1 Introduction and Background

1.1 What is Active Transportation?
Active transportation refers to multimodal transportation solutions that connect people of all ages and abilities to where they need to go using active modes such as walking, bicycling and taking public transit.

1.2 Purpose of this Plan
The Active Transportation Plan (ATP) recognizes and builds on existing policy from Transportation 2040 and VISION 2040. The purpose of the ATP is to advance many of these policies through implementation of active transportation in the Puget Sound region. This plan describes the need for active transportation, provides guidance and resources for local jurisdictions for developing their bicycle and pedestrian elements, and describes how the region is working together to support active transportation. The ATP also articulates the multiple benefits of active transportation.

1.3 Goals of the Active Transportation Plan

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<th>GOAL 1</th>
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<td>Increase the number and frequency of people choosing active transportation in the region</td>
<td>Improve safety and comfort for active transportation users</td>
<td>Contribute to the creation and completion of an active transportation network that connects within and between regional centers, improves access to transit and is accessible to everyone</td>
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GOAL 4
Provide guidance for jurisdictions to build robust multimodal measurement and monitoring systems

GOAL 5
Demonstrate how investments in active transportation help to achieve the PSRC’s VISION 2040 triple bottom line of people, prosperity and planet
Background

The Puget Sound region has a long history of active transportation. In the 1890s, it was common for people to walk to transit, to bicycle and to combine ferry trips with walking and bicycling. Both Tacoma and Seattle had streetcar systems and the first interurban railroad connected Renton to Seattle through the Rainier Valley. These cities also had more than 65 miles of bicycle paths, with additional connections from Tacoma to Puyallup and Lakewood. The region had a “dedicated bicycle toll road” connecting Seattle to other Puget Sound communities.” The bike path system connected public roadways and provided some of the “first public access to some of the undeveloped areas of the city.” Seattleites would take their bikes onto the ferry to Tacoma to ride the "longest, highest and only exclusive bicycle bridge in the world," then bike to American Lake for an all-day adventure. Second Avenue in Seattle (and numerous areas in the region) had booming bicycle-related businesses. Bicycle clubs thrived, advocated for more bicycle paths, and helped to maintain and build them. Everybody was, and still is, a pedestrian.

After decades of investing in and optimizing the public right of way for automobile use, bicycling and walking have become less integrated into the transportation system. More recently, there has been a growing call to link active transportation with land use and transportation decisions and a growing understanding of the benefits of active transportation (reduced congestion and emissions, and increased physical activity and health benefits). Through VISION 2040 and Transportation 2040, the region has committed to provide a more efficient and accessible public transportation system serving compact, walkable, and livable communities. Reaching this goal requires investment in active transportation.

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1.4 Policy Guidance

Relationship to VISION 2040 and Transportation 2040

VISION 2040 is the region’s long-range growth management, economic, and transportation strategy to accommodate the 5 million people expected to live in the region by 2040.

A core concept of VISION 2040 is improving the safety of the transportation system for drivers, freight, transit riders, pedestrians, bicyclists and others. Multicounty planning policies\(^2\) adopted in VISION 2040 call for designing transportation facilities to serve all users safely and efficiently. The plan focuses on integrating land use and transportation strategies and on building and improving the region’s pedestrian and bicycle infrastructure. These strategies reduce the need for driving alone and create a better environment for walking and bicycling. Active Transportation supports many of the VISION 2040 multicounty planning policies (MPP), which are cited throughout this document.

Transportation 2040 (T2040) is the transportation action plan for the central Puget Sound region. Transportation 2040 recognizes active transportation as a critical element of the region’s greenhouse gas reduction and mobility strategies, and calls for providing more and safer opportunities to walk and bike. The plan states that the region’s “sidewalks, bike lanes, bikeways and trails support a significant and growing amount of regional transportation.”

