

The Path to Complete Streets in Underserved Communities

Lessons from U.S. Case Studies



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INTRODUCTION

Increasingly, communities across the U.S. are exploring ways to balance their transportation systems to serve all modes and improve safe access to destinations. The term “complete streets” was coined in 2003 as way to unite these efforts and promote multimodal transportation planning and design nationally. A Complete Street policy, as defined by the National Complete Streets Coalition, “directs transportation planners and engineers to routinely design and operate the entire right of way to enable safe access for all users, regardless of age, ability or mode of transportation”.¹ A complete streets policy formalizes a community’s intent to plan, design, and maintain streets so they are safe for all users, including pedestrians, bicyclists, public transportation users, motorists, and freight vehicles.

Thus, the framework for complete streets policies is based on the concept of equity. By definition, complete streets accommodate all users and all modes. Often, however, the actual policies adopted by jurisdictions emphasize serving all modes, but not necessarily all users. While complete streets policies are frequently written to require the accommodation of bicycles and pedestrians, rarely do they go a step further and explicitly include diverse user groups such as children, older adults or people with disabilities. Transportation inequities tend to have a geographic component, and in an era of shrinking public funding, fixing the disparities in the transportation system can often be a matter of prioritizing implementation in communities with a high demonstrated need.

This study documents cases where communities adopted a multimodal policy framework or complete streets policy that directly involve and serve diverse and traditionally underserved community groups. The four communities profiled are: the Sault Ste. Marie Tribe of Chippewa Indians, Michigan; the City of Decatur, Georgia; the metropolitan region of Nashville, Tennessee; and the City of Portland, Oregon and are shown in **Figure 1**. These locations were selected as case studies with the assistance of the National Complete Streets Coalition. They have a diverse array of social, political and geographic contexts and highlight a different set of opportunities and challenges. The lessons learned may be useful to other communities seeking to change their transportation systems to include all modes and all users. Each of the locations highlighted in these case studies have adopted different methods for measuring and documenting system deficiencies, funding projects, creating community coalitions, and including disadvantaged population groups in the planning process. The Sault Tribe illustrates how the power of a coalition of a broad set of local, state and national advocacy groups can inspire action across multiple jurisdictions. The city of Decatur, Georgia developed a multimodal Community Transportation Plan based on a robust and inclusive outreach process that has resulted in tangible projects on the ground. The local and regional governing bodies of Nashville, Tennessee have demonstrated the importance of connecting active transportation (e.g., walking and biking) and public health, merging priorities to promote access to healthy food with transportation equity and multimodal infrastructure. The City of Portland, Oregon,

¹ National Complete Streets Coalition, “Fundamentals.” <http://www.smartgrowthamerica.org/complete-streets/complete-streets-fundamentals>

has developed equity-based funding criteria to guide its transportation investments for the next 25 years. The lessons that these communities provide on how to develop and implement effective, multimodal transportation plans and projects that serve all constituents are easily transferrable.



Figure 1: Case study locations

Background

Complete streets policies do not necessarily aim to provide a set of explicit infrastructure guidelines. Rather, the goal is to provide guiding principles that address the historic investments and policy decisions that have resulted in environments that cater to a singular mode of transportation – the automobile. There is no universal model for a Complete Street, as every community and case requires a context-sensitive design, and the policies included under the umbrella of complete streets vary widely.² Most policies adopted in the U.S. take the form of resolutions, which are legislatively weak documents that formalize a community's intent to plan, engineer and maintain transportation infrastructure to serve all roadway users.³ Many jurisdictions adopt explicit "complete streets" language in their local policies and have a variety of policy tools to encourage, plan, fund and build multimodal and inclusive transportation infrastructure. Some have developed specific multimodal transportation plans, while others

² National Complete Streets Coalition, *Complete Streets: A Story of Growing Strength*. Washington, DC: 2010.

³ McCann, B. and Rynne, S., *Complete Streets: Best Policy and Implementation Practices*. APA Planning Advisory Service, 2010.

have made multimodality a criterion for project funding. Thus, complete streets moves away from a “one size fits all” regulatory or design framework to a more varied and locally sensitive set of approaches to achieve the end goal of increasing the ability for users to choose among a variety of modes.

As described in the case studies in this report, communities also have different rationales for pursuing complete streets. Some are compelled by the growing awareness of the documented health benefits of active transportation, such as increasing physical activity and combating obesity epidemic. Others aim to increase access to destinations, improve safety or enable more independent mobility and access for all residents. Thus, these communities have attracted a broad array of stakeholders to this discussion, including traditionally underserved groups. Communities of all sizes are beginning to prioritize the development of multimodal transportation infrastructure where transportation alternatives are needed the most.

Communities of color, the poor, older adults, youth and people with disabilities, are in greater needs for access to convenient, safe, and well integrated transportation alternatives. For example, according to a 2011 report by the National Council on Disability, people with disabilities are more likely than people without disabilities to report that they have inadequate transportation (34 percent versus 16 percent, respectively).⁴ These transportation disadvantaged individuals are often without easy access to cars and live in locations without convenient and safe transportation alternatives. This severely hampers their ability to function in society. Furthermore, statistics indicate that these demographic groups are growing in numbers, and are not currently being accommodated by the existing transportation system.

