeholders participated in the workshops.

Each workshop included:

- Introductory presentation about the study and preliminary opportunities and challenges;
- Visual preference survey about greenway design features (during the daytime workshops);
- Facilitated “walkabouts” along the greenways in Maryville and Townsend to showcase greenway design elements and gather ideas;
- One-on-one discussion with participants on the Opportunities and Challenges maps.

The walkabouts were a key component of the effort as a way to showcase greenway usage and encourage physical activity. It is estimated that workshop participants walked a total of 40 miles and took more than 175,000 steps along the greenways in Townsend and Maryville as part of the workshop.

Participants in walkabouts were asked to reflect on four subject areas:

- Vision for the Maryville-to-Townsend Greenway;
- Design features and amenities;
- Connectivity; and
- Economic, health and social impacts.

Each subject area corresponded to a station along the greenway that included features related to the subject area questions. A summary of the most popular ideas from the walkabout are included in Figure 84. During the workshops participants cited the following communities/trails as examples to emulate: Silver Comet Trail in Georgia; Virginia Creeper Trail; Destin, FL, greenways; and Montreal, Quebec, trails.

Figure 84— **Popular Responses from Greenway Walkabouts in Townsend & Maryville**

What is your vision for a greenway connecting Maryville to Townsend?	
<ul style="list-style-type: none"> • Accentuate what we have now • Build the path along the river wherever possible • Keep the greenway buffered from visual & noise pollution • Make the greenway a destination for area residents and tourists • Fit the context: urban vs. rural areas • Connect the area to the Great Smoky Mountains National Park & Foothills Parkway 	<ul style="list-style-type: none"> • Prioritize section from Walland to Townsend • Highlight the native landscape & follow the natural terrain • Promote healthier lifestyles • Preserve its function as a family experience • Provide an alternative transportation option • Bicyclists, pedestrians & other users respect each other • Complete section from Maryville to Heritage High School in 1 to 5 years • Install crosswalks along US 321 in 1 to 5 years in Townsend and Maryville

Design Features & Amenities	Connections	Economics, Safety & Health
<ul style="list-style-type: none"> • Light the trail where necessary • Include mile markers • Highlight native landscape • Provide rest stops, benches, water fountains, shelters, trash cans, recycling bins & picnic areas • Tell a story with historic markers & interpretive areas • Install trailhead information kiosks • Build parking areas • Install wayfinding & other signage • Build bicycle racks at trailheads & destinations • Minimize use of bollards • Include public art 	<ul style="list-style-type: none"> • Build links from greenway to destinations—public & private • Prioritize access to public lands • Install crosswalks at major streets & across US 321 • Provide access to the river for fishing & rafting • Link to pocket parks • Ensure wheelchair access • Connect to schools, library, senior centers & apartments • Build overpasses / underpasses • Signalize major crossings to access destinations 	<ul style="list-style-type: none"> • Separate greenway from highway • Promote the greenway • Road diet / right-sizing of US 321 in Townsend • Organize events on the greenway • Place utilities underground • Schools should use it as nature classroom • Have maps readily available to visitors • Involve local hospitals • Promote goods & services along trail • Allow companies to sponsor sections of the greenway • Incentivize businesses to locate along the greenway

Other comments included:

- Do not restrict the use of electric bicycles (e-bikes);
- Use US 321 right-of-way as much as possible to reduce cost;
- Start a greenway foundation (non-profit) to support fund-raising and maintenance;
- Consider berms along sections of US 321 to separate greenway from highway;
- Consider rock fall potential through Walland Gap / Hatcher’s Cut;



Participants in the workshop were also asked to record their ideas directly on the maps for trail connections, additional opportunities and challenges to be addressed, as well as any other input that they wanted to share. Comments varied from recommendations of the alignment of the greenway on the north side of U.S. Highway 321 to exploring options to connect the greenway from the Foothills Parkway into Townsend bypassing U.S. Highway 321 all together. For the comments recorded on the maps please refer to the Appendix.

Survey

An online and paper survey was developed to gather input from the broader population base and those who could not attend one of the April 2013 workshops. Links to the survey were posted on website for the TPO, municipalities and other stakeholders. The survey was open for four weeks from late March to late April 2013. A total of 90 surveys were completed.