The Active Transportation Plan updates the **2003 Bicycle and Pedestrian Implementation Strategy** and incorporates and builds on these original objectives:

- Supporting local networks and associated programs
- Integrating bicycle and pedestrian travel into the overall regional transportation system
- Objectives regarding capital investments, education and encouragement, enforcement, transportation and growth planning, analytical tools and monitoring progress

The Regional **Bicycle and Pedestrian Advisory Committee (BPAC)** worked closely with PSRC staff in forming the recommendations that guided the development of this Active Transportation Plan. These near-term implementation actions for both the BPAC and PSRC staff will guide the development for the next BPAC work program. These implementation actions are outlined below:
ACTIVE TRANSPORTATION GOALS AND ACTION PLAN

GOAL 1 - INCREASE THE NUMBER AND FREQUENCY OF PEOPLE CHOOSING ACTIVE TRANSPORTATION IN THE REGION

The Active Transportation plan provides policy guidance, resources and recommends that local jurisdictions incorporate pedestrian and bicycle elements into projects, programs, local area plans and comprehensive plans.

**ACTION ITEMS:**

The Bicycle and Pedestrian Advisory Committee will:

- work to increase representation on the BPAC with more diverse stakeholder groups
- coordinate with other PSRC Committees including having representation on the Regional Project Evaluation Committee
- foster regional collaboration to increase active transportation by coordinating on projects, data collection and encouraging cross jurisdictional partnerships

PSRC Staff will:

- work with growth management staff to inform the comprehensive plan review process
- assist the implementation of education and encouragement programs by providing resources and exploring collaborative opportunities
- educate regional partners and promote the Active Transportation Plan by conducting outreach activities

GOAL 2 - IMPROVE SAFETY AND COMFORT FOR ACTIVE TRANSPORTATION USERS

The Active Transportation Plan calls for safer and more comfortable pedestrian and bicycle facilities so that all users of the system feel safe as they access local and regional destinations.

**ACTION ITEMS:**

PSRC staff and the BPAC will:

- evaluate pedestrian and bicycle safety issues and identify needs and opportunities for regional collaboration
- develop safety materials as a local resource for bicycle and pedestrian safety programs

GOAL 3 - CONTRIBUTE TO THE CREATION AND COMPLETION OF AN ACTIVE TRANSPORTATION NETWORK THAT CONNECTS WITHIN AND BETWEEN REGIONAL CENTERS, IMPROVES ACCESS TO TRANSIT, AND IS ACCESSIBLE TO PEOPLE OF ALL AGES, ABILITIES, RACES, AND INCOME GROUPS

The Active Transportation plan emphasizes complete networks as the first step to creating safer pedestrian and walking environments. It emphasizes that communities should consider access to centers and transit as well as accommodating people of all ages, abilities and people historically underserved when planning for pedestrians and bicyclists.
ACTION ITEMS:
PSRC staff and the BPAC will collaborate regionally to:

• raise awareness and continue to foster collaboration to support the development of the Regional Bicycle Network
• continue to seek funds for regional bicycle network
• engage in PSRC project selection process to strengthen pedestrian and bicycle criteria

PSRC Staff will:
• maintain and update PSRC website resources to support local network planning and for resource data to support our members (pedestrian shed tool, counts, bicycle facilities data set, photo bank)
• support bicycle and pedestrian multimodal integration into regional transportation networks, data collection and modeling tools

GOAL 4 - PROVIDE GUIDANCE FOR JURISDICTIONS TO BUILD ROBUST MULTI-MODAL MEASUREMENT AND MONITORING SYSTEMS

The Active Transportation plan provides a wealth of resources regarding data collection and monitoring, including information on multi-modal level of service approaches.

ACTION ITEMS:
PSRC staff and the BPAC will collaborate regionally to:

• inform the T2040 and VISION 2040 performance monitoring efforts currently being developed
• develop targets related to T2040 monitoring efforts as called for by MAP21 to be incorporated into future updates of this plan
• coordinate with stakeholders on data collection that supports T2040 and VISION 2040 monitoring

PSRC Staff will:
• work with growth management staff as ‘technical experts’ when local jurisdictions opt for PSRC review of comprehensive plans during their development process
• provide guidance for local development of multimodal level of service and local monitoring programs

GOAL 5 - DEMONSTRATE HOW INVESTMENTS IN ACTIVE TRANSPORTATION HELP TO ACHIEVE THE PSRC’s VISION 2040 TRIPLE BOTTOM LINE OF PEOPLE, PROSPERITY, AND PLANET

The Active Transportation Plan provides research for how active transportation meets the policy goals in VISION 2040 and outlines how active transportation benefits people, prosperity and planet.