For many households, living without a car is a consequence of limited income. A Brookings Institution study found that in the top 100 metropolitan areas in the U.S., 7.5 million households have no access to a private vehicle.⁵ Households that do own a car face rising associated costs, such as fuel, maintenance and insurance, and spend a greater percentage of their income on transportation.⁶ Because poverty disproportionately affects communities of color, ethnic and racial minorities are more frequently among the transport disadvantaged.

While some cannot afford to drive, other individuals are simply unable to drive. Older adults and children, as well as people with disabilities, frequently cannot operate a vehicle. This is of increasing concern as the US population ages: the US Census Bureau estimates that by 2030, one in five Americans will be over 65.⁷ Physical limitations that affect mobility tend to increase with age. According to Jana Lynott of the AARP, “not having safe and viable transportation alternatives can contribute to increased isolation and decline.”⁸ Additionally, although

⁴ National Council on Disability, *National Disability Policy: A Progress Report* (Washington, D.C.: October 2011).

⁵ Tomer, A, *Transit Access and Zero- Vehicle Households*. New York: Brookings Institute, August, 2011.

⁶ Center for Neighborhood Technology, *Driven to Spend*. 2009.

⁷ Population Research Center, *The Aging of America*. Portland, Oregon: 2012.

http://www.prcdc.org/300million/The_Aging_of_America/.

⁸ Jana Lynott et al., *Planning Complete Streets for an Aging America*, Research Report (Washington DC: AARP, 2009. p12

disabilities are of high concern for older adults, physical and mental conditions that impair mobility are not limited to one age group. According to data from the 2009 American Community Survey (ACS), 12% of the U.S. population, regardless of gender, race, and age, reported a disability.⁹

Complete streets, by accommodating all users, can help reduce the environmental barriers which inhibit people from walking, bicycling, or taking transit. Non-motorized transportation infrastructure has the potential to improve livability, encourage physical activity, increase access to full-everyday amenities, and better serve the transportation disadvantaged. However, changing the ways communities plan, build and maintain their roads is a long and complex process. A resolution or policy can help to solidify community goals, increase communication and collaboration across departments and levels of government, and heighten public awareness about the transportation system and alternatives.

As of 2013, over 625 regional and local jurisdictions, 27 states, the Commonwealth of Puerto Rico, and the District of Columbia have adopted complete streets policies or have made commitments to do so. Adoptions are on the rise, reflecting the increasing interest in these policies as effective instruments for increasing the use active transportation modes. More information can be found at the National Coalition for Complete Streets¹⁰. They compile a list of the places that have adopted complete streets policies in a *Policy Atlas*¹¹ and the best policies are highlighted in an annual document¹².

Case studies: Lessons from four communities

There are many examples of communities where complete streets policies have been adopted and these offer guidance for how other communities might follow their lead, particularly in low-income areas. However, there are few examples where these policies have resulted in physical changes that can be observed, largely because of their recent adoption combined with the relatively slow pace of infrastructure investments. Thus, the authors' intent in this report is to highlight stories from communities where complete streets efforts are underway and have been motivated or driven by the needs of the transport disadvantaged. It is the process of adopting complete streets policies – the goals, coalition formation, outreach activities and the political will – that have resulted in a change in the transportation culture that we aim to focus on.

The four communities included here are: Sault Ste. Marie, Michigan; Decatur, Georgia; Nashville, Tennessee; and Portland, Oregon. Each provides different perspectives on how to improve the lives of the transport disadvantaged through complete streets policies and

⁹ Erickson, W., Lee, C., von Schrader, S. (2010, March 17). Disability Statistics from the 2008 American Community Survey (ACS). Ithaca, NY: Cornell University Rehabilitation Research and Training Center on Disability Demographics and Statistics (StatsRRTC). Retrieved Oct 15, 2011 from www.disabilitystatistics.org

¹⁰ National Coalition for Complete Streets: <http://www.smartgrowthamerica.org/completestreets>.

¹¹ National Coalition for Complete Streets. *Policy Atlas*.. <http://www.smartgrowthamerica.org/complete-streets/changing-policy/complete-streets-atlas>

¹² National Coalition for Complete Streets. *The Best Complete Streets Policies of 2013*. <http://www.smartgrowthamerica.org/documents/best-complete-streets-policies-of-2013.pdf>

implementation. Each community takes a unique approach to the inception, adoption and implementation of complete streets policies. Although not all have explicitly named their policies “complete streets”, they all have identified multimodal transportation as critically important to traditionally underserved communities. Tools, strategies of partnerships, acquisition of grant funding, robust public participation, and funding prioritization may be transferrable to other communities with common contexts looking to serve the transport disadvantaged.

The cases in this report were based on interviews with policy makers, activists and public officials from the four communities. The communities were chosen to represent diverse geographical regions and because they had projects in place that targeted or served the transportation disadvantaged. Interview subjects were asked about the history of Complete Streets policies in their community and what existing policies look like. Subjects described the catalyst that led to community action to improve biking, walking and transit options for the transport disadvantaged. By tracking the events that led to Complete Streets policies or projects, the report provides lessons that other communities can use.