The survey gathered information such as how often the respondent used a greenway, the types of activities for which they use (or would like to use) greenways; place of residence; preferred amenities; and popular destinations that should connect to the greenway.

Figures 85 and 86 illustrate some of the results of the survey. A table of desired amenities and preferred destinations are shown in Figures 87 and 88. Summaries of the survey are included in Appendix A (page 60).

Figure 85— How often do you use greenways or trails in Blount County?

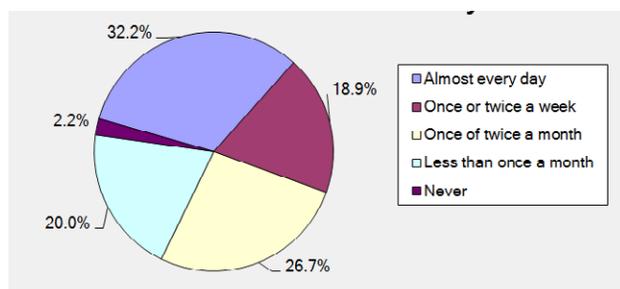


Figure 86— How do you use greenways and trails in Blount County? (multiple responses allowed)

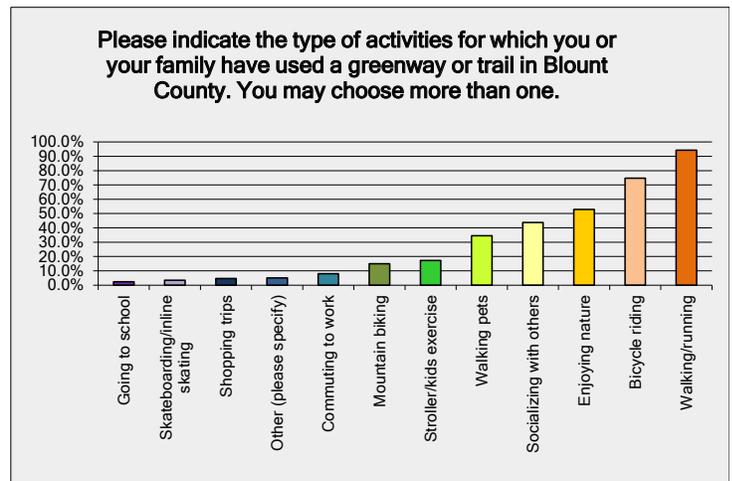


Figure 87— What amenities would you like to see along greenways and trails?

Responses	Response Count
Restrooms	61
Drinking water	59
Trash cans	51
Parking areas at trailheads	46
Directional signs / mile markers	43
Native trees & shrubs	30
Pet cleanup / water stations	30
Pocket parks / open space	28
Wildlife habitat improvements	28
Rest areas / shelters	26
Benches / gathering spaces	25
Picnic tables	22
Community gardens	22
Bicycle parking / lockers	13
Outdoors classrooms	8
Fishing access	7
Bicycle / inline skate rental	6
Interpretive signage	6
Food / beverage concessions	6
Performance space	4
Bus connections to trailheads	3
Volunteer-led tours	2

Figure 88—What are the top places where you think greenway connectivity should be a priority? (Up to 3 each)

Answer Options	Response Count
Other greenways / trails	65
Parks/natural areas	57
Residential areas	28
Schools	25
River/stream corridors	24
Businesses	13
Scenic vistas / ridge tops	13
Recreation centers	12
Athletic fields/complexes	11
Historic sites	7
Transit routes	7
Public buildings	6
Places of worship	1

Interest in volunteering was strong among survey participants, with nearly 80% saying they would volunteer their time to help manage and maintain the facility. When asked how they would like to volunteer, more than 60% said litter patrol; nearly 50% said helping to clean up after storm; and 44% said light maintenance. There was also support from more than 30% of respondents to help plant trees, build improvements and help with events and programs along the greenway.