ACTION ITEMS:
The Bicycle and Pedestrian Advisory Committee will:
• participate in future opportunities to enhance prioritization measures for Transportation 2040

PSRC Staff will:
• provide guidance for local jurisdictions as they incorporate health and equity into the decision making process
1.5 Relationship to State and Federal Policy

On March 11, 2010, the United States Department of Transportation (USDOT) provided this Policy Statement\(^3\) to reflect the department’s “support for the development of fully integrated active transportation networks:”

> The establishment of well-connected walking and bicycling networks is an important component for livable communities, and their design should be a part of Federal-aid project developments. Walking and bicycling foster safer, more livable, family-friendly communities; promote physical activity and health; and reduce vehicle emissions and fuel use. Legislation and regulations exist that require inclusion of bicycle and pedestrian policies and projects into transportation plans and project development. Accordingly, transportation agencies should plan, fund, and implement improvements to their walking and bicycling networks, including linkages to transit. In addition, DOT encourages transportation agencies to go beyond the minimum requirements, and proactively provide convenient, safe, and context-sensitive facilities that foster increased use by bicyclists and pedestrians of all ages and abilities, and utilize universal design characteristics when appropriate. Transportation programs and facilities should accommodate people of all ages and abilities, including people too young to drive, people who cannot drive, and people who choose not to drive.

The U.S. Code\(^4\) calls for the “integration of bicycling and walking into the transportation mainstream. More importantly, it enhances the ability of communities to invest in projects that can improve the safety and practicality of bicycling and walking for everyday travel.”

Section 217 of Title 23

The Federal Highway Administration\(^5\) (FHWA) calls for the design and development of the transportation infrastructure to improve conditions for bicycling and walking, including:

- The design and construction of new facilities should anticipate likely future demand and not preclude the provision of future improvements. (More information about future demand can be found in section 1.3 – latent demand.)

  For example, a bridge that is likely to remain in place for 50 years, might be built with sufficient width for safe bicycle and pedestrian use in anticipation those facilities will be available at either end of the bridge even if that is not currently the case.

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• Addressing the need for bicyclists and pedestrians to cross corridors as well as travel along them. Even where bicyclists and pedestrians may not commonly use a particular travel corridor that is being improved or constructed, they will likely need to be able to cross that corridor safely and conveniently. Therefore, the design of intersections and interchanges shall accommodate bicyclists and pedestrians in a manner that is safe, accessible and convenient.

• Getting exceptions approved at a senior level. Exceptions for the non-inclusion of bikeways and walkways shall be approved by a senior manager and be documented with supporting data that indicates the basis for the decision.

• Designing facilities to the best currently available standards and guidelines. The design of facilities for bicyclists and pedestrians should follow design guidelines and standards that are commonly used.

Federal guidance for Metropolitan Planning Organizations\(^6\) - It is Federal transportation policy to promote the increased use and safety of bicycling and walking as transportation modes and FHWA recommends the bicycle and pedestrian plan elements of Metropolitan and State plans should contain supportive policy statements and goals as well as, whenever possible, the inclusion of specific projects and programs.

The Washington State Bicycle Facilities and Pedestrian Walkways Plan\(^7\) sets the following statewide goal: “increase bicycling and walking five percent per year for the next 20 years while reducing injuries and deaths.” This plan also establishes objectives and performance measures in each of the state’s five transportation policy areas (as established in state law, RCW 47.04.28001.012).

- **Preservation:** Ensure no net loss in pedestrian and bicycle safety, and mobility.
- **Safety:** Target safety investments toward known risk factors for pedestrians and bicyclists.
- **Mobility:** Increase bicycling and pedestrian transportation choices.
- **Environment:** Walking and bicycling will be part of Washington State’s strategy to improve public health and address climate change.
- **Stewardship:** Improve the quality of the transportation system by improving transportation access for all types of pedestrians and bicyclists, to the greatest extent possible.

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According to the Washington State Growth Management Act (RCW 36.70a.070), comprehensive plans should include “collaborative efforts to identify and designate planned improvements for pedestrian and bicycle facilities and corridors that address and encourage enhanced community access and promote healthy lifestyles.”