The remainder of this report is organized as follows. First, each case study is described, including demographics of the community, the nature and scope of the transportation disadvantaged community, the structure of government, and the surrounding environment. Each case study presents the catalyst that inspired a change in policy direction, the policy, plan or change that was enacted, the results for the community, and planned next steps. At the end of the report, a Lessons Learned section sums up the common themes and lessons that may be applied into other communities seeking to serve the transportation disadvantaged through complete streets policies.

SAULT STE. MARIE TRIBE OF CHIPPEWA INDIANS, MICHIGAN

Behind every complete streets story are community champions who initiate conversations about the importance of a fully integrated and multimodal transportation network. The story of Sault Ste. Marie begins with the vision for a community coalition that works together to improve public health through the avenue of active transportation. To achieve this end, the Sault Ste. Marie Tribe of Chippewa Indians successfully obtained a public health grant to advocate for improved access to transportation services and facilities for all community members. This grant engaged the Chippewa County “Building a Healthier Community Coalition” in the planning process by conducting walking access audits, public surveys and community assessments. These activities sparked a conversation around active transportation and the need to improve existing facilities for the transport disadvantaged, in particular for youth, older adults, and disabled residents. The results of this process demonstrate that an external public health grant can increase awareness about the value of complete street policies and serve as the foundation for engaging the community and galvanizing support for more bicycle and pedestrian infrastructure.

The Place

The Sault Ste. Marie Tribe of Chippewa Indians service area spans seven counties in the Upper Peninsula of Michigan (Figure 2), including: Chippewa, Luce, Mackinac, Schoolcraft, Alger, Marquette and Delta counties. Most Sault Tribe members do not live on tribal lands, but instead reside within the four communities and other locations within the tribal service area. However, some tribal members do live in tribal housing on tribal trust land. Many young adults leave the area to attend college or to find work and the community would like to attract them to come back.



Figure 2: Sault Ste. Marie, the largest of four towns in the tribal service area, has approximately 14,000 residents. Source: Sault Tribe of the Chippewa Indians Service Area <https://www.saulttribe.com/about-us/service-area>

Jurisdiction over city and county streets and State highways is shared between the cities, county road commissions and the Michigan Department of Transportation. The tribal government, aided by funding from the Bureau of Indian Affairs (BIA), has full control over

roads on tribal land. There is some collaboration with cities regarding planning and maintenance of shared roads, which are listed in a tribal Transportation Improvement Plan.

The largest of the four communities, Sault Ste. Marie is the site of the tribal government and home to approximately 14,000 residents. See Table 1 for more demographic information about the 7 counties and select cities in the service area of Sault Ste Marie Tribe of the Chippewa Indians. Access to services is a challenge for residents in Sault Ste. Marie, especially tribal community

members, who live in tribal housing developments on the outskirts of town (Figure 3). Nearby communities in the Upper Peninsula, including St. Ignace, Manistique and Munising, have similar characteristics, demographics and transportation challenges. Nearly all of the tribal housing developments do not include sidewalks, and in many cases the only routes to and from other tribal services such as the Health Center and public schools are along busy highways. While dial-a-ride transit is available, it does not run on evenings or weekends and thus has a small window of operation for users. Additionally, harsh winters create challenging conditions for pedestrians, as snow clearing and icy sidewalks and roads render walking difficult.



Figure 3: A lack of sidewalks or convenient transit service between tribal housing and public services such as schools or health centers often left residents no choice but to walk in the roadway. Photo: Donna Norkoli

Table 1 Demographic Information for the service area of Sault Ste Marie Tribe of the Chippewa Indians

County	Population	Land Area (sq mi)	Population Density (per sq mi)	Median Age	Native American or Alaska Native (%)	Median Household Income (\$)	Individuals Below Poverty Level (%)
Alger	9,601	915	11	47.3	4.1	38,348	14.9
Chippewa	38,520	1,558	25	39.5	15.8	41,114	18.5
Delta	37,069	1,171	32	45.6	2.4	42,504	15.3
Luce	6,631	899	7	43.0	5.0	42,414	16.9
Mackinac	11,113	1,021	11	48.3	17.3	38,507	15.3
Marquette	67,077	1,808	37	39.4	1.7	45,349	15.4
Schoolcraft	8,485	1,171	7	48.3	8.8	37,469	18.3
City	Population	Area (sq mi)	Population Density (per sq mi)	Median Age	Native American or Alaska Native (%)	Median Household Income (\$)	Individuals Below Poverty Level (%)
Manistique	3,097	3	968	43.0	9.7	28,367	23.3
Marquette	21,355	11	1873	29.1	1.5	37,355	25.9
Munising	2,355	5	436	48.6	4.8	34,395	15.3
Sault Ste. Marie	14,144	15	956	33.8	17.7	33,229	23.7
St. Ignace	2,452	2.7	908	44.5	27.8	38,806	13.5
Source: US Census Bureau, American FactFinder, 2010							

The Catalyst for Change

The journey to improving non-automobile transportation infrastructure began for the Sault Tribe community with a grant from the Centers for Disease Control and Prevention (CDC), distributed by the Healthy Communities' Division for the Strategic Alliance for Health (SAH). The Sault Tribe Health Services Division applied for the 5-year grant, which would cover the communities of Sault Ste. Marie, St. Ignace, Manistique and Munising, with the goal to "focus on chronic disease prevention through policy, systems and environmental change."¹³ The grant was awarded to the Sault Tribe in 2008.