Open Houses & Final Survey

Two public open houses were advertised and conducted on July 23, 2013 (an afternoon session in Townsend and an evening session in Maryville). The purpose of the open houses was to gather input on the conceptual greenway corridor maps that identified alignment options to link Maryville to Townsend. The conceptual alignments, which also included preliminary facility recommendations, were developed based on public input from the workshops and first round of surveys, as well as from Technical Advisory Committee and consultant input. The drop-in format for

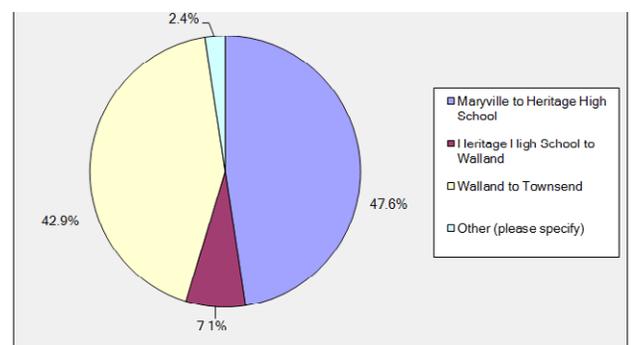
the Open Houses included display boards consisting of the original Opportunities and Challenges Maps displayed at the Workshops, then modified based on input, and three segment maps for distinct areas of the greenway corridor.

The Open House and online survey attracted 42 participants, who were asked to provide their thoughts on the display boards and fill out a short questionnaire, which included the following questions:

- Question 1: Which section of the Maryville-to-Townsend Greenway would you like to see constructed first?
- Question 2: What was the main reason for choosing your preferred section in question 1?
- Question 3: Do you see any other issues or concerns that are unresolved based on what you've seen of the Preliminary Master Plan? Are we missing something? Is there anything else you would like to tell us about the greenway?

The purpose of Question 1 was to determine which segment of the greenway should be pursued as a top priority if funding was not available to construct the entire project at once (Figure 89). More than 47% of respondents (20 total) indicated a preference for the Maryville to Heritage High School section, with many specifically citing lower costs as their reason as well as connecting to the existing greenway network. Almost 43% of respondents (18 total) indicated Walland to Townsend was their preference. One-third of

Figure 89—Which section of the Maryville to Townsend Greenway would you like to see constructed first?



respondents said the main reason for their choice of preferred segment was that it would attract the most users, and 19% indicated that economic impacts and tourism as their reason for choosing the Walland to Townsend segment.

In Question 3 responses, there was still sentiment regarding placing the greenway as far away from US 321 as possible, but many also recognized the cost and other feasibility issues. Otherwise, the comments were very supportive of the greenway.



"Good idea--very challenging and expensive to do it right... The more quiet, beautiful, and natural it is, the more people will want to use it."

-Public workshop attendee

SECTION VI. ECONOMIC, HEALTH & SOCIAL IMPACTS

The proposed Maryville-to-Townsend Greenway will consist of more than 13 miles of trail paralleling the existing transportation infrastructure for most of its route. Greenway construction is expected to cost \$24,460,000. The greenway will pass through a relatively undeveloped portion of Blount County with low population densities and end near the Great Smoky Mountains National Park. Like the Great Smoky Mountains National Park, the greenway will have a significant economic impact on the economy of Blount County. Over the first 10 years of the project, the project’s economic impact is expected to be \$65,089,948. Therefore, each dollar that is spent over the 10-year period for construction and maintenance will return \$2.66 in increased economic activity. A detailed description of the methodology used and tables containing annual economic impacts for construction spending, facility maintenance spending and non-local user greenway spending are located in Appendix B: Economic Impact Methodology.

Maryville-to-Townsend Greenway: An Economic Engine

Construction Impacts

Preliminary cost estimates indicate that the project’s construction costs will total approximately \$24,460,000. While the specific timing of the greenway’s construction is uncertain, it is reasonable to estimate that the project’s construction will be spread over 10 years. Given the fluid nature of the construction schedule, it is impossible to assign detailed construction expenditures to specific dates. However, a reasonable and conservative estimate of the projects construction impacts can be derived if the project’s construction costs are prorated over each year of the anticipated construction period.