2010 FHWA POLICY STATEMENT ON BICYCLE AND PEDESTRIAN ACCOMMODATION

“Every transportation agency, including [Federal] DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide – including health, safety, environmental, transportation, and quality of life – transportation agencies are encouraged to go beyond minimum standards to provide safe and convenient facilities for these modes.” Federal Highway Administration

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1.6 The Benefits of Bicycling and Walking

Active transportation benefits people, the environment, and the transportation system. People who walk, bike and take transit are more likely\(^9\) to get the physical activity they need every day than those who drive. They are benefiting the community simply by being out and about. Jane Jacobs, the acclaimed urban planner, said\(^10\) that “a well-used city street is apt to be a safe street,” and noted that the qualities of a safe street include good lighting, people and children on the sidewalks with “eyes on the street” from businesses and public places. People out walking and bicycling are also more likely to frequent local businesses and often spend more money locally\(^11\) than those who drive. The environment benefits from reduced emissions, and the transportation system benefits from reduced traffic congestion and improved connections to transit.

Transportation Benefits

VISION 2040 calls for reducing vehicle miles traveled by increasing alternatives to driving alone. In the Puget Sound region, 38% of daily person trips in vehicles are less than three miles long, which is the length of an average bicycle trip (2006 PSRC Household Travel Survey). In addition, Transportation 2040 calls for increasing travel choices. Implementing active transportation policies, programs and projects increases choices, reduces traffic congestion and also reduces the demand for parking spaces. In addition, making the “first and last mile” to and from public transit is an added benefit to the transportation system. “Bicycles are the ‘no-brainer’ of American mobility” according to a Federal Transit Administration quote in a 2009 Federal Register Notice (Docket No. FTA-2009-0052).

Environmental Benefits

VISION 2040 recognizes the important relationship between a healthy natural and built environment and healthy people. As a result, health issues, including limiting pollution and reducing transportation’s impact on health, are addressed throughout VISION 2040. Data shows that emissions of air pollutants and greenhouse gases increase with vehicle miles driven.

Increased bicycling and walking reduces the reliance on driving and therefore reduces emissions from automobiles. A \(^5\%\)\(^12\) increase in neighborhood walkability is associated with 6.5% fewer vehicle miles.

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traveled (VMT) per capita. Substitution of bicycling for driving for short trips has the potential to reduce gasoline demand by nearly 34.9%\textsuperscript{13} of current domestic oil consumption. In addition, projects that support active transportation are often designed in ways that have environmental benefits, such as green landscaping, street trees and in some cases, the use of impervious surfaces.

The Federal Highway Administration provides additional resources and research that demonstrate the health and environmental benefits of bicycling and walking. More information is available on their website\textsuperscript{14}.

### Health Benefits

Investing in active transportation provides a significant opportunity to leverage limited resources to produce multiple health benefits, work toward important public health goals, and reduce health care spending. Transportation policies and systems impact quality of life and health, both from a standpoint of physical and mental health, but also related to air and water quality.

Expanding the availability and access to active transportation has the potential to save lives by preventing chronic diseases, preventing childhood obesity, reducing and preventing motor vehicle related deaths and injuries, and by improving air and water quality. In the past, transportation policies and projects have focused only on minimizing or mitigating negative impacts to human health but there is growing awareness of the very real health benefits of these policies and projects.

The Center for Disease Control\textsuperscript{15} has documented the linkage between improved air quality and the potential for reductions in adverse birth outcomes, asthma, diminished lung function, and cancer, all of which have been linked to exposure to traffic emissions.

The Federal Centers for Disease Control and Prevention (CDC)\textsuperscript{16} states that “automobile trips that can be safely replaced by walking or bicycling offer the first target for increased physical activity in communities” and that “changes in the community environment to promote physical activity may offer


Bicycle and pedestrian trails are important community amenities that can help spur economic development, and promote physical activity and public health. The **CDC**\(^\text{17}\) has drawn connections between active transportation and a reduction in obesity, diabetes, osteoporosis, pulmonary and cardiac diseases, and even cancer.