Within the first year of receiving the grant, the Sault Tribe Community Health Program formed an SAH Leadership Team of tribal leaders, including staff from various tribal agencies involved with transportation, housing and economic development and staff from the Health Services Division. The newly formed team's directive was to focus on health improvements for tribal and family members while also collaborating on developing the SAH programs and strategies. One

¹³ (25 February, 2010). "The Challenge of Creating Healthier Communities – Strategic Alliance for Health." *East Upper Peninsula News*. Retrieved from: <http://eupnews.com/2010/the-challenge-of-creating-healthier-communities-strategic-alliance-for-health/>.

of the aims of the grant was to develop active transportation connections between tribal housing developments and the five federally qualified Health Centers in the four cities. Other goals included promoting tobacco-free lifestyles and increasing access to healthy food and physical activity.

SAH community coalitions utilized the Community Health Assessment and Group Evaluation (CHANGE) tool created by the CDC to develop a “community snapshot of the policy, systems, and environmental change strategies currently in place and helped identify areas where improvements are warranted” across the four communities.”¹⁴ The CHANGE tool illustrated what the SAH Leadership Team had already suspected about the community—more walkable and bikeable communities were sorely needed. With this information, the team worked with each of the four city governments and the Tribe to develop independent Community Action Plans. Complete streets practices were also identified at that time as a method to ensure that future transportation infrastructure development followed the community vision created with the aid of the SAH grant.

CHANGE tool is a data-collection tool that allows community team members to track progress across a five-point scale, so incremental changes can be noted. As problem areas are identified, health-related policies are implemented, and systems and environmental change strategies are put in place, team members can document the community-level changes.

Purpose of the CHANGE Tool

- Identify community strengths and areas for improvement.
- Identify and understand the status of community health needs.
- Define improvement areas to guide the community towards population-based strategies that create a healthier environment (e.g., increased physical activity, improved nutrition, reduced tobacco use and exposure, and chronic disease management).
- Assist with prioritizing community needs and consider appropriate allocation of available resources.

CHANGE Tool Benefits

- Allows local stakeholders to work together in a collaborative process to survey their community.
- Offers suggestions and examples of policy, systems, and environmental change strategies.
- Provides feedback to communities as they institute local-level change for healthy living.

For more information on the CHANGE tool:

<http://www.cdc.gov/nccdphp/dch/programs/healthycommunitiesprogram/tools/change.htm>



Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People.™

¹⁴ “(25 February, 2010). “The Challenge of Creating Healthier Communities – Strategic Alliance for Health.” *East Upper Peninsula News*. Retrieved from: <http://eupnews.com/2010/the-challenge-of-creating-healthier-communities-strategic-alliance-for-health/>.

The CHANGE tool identified the need for increased walkability and physical activity opportunities for the Upper Peninsula communities. In response, the SAH Team partnered with Mr. Dan Burden, the Executive Director of the Walkable and Livable Communities Institute, to conduct an in-depth walking audit of the communities. The walking audit's purpose was to engage community members in the conversation around complete streets. Participants would not only create an inventory of locations that needed infrastructure improvements, but would also bring awareness to community members about the needs for these improvements and the opportunities to enhance the walking and bicycling environment. The SAH Team partnered with Mr. Burden to conduct the walking audit in close collaboration with the community as a public engagement activity. The walking audit was well publicized and sparked broad community interest. Key decision leaders, including the tribal transportation planner, participated in the audit. The walking audit not only generated excitement and publicity about the project but also brought community members and agency staff together to jointly discuss the need for complete streets. It also served as a mechanism for communication and education of the public and its leaders about transportation options and processes.

Several members of the Superior Alliance for Independent Living (SAIL), a statewide advocacy group which helps disabled people live independently, had attended a SAH meeting and voiced several concerns about the current status of the transportation system and the many barriers disabled users face. To address these concerns, the SAH team completed a second walking audit in collaboration with SAIL. People who used wheelchairs or had vision impairment were invited to be active participants in the audit. During the audit, the group took pictures and notes, and developed a report to be integrated into the Sault Ste. Marie's Non-motorized Transportation Plan. As a result of this audit, the Sault Accessibility Group was formed; the city engineer for Sault Ste. Marie has become inspired and involved, and has committed to working with this group in the future.

After the generation of CHANGE tool results and the completion of the walking audits, the communities in the Upper Peninsula were ready to see a change in local transportation policy to ensure that future projects would be designed and built with their needs in mind. Decision makers in each community embraced the complete streets concepts and looked for ways to put these concepts into practice. The first to pursue the adoption of a complete streets Resolution was Sault Ste. Marie. The Sault Ste. Marie City and Planning Commission reviewed the Resolution and the Sault Ste. Marie City Commission adopted it in August of 2010. Following their lead, Munising, St. Ignace and Manistique have all adopted resolutions of their own.