A word of caution is appropriate when interpreting construction impacts. Economic impacts arising out of construction spending are specific to a construction period. Each year’s employment impacts are associated with that year only. In order to avoid double counting,

Figure 90—Phasing Diagram

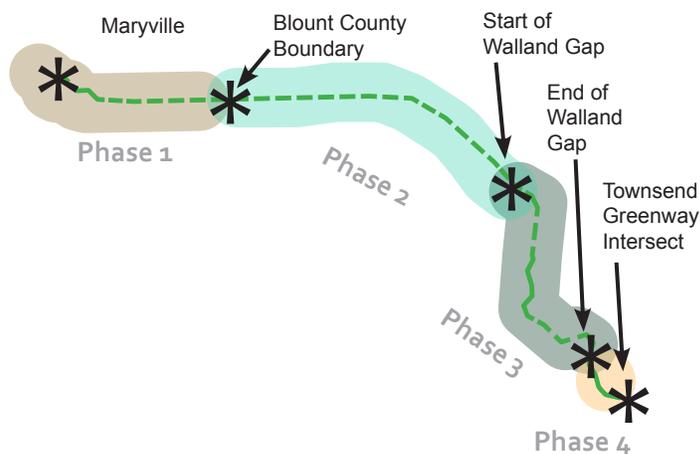


Figure 91—Potential Cost Per Phase

PHASE	COST
Corridor 1 (The Town Corridor)	\$665,000
Corridor 2 (The Suburban Corridor)	\$2,510,000
Corridor 3 (Rural/ Steep Wooded Corridor)	\$21,149,000
Corridor 4 (The Mountain Town)	\$136,000
TOTAL:	\$24,460,000

Figure 92—Total Economic Effect (First 10 Years)

Type of Expenditure	Economic Impact
Construction Activities	\$36,297,434
Maintenance Expenditures	\$697,424
Non-Local User Expenditures	\$28,095,090
Total	\$65,089,948

Note: beginning 2015

employment impacts (jobs) should not be treated as cumulative. For example, a job that originates in 2014 may continue through 2015. It would therefore be inaccurate to report the creation of two jobs, one in

2014 and another in 2015. Accordingly, job creation for multi-year projects is reported on an annual basis.

The estimated economic impacts for the greenway's construction are based upon the assumption that 10% of the construction budget will be spent during each year over the 10-year construction period. This may be unrealistic given that construction expenditures can be larger in some years than in others. However, in the absence of a clear construction schedule it is a necessary accommodation.

Each year the project is expected to require the expenditure of \$2,446,236. This direct spending will generate annual total economic impacts, expressed in constant 2013 dollars, of approximately \$3,629,744 in output, \$1,616,734 in labor income, which will support 33 jobs.

Maintenance Expenditure Impacts

Based on costs for maintenance from other greenways, it is estimated that the Maryville-to-Townsend Greenway will require ongoing maintenance expenditures that will remain relatively constant at approximately \$4,515 per year per mile. It is anticipated that these expenditures will begin in 2015 and will continue over the life of the trail. Direct spending associated with maintenance activities will annually result in total economic impacts of \$87,178 in output, \$16,791 in labor income, which will support one job within the county.

User Expenditure Impacts

Tourism is the second largest industry in Tennessee and generates a \$15 billion impact throughout the state. Blount County, partially due to its proximity to the Great Smoky Mountains National Park, ranks 8th in the state in terms of tourism impact, generating an impact of \$312 million and a \$77 million payroll. It is anticipated that the Maryville-to-Townsend Greenway will prove to be an attraction to both day visitors and tourists visiting the National Park. Spending by greenway users will generate economic impacts for Blount County. However, as noted in their study of the proposed Coastal Georgia Greenway (CGG), Michael J. Toma and his associates indicate that, "...the degree to which CGG trail users are local residents or non-local visitors will significantly affect the economic impact. Non-local trail users inject income into the region by their expenditures on lodging and in restaurants, retail stores, and gas stations."

Spending by local greenway users tends to not result in new economic impacts. This is due to the fact that economic impacts are based upon the number of new

dollars that are spent in the study region. Spending by local users is assumed to be "displacement spending." That is, spending by local greenway users tend to be dollars that they would have spent elsewhere in the community had the greenway not been available. Hence, this spending does not result in any new economic activity and therefore creates no new economic impact.

As shown in Appendix B, it is estimated that there will be 109,500 greenway users each year (65,700 local users and 43,800 non-local users). Non-local users' daily expenditures are estimated to be \$43.22 per user based upon average expenditures during local day trips by visitors to national parks. Direct spending associated with these non-local greenway users will result in total annual economic impacts of approximately \$2,809,510 in output, \$1,002,715 in labor income, which will support 34 jobs within the county.