Projects that promote active transportation can improve physical and mental health. **Numerous studies**\(^\text{18}\) show that exercise can improve physical health and ease the symptoms of depression and anxiety.

### Community Benefits

Streets are safer when more people use them for walking and biking. People also are more likely to engage in a positive way when they interact while walking, biking, or taking transit than while driving. Pedestrian plazas are often great places for events, and walking and bicycling generate their own events and activities. Organized bicycle rides and pedestrian alleyway events are examples of how fostering active transportation sparks community engagement. In addition, community amenities like lighting, benches and street trees are often incorporated in bicycle and pedestrian projects and benefit the entire community.

### Economic Benefits

**Increasing evidence**\(^\text{19}\) shows how active transportation has many economic benefits. This includes increased tourism, the increase in number of bike related and bike friendly businesses, and walkable neighborhoods that receive a greater influx of foot traffic. In addition, measures of walking friendly environments, such as the [Walk Score](http://www.walkscore.com/), are influencing housing values\(^\text{20}\).

Investing in bike infrastructure is a wise use of public funds. According to the [Portland Bureau of Transportation (PBOT)](http://www.portlandoregon.gov/transportation/article/371038)\(^\text{22}\), the replacement cost for one mile of urban freeway (in Oregon) was

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A NYC Department of Transportation report showed up to a **49% increase in retail sales** on 9th Avenue after protected bike lanes were installed (compared to a 3% borough wide increase in sales during the same period).

**Source:** NYC Department of Transportation – Measuring the Street: New Metrics for the 21st Century Streets

The San Francisco Bay Area transportation plan values “the cost of physical inactivity” at $1,220 -- representing “the savings achieved by influencing an insufficiently active adult to engage in moderate physical activity five or more days per week for at least 30 minutes. It reflects annual Bay Area [per-person] health care cost savings of $326 (2006 dollars), as well as productivity savings of $717 (2006 dollars).” Increased emissions, such as fine particulate matter, are tied to increased medical costs, loss of productive time at work and school due to related illness, and more. Some of the numbers are particularly striking: per ton, Diesel PM2.5 (Fine Particulate Matter) is estimated to cost society $490,300.23

### 1.7 Demonstrating the Need

**Need for Connectivity in Relatively Young System**

Complete streets alone do not make complete networks. Connectivity to transit, schools and community locations is a key element for reducing barriers and increasing the number of people who bike and walk. There are many sidewalks and bike facilities in the Puget Sound region but in order to reduce the barriers for people to walk and bike and access transit, a system of connected **networks** is needed. Even in urban centers, old infrastructure requires many improvements to become ADA compliant and to provide safe and separate facilities for all users.

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Need for Safe Streets and Networks for All Ages and Abilities

Bicycle and pedestrian facilities should be made safe for people of all ages and abilities. Adults need to feel safe taking their children on a walk or bike ride, and a person with limited mobility should have enough time to cross the street safely. The need to separate bicycles and pedestrians from motor vehicle traffic is growing for several reasons: increasing demand for bicycling and walking, the need for increased safety and for the inclusion of those who don’t choose active transportation due to unsafe biking and walking conditions.

Latent Demand and Mode Shifts

The Puget Sound region is experiencing tremendous growth and with that comes future demand and new users to the transportation system. Transportation planners and traffic engineers often seek current usage data when planning for active transportation facilities. However, future demand and mode shift trends should be considered when making decisions for the design of the transportation system. Studies show that more and younger people are choosing not to drive while an aging population is beginning to require safe access to transit due to an increasing inability to drive. The population age 65 and older, which represented 11% of the region’s population in 2010, is expected to more than double over the next 30 years to constitute 20.6% of total population by 2040 (T2040 FEIS – Regional Trends and Forecasts). In addition, bicycling and walking are becoming more popular. Some examples of this are the growing interest in bicycling and walking by young people and the increasing importance of walkable communities. The cost of travel is another factor. Car ownership can be financially prohibitive to many people, given the high cost to buy, insure, maintain and operate automobiles. See section 2.2. in this report for more information about the rates of walking and bicycling. See section 6.1 of this report for methodologies for measuring latent demand.