The Results

The SAH Team has helped increase awareness of the needs of the transport disadvantaged in the Upper Peninsula. Redesigning a community to be more walkable and bikeable is a long-term process. It will take years to create a connected bike and pedestrian network. One of the greatest achievements from the SAH grant is the increased interdepartmental communication among tribal offices. The collaboration among agencies has also extended outside of the tribe and has increased communication and partnership with city planners, engineers, and county commissioners. These relationships and partnerships are invaluable to the process of building a cohesive and sustainable transportation network and addressing the needs of the transport disadvantaged population.

The communities in the Upper Peninsula, encouraged by the adoption of the complete streets Resolutions, the walking audits and the work of the SAH community coalitions, have begun work on several transportation projects. Manistique has upgraded crosswalks and installed way-finding signs, and Sault Ste. Marie has striped 9 miles of bike lanes, constructed sidewalks and is currently planning bikeway signs (Figure 4). Additionally, the transportation planners for the Sault Tribe included a mandate in the tribe's long range transportation plan to install sidewalks whenever a street is being repaved, a mandate beyond the complete streets Resolutions that affects all four communities within tribal land. The cities of Manistique, Sault Ste. Marie and St. Ignace are all in the process of reviewing active transportation plans that, if adopted into the cities' comprehensive plans, will assist in securing funding for future active transportation projects.



Figure 4: This sidewalk and parent pick-up/drop-off site in front of a school was installed by the Tribal Transportation Department in Sault Ste. Marie.
Photo: Donna Norkoli

The SAH communities in the Upper Peninsula believe that complete streets Resolutions, beyond their potential health benefits, improve livability, economic development, and the sense of social connectivity. Disabled members of the community have also seen the benefit of new sidewalks and ADA facilities. After sidewalks were constructed on tribal lands, SAH staff heard from a woman in a wheelchair who was thrilled that she could now visit her daughter on her own; she was no longer trapped in her own house. Beyond serving the transportation disadvantaged and other current residents, the community also hopes that creating a more walkable and livable community will make the area more attractive to returning college graduates and young families.

Next Steps

The SAH communities continue to work on improving the non-automobile transportation options for their community through infrastructure and planning while also increasing education about healthy life choices. In the summer of 2011, the SAH partnered with Blue Cross Blue Shield of Michigan to bring the 2nd Annual Let's Get Moving – Community Challenge to the Upper Peninsula communities. The challenge is focused around earning 'mileage' from physical activity, healthy nutrition and tobacco-free lifestyles and each community competes against each other. Funds will be awarded to each community based on accumulated 'mileage' and these funds will then be put to use towards infrastructure improvements to increase access for the transport disadvantaged populations in the communities.

Obtaining the public health grant from the CDC was a catalyst of change for the Sault Ste. Marie community and established a base on which to build community support. Once the CDC grant was implemented, the desire for community change was infectious and spread to neighboring communities, creating a regional effort to increase access and transportation services for the transport disadvantaged and ultimately improving livability for all.

DECATUR, GEORGIA

Decatur, Georgia, a small city in the suburbs of Atlanta, has leveraged its complete streets policy as a vehicle for community building, public involvement and a commitment to active living and healthy lifestyles. Since 2005 this city has focused on improving the connectivity of the existing street network through an inclusive public outreach process that engages a broad spectrum of residents. Strong political support and continued community involvement have led this community to embrace multi-modal transportation options and policies, with a strong emphasis on serving youth. The catalyst for this change began with the adoption of the Safe Routes to School program in 2005. This, in turn, led to the development of a *Community Transportation Plan* promoting the use of active transportation and addressing the needs of the transport disadvantaged through the inclusion of Complete Street policies in the plan. By developing an Active Living Division, the city has ensured that active transportation continues to be a priority through this division's efforts to implement the plan and address issues with walking and cycling. It also maintains a strong emphasis on the public involvement process to ensure diverse stakeholder participation and engagement.

The Place

Decatur is a vibrant community just east of Atlanta, with a population of 19,335 as of the 2010 census (Figure 5). Today, Decatur benefits from decisions made by the Planning Commission in the 1970's to curtail the development of a large commercial center in downtown in favor of supporting a small-scale walkable environment. At the time the city's population was shrinking; the shift of residents and businesses to the periphery had emptied the center of Decatur. Community input led to new development priorities to make the streets come alive. Boosted by a *Town Center Plan*¹⁵ adopted in 1982, as well as federal support for the Summer Olympics in Atlanta in 1996, the city made investments in sidewalks and other pedestrian enhancements. Special events such as concerts and festivals increased pedestrian activity in the downtown, which in turn led to a growth in



Figure 5: Decatur, Georgia lies only 8 miles east of Atlanta, and has been planning their downtown around walkability since the 1980's.