Tax Impacts

As an outgrowth of greenway construction spending, maintenance spending and user spending federal, state and local tax collections are also generated. Construction activities will generate approximately \$359,110 in taxes annually. Of this amount, \$169,862 represents state and local tax collections. Annual greenway maintenance spending will generate \$7,753 annually of which \$3,322 will be state and local taxes. Tax collections associated with expenditures by non-local trail users will amount to approximately \$359,100 annually with \$169,862 representing state and local tax collections.

Over the 10-year period, total taxes generated are estimated to be \$7,206,934 of which \$2,668,106 will be state and local taxes. Given the importance of sales taxes to state and local governmental operations in Tennessee it is clear that the greenway's construction and ongoing operation will have a significant impact upon the state and the county.

Social Impacts & Benefits

As noted above, economic impact estimates are based upon the spending associated with non-local trail visitors. This is not to infer that there is no value that accrues to local users of the greenway. Numerous economic studies have demonstrated that recreational greenway and trail users place a very real value upon their activities. These values are often estimated using Contingent Valuation Methods (CVM) which

Figure 93—Blount & Surrounding County Health Rankings

County	Overall Health Outcomes Rank (of 95)	Health Factors Rank	Health Behaviors Rank	Social & Economic Factors Rank	Physical Environment Rank
Blount	4	6	16	5	59
Knox	14	2	4	6	62
Loudon	7	10	21	11	69
Monroe	23	84	93	75	21
Sevier	25	40	33	42	58

are typically based upon surveys of users who are asked to place a dollar value upon their recreational experience. The survey process is time consuming and often relatively expensive. As a result, other methods of valuing recreational activities have been developed. One of these is the Unit Day Values for Recreation method developed by the U.S. Army Corps of Engineers.

Unit Day Values are dollar values assigned to recreational activities based upon a scoring system. A recreational activity is assigned points based upon a variety of factors including the availability of the opportunity for users, the degree to which facilities are developed and appropriate for the activity, accessibility and the aesthetic quality of the environment. The Unit Day Values for 2013 are shown in Figure 102: Economic Impact Methodology. Using these values, it is possible to assign a dollar value that can be thought of as how much each local user would be willing to pay each time they use the greenway. While this value is not included in the economic impact analysis, it nevertheless represents a real benefit to the greenway’s users.

Using the Army Corps of Engineers’ Guidelines for Assigning Points for General Recreation, a point value of 50 was assigned to activities associated with the greenway. This is in keeping with the point value that was used in the impact study of the Proposed Carolina Thread Trail. This results in the assignment of a value of \$8.07 for each local user’s greenway experience. This means that local users would be willing to pay \$8.07 for the use of the greenway. This yields an estimated recreational value of \$530,199 per year (\$8.07 x 65,700 local users) that will accrue to local users each year.

Health Impacts

Determining the potential health impacts of the Maryville-to-Townsend Greenway does not lend itself to the same types of econometric modeling associated with the economic and social impact analysis. However, it is likely that construction of the greenway will improve the health of children, adults and senior citizens of Blount County and surrounding areas. In terms of overall health statistics, Blount County performs well when compared to other counties in Tennessee, ranking 4th out of 95 counties in the 2013 County Health Rankings compiled by the University of Wisconsin.¹ Figure 93 shows Blount County’s rankings in comparison to neighboring county rankings.

Such a positive overall health ranking indicates Blount County residents have mortality and morbidity rates that are below the state average. Several of the metrics within the health rankings provide insight as to how Blount County ranks and how the greenway can impact certain elements of these rankings.

Blount County has physical activity rates higher than the state average, but access to recreational facilities is 25% lower than the Tennessee average and less than half of the national benchmark. This is a contributing factor to Blount County’s Physical Environment rank being 59 out of 95. The Physical Environment metrics also included drinking water safety, pollution, limited access to healthy foods and percent of fast food restaurants. In general, Blount County performs at or better than the state average for these criteria.

¹ County Health Rankings & Roadmaps: A Healthier Nation, County by County. Blount County, Tennessee statistics, 2013. <http://www.countyhealthrankings.org/app/tennessee/2013/blount/county/outcomes/overall/snapshot/by-rank>. Retrieved September 9, 2013.