Demographic shifts are not the only measures for latent demand. The Federal Highway Administration\(^\text{24}\) also recognizes latent demand and calls for the design and construction of new facilities to anticipate likely future demand and not preclude the provision of future improvements for bicycling and walking.

According to the 2006 Household Travel Survey conducted in the Puget Sound region, 38% of all daily person trips in vehicles (4.4 million trips) were less than three miles long. Many of these three-mile trips could be made by bicycle, and some of those shorter trips could be done on foot.

A study conducted by the City of Portland’s Bureau of Transportation shows that 60% of respondents are interested in bicycling but have concerns, particularly about safety. Transportation planners and engineers should plan for safety and comfort, and explore new infrastructure types that better suit the needs of the “interested but concerned” population. New innovations in accepted facility types such as neighborhood greenways and protected bicycle lanes have provided more local options for safe infrastructure. Safe and comfortable facility types become a tool to attract new users of the system.

Integrating Pedestrians and Bicycling with Transit
Active transportation includes people taking transit because most people walk or bike to and from a transit stop or center. However, access to transit locations can be a challenge and a barrier to potential transit riders. Many destinations are located beyond practical walking distances from fixed route transit, making bicycling a viable option to support transit. Safe walk and bike routes may also be non-existent or intermittent so access deficiencies between transit locations and trip origins and destinations should be addressed. These connections are often referred to as the “last mile” to and from transit.
Transit-oriented development (TOD) is a type of community development that includes a mixture of housing, office, retail and/or other amenities integrated into a walkable neighborhood and located within a half-mile of quality public transportation. As transit planning occurs throughout the region, it is essential to plan for walk and bike access to these transit hubs, as well as nearby amenities in order to meet the needs of the increasing number of people living and working near transit oriented locations. This recognizes that transit passengers do not end their trip upon exiting the bus or train, and that people should feel safe within transit zones and find adequate routes for their “first and last mile” to and from transit routes.

Underserved Communities
Low-income families face a higher burden when making transportation choices because they often pay a higher percentage of their monthly income on transportation costs. “Transportation is the second largest expense for American households, costing more than food, clothing, and health care.” Americans spend an average of 18 cents of every dollar on transportation, “with the poorest fifth of families spending more than double that figure.” People with lower incomes often have longer commute times because they are more likely to live away from urban centers if the housing costs are increasingly prohibitive.

Good pedestrian and bicycle facilities enable low-cost transportation. This, combined with transit networks, have the potential to serve these communities in a cost effective and sustainable way but often, these communities have been historically left behind in terms of transportation investments. Jurisdictions should be deliberate about prioritizing transportation investments into underserved and low-income neighborhoods and communities.

Accessibility
In addition to underserved communities, many other barriers exist that can prevent potential active transportation from being a viable choice. Eliminating physical barriers may mean providing routes around steep slopes or across freeways, rail lines or waterways. Another way to address accessibility is to ensure that people of all ages and abilities are accommodated when choosing active transportation. This includes places to rest such as benches, ensuring safe crossing times across busy roadways and ensuring sidewalks are free of clutter and objects such as utility poles or signage. Deteriorating infrastructure can also become a barrier for people in wheelchairs. Serving these users requires higher pavement quality to be intact and ensuring that transit stops are ADA compliant.

Changes to the regional transportation system that result in a decrease in transit service or reductions in pedestrian or bicycle infrastructure can have a disproportionate impact on vulnerable populations, who are often less likely to own cars, due to financial or physical limitations. Transit dependent communities whose mobility and accessibility are restricted can suffer subsequent negative health impacts in several ways: limited access to healthy food can result in obesity; limited access to hospitals and medical facilities can make it more difficult to get to doctor’s appointments, making small health problems more likely to go untreated, after which they may need much larger medical interventions; difficulty in getting to school or place of employment can cause stress and anxiety; and isolation from friends and family can increase the symptoms of depression.

Fewer opportunities for active transportation in a community means fewer opportunities for improved physical and mental health through daily exercise. Additionally, if a previously transit reliant, lower-income family’s access to transit becomes compromised and purchasing a car becomes a necessity, transportation costs as a percentage of overall household income will likely increase, leaving fewer funds available for groceries, rent, and healthcare.