¹⁵ City of Decatur Community Development Department. (1982). *Decatur Town Center Plan*. Excerpts retrieved from: <http://www.decaturga.com/index.aspx?page=157>.

small businesses. Downtown housing was constructed during the housing boom of the 1990's and early 2000's.¹⁶

Over the last decade, Decatur has focused on biking and walking even more. The *Town Center Plan* demonstrated how good a safe, comfortable pedestrian environment could be for business and instilling a sense of community. Yet pockets remained on the outskirts of the city that did not have sidewalk coverage. And despite the focus on creating a pedestrian-friendly downtown, many parents still did not feel comfortable allowing their children to walk or bike to school.

The population of Decatur has an average household income of \$82,406, and is highly educated: 15% of the population holds a Master's degree and 10% holds a professional degree or higher. However, despite the high average household income, nearly 18% of Decatur residents lived below the poverty line in 2009.¹⁷ Half of poor families in Decatur are headed by a single mother, and roughly a quarter of men and a third of women living in poverty are disabled.

The Catalyst for Change

While the City of Decatur does not have an explicit complete streets policy, it has made significant progress in building a multimodal system that accommodates a wide variety of transportation system users. The city first reached out to the school-aged population. Of the 3,000 school-aged children that lived in Decatur, most lived within one mile of their school, yet rarely walked or biked to school. Parents viewed the roadway network as unsafe and had concerns about their children's security and thus chose to drive or bus their children to school.



Figure 6: In 2005, Decatur conducted a successful pilot Safe Routes to School program which resulted in new facilities and increased walking and biking among students.

Photo: City of Decatur

In 2005, Decatur was selected for a Safe Routes to School pilot project for Georgia and had high rates of success with improving school routes and safety amenities for school-aged children (Figure 6). After the pilot program ended, there was interest in building a more permanent program within the city. Beginning with the 2008-2009 school year, the Decatur Active Living Division took on the management and development of Decatur's program. The Safe Routes to School National Partnership considers the Decatur program a success story, stating:

¹⁶ International City/County Management Association. (2009). *Healthy Decatur: A Holistic Approach to Sustainability*. Retrieved from: <http://www.decaturga.com/index.aspx?page=122>.

¹⁷ <http://www.city-data.com/poverty/poverty-Decatur-Georgia.html>

“Decatur, GA kept their Safe Routes to School program going after a pilot project grant ran out by integrating the program within the City’s active living division. They also incorporated Safe Routes to School engineering improvement requests into their capital projects lists. City staff has really taken ownership of the Safe Routes to School program. When they first started out 10 years ago, advocates had to explain the basics of Safe Routes to School. But now Safe Routes to School is becoming ingrained in city programs, and many infrastructure needs are being looked at from the Safe Routes to School perspective. Local level partnerships such as these really help create sustainable Safe Routes to School programs.”¹⁸

Encouraged by the success of their Safe Routes to School program, the city began developing a Community Transportation Plan (CTP) in 2006. In the process of developing the CTP, city staff conducted public meetings and workshops targeted at diverse populations, including older adults, people with disabilities, children and public housing residents. Results indicated strong support for improved bicycle and pedestrian facilities. These findings were reinforced by constructive feedback from well-attended public meetings. This strong expression of community support was critical to the eventual adoption and implementation of the CTP.

Many of the CTP planning meetings reached out to specific populations. Senior and Disabled Citizens meetings were held at two assisted living facilities. The comments the city received from the Senior and Disabled Citizens meetings focused mostly around improving the



Figure 7: East Ponce de Leon Avenue improved their raised crosswalk design to make it more visible and handicap accessible.
Photo: *The Decatur Minute*

pedestrian realm—with emphasis on crosswalks and intersections. According to the CTP, “participants [at the Senior meetings] requested improvements to curb cuts to accommodate wheelchairs and walkers, increased time for crossing at crosswalks, crosswalk signs that display a countdown timer, and an education program for drivers to encourage responsible driving.”¹⁹ The city planning director also conducted a walking tour with some of the elderly residents to better understand their needs and capture these points of interests and requests in the CTP.

¹⁸ Safe Routes to School National Partnership: <http://saferoutespartnership.org/state/srts-in-your-state/georgia#success>

¹⁹ City of Decatur. (2008). *Community Transportation Plan*. Decatur, Georgia: City of Decatur. Retrieved from: www.decaturga.com/Modules/ShowDocument.aspx?documentid=1225.

Low-income residents were drawn into the process through meetings organized with the local housing authority. Attendees at the public housing meeting discussed the need to increase access to transit, improve crosswalks, and further implement Safe Routes to School programs. This information emphasized the need to help residents reach buses and trains run by the regional transit provider, MARTA. This was particularly true in areas with high concentrations of transit-dependent riders.

Through this extensive public outreach and engagement, the project staff received more than 700 public comments, letters, and emails from the meetings. The comments overwhelmingly expressed the importance of walking and cycling, and the importance of accommodating all users, including the vulnerable groups such as children, older adults and people with disabilities.