Figure 94—Blount & Surrounding County Health Rankings

	Adult obesity	Physical inactivity	Pollution	Access to recreational facilities	Poor physical health days	Poor mental health days
County	(% of adults with BMI > 50)	(% of adults aged 20 and over reporting no leisure time physical activity)	(avg. daily measure of fine particulate matter per cubic meter)	(rates of recreational facilities per 100,000 population)	(avg. number of physically unhealthy days reported in a 30-day period)	(avg. number of mentally unhealthy days reported in a 30-day period)
Blount	33%	27%	14.0	6	3.2	2.6
Knox	31%	28%	14.0	10	4.0	3.4
Loudon	31%	30%	14.1	6	3.9	3.5
Monroe	34%	32%	13.8	7	4.4	2.8
Sevier	30%	29%	13.9	7	4.2	2.8
Tennessee	32%	30%	13.9	8	4.2	3.3
National Benchmark*	25%	21%	8.8	16	2.6	2.3

Above state average
 Below state average

* 90th percentile for the United States; only 10% of counties have a better value than this.

Two particular “areas to explore” identified in the County Health Rankings for Blount County are adult obesity and daily fine particulate matter, each of which could see positive effects with the completion of the Maryville-to-Townsend Greenway. The adult obesity rate (defined as percentage of adults reporting a Body Mass Index greater than 50) is 33% of the county population, which is similar to Tennessee’s overall rates (32%) but well above the national benchmark of 25%. Figure 93 indicates county-by-county health statistics for factors upon which greenways are likely to have a positive influence.

Figure 94 is a qualitative analysis of how investing in new greenways, such as the one planned to connect Maryville to Townsend, can impact these health factors:

- **Adult Obesity:** Increased levels of physical activity can be a major factor in reducing adult obesity.²

- **Physical Inactivity:** Convenient access to nearby greenways can affect physical activity levels among adults and children. The more connections made by the

² Centers for Disease Control and Prevention. (2012). Overweight and obesity: Strategies and solutions. Retrieved from <http://www.cdc.gov/obesity/childhood/solutions.html>

greenway or the longer distance one can walk, bike, run or perform other physical activities can increase usage rates.^{3 4}

- **Daily Fine Particulate Matter:** Greenways that evolve into transportation facilities provide greater choices for people to take daily transportation trips via the greenway rather than by automobile. Lower rates of automobile usage reduce the amount of pollution in the air.⁵

- **Access to Recreational Facilities:** Greenways can be defined as linear parks and can link recreational facilities, thus providing greater access for a broader segment of the population.⁶

- **Poor Physical Health Days:** Since greenways promote

³ Brownson, R., Baker, E., Housemann, R., Brennan, L., & Bacak, S. (2001). Environmental and policy determinants of physical activity in the United States. *American Journal of Public Health*, 91(12), 1995-2003.

⁴ Addy, C., Wilson, D., Kirtland, K., Ainsworth, B., Sharpe, P., & Kimsey, D. (2004). Associations of perceived social and physical environmental supports with physical activity and walking behavior. *American Journal of Public Health*, 94(3), 440-443.

⁵ Centers for Disease Control and Prevention. (2009). Healthy places: Respiratory health and air pollution. Retrieved from <http://www.cdc.gov/healthyplaces/healthtopics/airpollution.htm>

⁶ Wilson, D., Kirtland, K., Ainsworth, B., & Addy, C. (2004). Economic status and perceptions of access and safety for physical activity. *Annals of Behavioral Medicine*, 28(1), 20-28.

greater physical activity, they have the potential to reduce the number of days people are sedentary.⁷

- **Poor Mental Health Days:** Studies have shown that greenways and other natural open space features can positively impact one's mental health.⁸

Broad Health Effects of the Greenway

The degree to which these factors are influenced by construction of the Maryville-to-Townsend Greenway will ultimately depend on the type of usage the greenway receives, how well it is linked to existing sidewalks and greenways, and how well it is promoted via programs and events to encourage more people to use it. Figure 95 on the next page outlines the potential health effects of three different types of greenway-related investments: the greenway itself, crosswalks to access the greenway, and sidewalk linkages to the greenway.

The economic and social analysis element of this study estimated the likely number of local and non-local users for the Maryville-to-Townsend Greenway. While health models related to usage are not as time-tested as economic models, they can be incorporated into health impact analysis to gain an order of magnitude perspective on the likely health impacts to the population. The economic analysis estimated 29,000 local and almost 20,000 non-local users annually for the greenway.