The CTP, adopted in 2008, focused on a “healthy and active community.”²⁰ According to the Plan, the city strives to create a multifaceted transportation system that encourages physical activity. Toward this end, Decatur adopted four principles for the Community Transportation Plan: Health, Choice, Community, and Connectivity. To support these guiding principles, the plan developed three goals with accompanying objectives:

- Ensure safety for all modes and users of all ages and abilities.
- Establish a high level of connectivity and efficient movement.
- Promote increased levels of physical activity.²¹

The plan also provided guidance on Universal Design principles and ADA accessibility.

The Future

Since adopting the CTP, whenever Decatur has a new project in the design phase, city employees consider the project’s impact on the greater transportation network. In addition to adopting the CTP in 2008, Decatur created an Active Living Division, led by an Active Living Advisory Board, to support the focus on improving health and active living and connect public health with active transportation. The Active Living Division houses the Safe Routes to School program and also provides the public with active living programs (e.g. walking and biking programs and classes). Improving transportation facilities and access for the transport disadvantaged population has been made a priority since the adoption of the CTP. For example, given that senior citizens are more likely to be struck and injured at intersections than younger residents, Decatur is focusing on improving intersections in the city’s downtown, where the majority of the city’s senior population lives.

City of Decatur. (2008). *Community Transportation Plan*. Decatur, Georgia: City of Decatur. Retrieved from: www.decaturga.com/Modules/ShowDocument.aspx?documentid=1225.

²¹ City of Decatur. (2008). *Community Transportation Plan*. Decatur, Georgia: City of Decatur, p. 1.4-1.5. Retrieved from: www.decaturga.com/Modules/ShowDocument.aspx?documentid=1225.

The CTP adoption created an opportunity to partner with the Georgia Department of Transportation (GDOT). The major arterials through the city are under the control of GDOT, so to make changes the city must negotiate with the state transportation agency. City staff has used the transportation plan to educate GDOT staff and elected state officials about local community priorities. In some cases, the city has worked with GDOT to take local control over state routes within the urban area. For example, GDOT was not in favor of constructing a mid-block raised crosswalk with a pedestrian crossing warning sign along a state highway in a Decatur shopping area. The city successfully petitioned to remove the road from state control so the pedestrian treatment could be implemented to meet their CTP goals (Figure 7).

Since adopting the CTP, Decatur has also set about reallocating the road capacity on some city streets. For example, the Church Street “road diet” project will convert a four lane street to a three lane road with one traffic lane in each direction, a center turn lane, two bike lanes and on-street parking. The plan has catalyzed the use of cutting edge designs, including newly installed sharrows (on-street markings indicating that bicycles and cars must share the lane) and the city’s first bike box, which aims to improve bicycle safety at intersections. Additionally, the city has spent \$400,000 from the general fund, and \$1.5 million from bonded funds, on sidewalk improvements over the last seven years.

Using new and innovative street designs also requires ongoing education and public engagement. Every time the city gets a Federal Transportation Enhancements grant and is planning a new project, the city holds a series of public meetings. There is sometimes pushback from various residents or business leaders on newly proposed projects. But because there was such an intensive engagement process on the front end, elected officials feel more confident about the project and its goals when they respond to complaints. As the city continues to develop and grow, the policy and motivation behind the CTP and the support of the Active Living Board will help guide city staff in ensuring that the transportation network continues moving towards an integrated and multimodal system that serves all Decatur residents.

NASHVILLE, TENNESSEE

The Nashville, Tennessee (Figure 8) is a leader among Southeast cities in championing active transportation investments. On a local level, the Mayor of Nashville signed an executive order in 2010 mandating that the needs of roadway users be considered in all transportation projects. On a regional level, the Nashville Metropolitan Planning Organization (MPO) conducts bicycle and pedestrian counts and Health Impact Assessments, and targets multimodal projects in areas with high rates of health disparities.

Nashville has successfully linked its policy and planning for active transportation with initiatives to fight obesity and improve food access. The dialogue that began in Nashville has led to state-level planning for health that includes a strong active transportation focus. Many other cities and regions in Tennessee and elsewhere are beginning to look to Nashville for guidance in adopting their own complete streets policies.

The Place

The regional MPO, which was formed in the 1960s, initially consisted of representatives from the consolidated city-county government of the City of Nashville and Davidson County. Outward growth eventually met and then surpassed several surrounding cities. Today the MPO covers a seven-county region, representing every city within those counties with a population over 5,000. Until recent years, the region had limited transit service consisting of bus routes to and from the central business district. As the Nashville economy expands, many residents commute long distances, mostly by private automobile. In a 2010 report by CEO's for cities, Nashville ranked first in the nation for the amount of time commuters spent in their vehicles.²²



Figure 8: The Nashville Metropolitan Planning Organization spans seven counties, covering 2,800 square miles of both urban and rural land and governing over 1.5 million residents.

As the urban area continued to grow, Nashville was also seeing evidence of increasing numbers of overweight and obese adults, a national trend that has been particularly prominent in the state of Tennessee. Since 2000, Tennessee has ranked in the top ten states with the highest obesity levels. By 2009, ten percent of the adults in Tennessee were diabetic.²³ This trend is not evenly distributed throughout the state: rural, African-American and Hispanic populations average higher rates of overweight and obesity and are known to be at higher risk of diabetes,

²² Cortright, J. (2010). *Measuring Urban Transportation Performance: a critique of mobility measures and a synthesis*. CEO's for Cities. Retrieved from: http://www.scribd.com/fullscreen/87244676?access_key=key-1gciaq47u0ju1mrin4eu.