Based on Blount County statistics from the US Census and the American Community Survey, the Physical Inactivity Cost Calculator was used to estimate the community-wide costs related to medical care, workers compensation insurance and loss productivity. The results are that an estimated \$258 million per year (approximately \$2,100 per person) in costs are incurred by the community due to physical inactivity. The Cost Calculator estimates that if there was an overall increase of 5% of Blount County residents who became physically active (putting it on par with the National Benchmark), it could save the community an estimated \$13 million per year.

7 Fitzhugh, E., Bassett Jr., D., & Evans, M. (2010). Urban trails and physical activity: a natural experiment. *American Journal of Preventive Medicine*, 39(3), 259-62.

8 Van den Berg, A., Maas, J., Verheij, R., & Groenewegen, P. (2010). Green space as a buffer between stressful life events and health. *Social Science & Medicine*, 70(8), 1203-10.

Figure 95—Greenways and Related Facility Types & Potential Health Effects

Facility Type	Description	Health Effects (▲ = positive; ▼ = negative)
<p>Building a new greenway/ side path</p>	<p>Greenways and side paths are multi-use trails designed to provide safe bicycle and pedestrian travel for people of all ages and abilities. As transportation, they often travel along other protected corridors or rights-of-way such as rivers and streams, railroads and roads. Ideally they are separated by a buffer from roads and railroads to promote the safety and comfort of trail users.</p>	<ul style="list-style-type: none"> ▲ Removes user from roadways, potentially reducing conflicts with motor vehicles. ▲ Dedicated pedestrian/bicyclist space. ▲ Connects land uses other than by roadway. ▲ Provides stable and predictable walking surface. ▼ If isolated, perception of danger heightened. ▼ Variability in user type/speed could lead to bike/pedestrian, or bike/bike crashes. ▼ If too far outside of peripheral vision of motorists, crash rates at intersections increased.
<p>Marking Crosswalks</p>	<p>Providing marked crosswalks as a designated space for pedestrians and bicyclists to cross a street to access the greenway, neighborhood or nearby land use. Crosswalks are marked either at an intersection or mid-block. Crosswalk design can range from simple paint schemes, to more complex design including the use of pedestrian or traffic signals, pedestrian countdown signals, auditory devices and refuge islands.</p>	<ul style="list-style-type: none"> ▲ Fosters pedestrian/bicyclist movement at predictable locations. ▲ Allow accessibility to nearby land uses. ▲ Heightens awareness for pedestrian presence to drivers. ▲ Some design features can calm traffic and reduce severity of possible crash. ▼ Without maintenance, crosswalks can lose both reflective properties and visual prominence. ▼ Crosswalks generally put pedestrians in direct line with motorists. Use is principally dependent on driver compliance.
<p>Providing Sidewalk Connections to Greenways</p>	<p>It is not likely that a large number of people will reside adjacent to the greenway, meaning they must access the greenway through walking, biking or driving. Linking sidewalks from existing neighborhoods, institutions or commercial uses to the greenway should be made a priority during and following greenway construction.</p>	<ul style="list-style-type: none"> ▲ Provides stable and predictable walking surface that connects to the greenway. ▲ Heightens profile and presence of pedestrians to motorists. ▲ Space between sidewalk and street can be used for providing street furniture, signage, vegetation. ▲ Is not prone to flooding, roadway debris, or rutting like softer surfaces. ▲ Provides space for children to ride their bikes to access the greenway. ▼ Initial construction can generate noise, dust, and potential stress. ▼ Placing sidewalks adjacent to high-speed, high-volume street may not maximize safety for pedestrians. ▼ Sidewalks built to minimum standards that connect greenways can attract other non-motorized users, creating conflict among users potentially increasing crash risk with other non-motorized users.

SECTION VII. OVERALL RECOMMENDATIONS

Overall Recommendations

There are several actions to be undertaken over the next several years to bring to fruition the vision for this greenway and the larger regional vision of a trail connecting Knoxville to the Great Smoky Mountains National Park. The amount of resources allocated to implement the recommendations of this Plan will determine when certain projects are realized. This chapter contains recommendations and action steps intended to help guide development of the proposed greenway. These recommendations focus on implementation of the greenway and are based on key themes with associated action steps. They are not in priority order. Rather, the recommendations should be reviewed and prioritized on an annual basis with the Knoxville Regional TPO and the Great Smoky Mountains Regional Greenway Council as well as with the City of Alcoa, Blount County, the City of Maryville, the City of Townsend, the Maryville-Alcoa-Blount County Parks & Recreation Commission, the Blount Partnership, and the Tennessee Department of Transportation.

Funding

Identify Strategic Grant Opportunities—

Work with County & City leaders, non-profits, local and regional governments, and major employers to methodically identify the most appropriate funding sources. Consider new and innovative opportunities and trends in funding such as the current opportunities with health-related programs.

Identify Funding Sources—

Create a database of all potential funding sources for greenway implementation and work with partners in pursuit of funding.

Secure Local Funding Commitments—

Identify and ensure adequate and dedicated funding through the local governments' annual Capital Improvement Programs for implementation of the greenway and future maintenance.

Phasing—

While the Walland Gap section of the greenway is going to be the most costly to construct, it will serve as landmark greenway segment and a destination for locals and tourists along the entire greenway system and should be a top priority.

Build Connectivity—

Construct the greenway in phases, building no less than 1-mile segments at a time that connect to existing greenways, schools, or significant destinations.

Utilize Existing Infrastructure—

Greenways should be constructed from the existing Maryville and Townsend greenways (the bookends of this greenway corridor) inwards toward the suburban section of the greenway corridor.

Conduct Detailed Plans for the 4 Corridors—

Continue building on the momentum of the Master Plan by working toward the design development of the corridors. Such work should include permitting and development of detailed construction documents.

Partnerships—

Formalize existing partnerships and pursue new partners with public and private sector interests to help with future greenway needs including funding, stewardship, and promotion of the greenway

Coordinate with TDOT and Utility Providers—

Work to ensure that greenway connectivity can be maintained and coordinate with any road or utility upgrades and improvements to make provisions for implementation of sections of the greenway corridor.

Determine a Framework for Responsibilities—

Convene all partners to determine phasing and "ownership" of actions to implement the greenway as well as determining maintenance responsibilities.

Design

Design Matters—

Create a sense of place and identity of the greenway through hardscape, landscape, built structures, and signage that reflects the location of the different corridors of the greenway based on typologies. The design of the trail system creates a very clear message about whether it is safe and worthwhile to walk or bike to a place. Gateway treatments and attractive designs of connecting links between trails and important destinations are critical to generating more trail usage.

Develop Design Guidelines for U.S. Hwy 321—

Coordinate with TDOT to define future access as U.S. Highway 321 corridor develops. Guidelines that address access are needed to create a safe and quality greenway experience. The guidelines should ensure that, as redevelopment occurs along the corridor, excess driveways are eliminated and the width of driveways is narrowed. This will reduce potential vehicle and bicycle/pedestrian conflicts.

Pedestrian Bridges—

Several bridges will be required along the length of the corridor and to promote connectivity. In the case that any bridges in municipalities are decommissioned for motor vehicle use, they may be reused for pedestrians, especially if the bridges are deemed historic.

Provide Signage—

Develop consistent maps, trail signage, and directional information to key destinations as well as to restrooms, water fountains, assistance, and nearby greenway-related business (bike shops, restaurants, etc.) along the greenway. This is important to help out-of-town visitors navigate the greenway. In addition to assisting with wayfinding, signage can also provide cues and awareness for motorists and gateways/ branding elements for the greenway and communities.

Landowner Outreach & Marketing

Create a Landowner Outreach Program—

If trail sections along the Little River are preferred, develop and adopt a landowner outreach program that includes strategy, process, and protocol to start landowner outreach and voluntary land acquisition for the greenway. This should include an education element to promote the benefits of greenways.

Acquire Easements from Willing Landowners—

Reach out immediately to landowners who may be amenable to the greenway trail crossing through their land (such as schools and conservation properties) and secure greenway easements.

Identify an Entity to Hold Easements—

A partnership should be considered with the Foothills Land Conservancy or other non-profit to hold easements for greenways within this corridor.

Community Branding—

Work with tourism agencies and municipalities to identify community branding opportunities along the greenway. This might also include the opportunity to promote greenway related businesses or services (i.e. bike repair and restaurants) and “sharing” programs such as allowing greenway users access to restroom facilities in exchange for promotion of the business.