²³ Tennessee Obesity Taskforce. (2010). *Tennessee Statewide Nutrition and Physical Activity Plan*. Appendix I: Pg. 52. Retrieved from: <http://www.eatwellplaymoretn.org/assets/files/Data%20Tables.pdf#page=5>

hypertension and other health disorders.²⁴ This trend is particularly pronounced in Nashville, which is more diverse than the state as a whole. According to the 2010 census, 28.4% of central-city residents are African-American and 10% are Hispanic, nearly double the state average.

The Catalyst for Change

At both the city and the regional level, policy makers and public officials in Nashville understand the connection between the built environment, transportation and public health. Simultaneous efforts from the City of Nashville and the Nashville MPO have led to explicit complete streets policies as well as plans, guidelines and projects that encourage multimodal transport and physical activity. This policy shift has come about thanks to a supportive city administration, dedicated staff and committees, and an increasing recognition of the importance of complete streets for sustainability and public health.

The Metro Planning Department for Nashville and Davidson County first considered the idea of a municipal complete streets policy in 2007. At the time, some Metro departments were skeptical of a complete streets policy because of budget constraints. But in the following years, discussions of active transportation as a livability and public health measure intensified. In 2009, a Green Ribbon Committee on Environmental Sustainability assembled by the mayor released a report, *Together Making Nashville Green*. The report made several transportation recommendations including setting aside funding for active transportation and adopting a complete streets policy, in order to reach the policy goal of “Provid[ing] every citizen of Davidson County at least two modes of transportation available and accessible in order to reach food, work, school, worship and recreation.”²⁵ Many of the panel’s recommendations overlapped with input from the Healthy Nashville Leadership Council, and the result was a new city initiative called the Nashville Livability Project. The mayor established a new staff position, the Director of Healthy Living, to coordinate programs to improve active transportation access to fresh healthy food near schools and neighborhoods, using a 2010 federal grant “Communities Putting Prevention to Work” of \$7.5 Million aimed at promoting public health and prevent obesity.

Having already overseen the launch of a pilot bike sharing program, the mayor was very supportive of non-motorized transportation and appointed the city’s first Bicycle and Pedestrian Advisory Committee (BPAC). The BPAC, along with the mayor’s staff and the Davidson County Health Department renewed the conversation about a city complete streets ordinance, focusing on how the new policy would change how road projects are designed and built, considering the needs of all users. The mayor signed an executive order in October of 2010, mandating “full consideration to the accommodation of the transportation needs of all users, regardless of age or ability” during project design, planning, construction, rehabilitation or maintenance.

²⁴ Tennessee Obesity Taskforce. (2010). *Tennessee Statewide Nutrition and Physical Activity Plan*. Appendix I. Retrieved from: <http://www.eatwellplaymoretn.org/assets/files/Data%20Tables.pdf#page=5>

²⁵ Green Ribbon Panel on Environmental Sustainability. (June 2009). *Together Making Nashville Green*.

This policy formalized what the city was already doing. Before Mayor Dean took office, two previous mayors had overseen the construction of a bicycle and pedestrian bridge over the Cumberland River and several miles of multi-use paths. Adopting a complete streets policy was not a change of direction for the City of Nashville, but rather a reinforcement of a growing support towards biking and walking for transportation. Putting the order in writing simply reinforced multimodal considerations throughout all Metro departments.

Recognizing that the executive order was only the beginning step in implementing bicycle and pedestrian infrastructure, the city's next step was to update its *Major and Collector Street Plan* to reflect a new commitment to multimodal transportation. The previous city street plan had been adopted in the early 90's and was increasingly out of date with new multi-modal policy directions, especially in its design guidelines for roadways and consideration of multiple travel modes. The overhauled *Major and Collector Street Plan* was intended as a design guide for future transportation projects, and included guidelines for street intersection design that was more bicycle, pedestrian, and mass transit friendly.²⁶



Figure 9: Public input during the MPO's Regional Transportation Plan update revealed a strong citizen interest in and need for walking, biking and transit improvements. *Photo: Leslie Meehan*

At a city and county level, the political will to implement complete streets came from a growing recognition of the role of active transportation in public health and fitness. At a regional level, the Nashville MPO was simultaneously in the process of changing the way they funded and prioritized transportation projects. Like the City of Nashville, the MPO has created a Director of Healthy Communities position. When the MPO started the update process for the Regional Transportation Plan (RTP) in 2010, they conducted a community visioning process in which stakeholders, elected officials and the public discussed what they wanted their communities to look like. The process revealed a deep interest in more walkable neighborhoods with access to transit (Figure 9). Community members described a vision of neighborhoods that are a pleasure

²⁶ Metropolitan Government of Nashville and Davidson County Planning Department. (2011). *Implementing Complete Streets: Major and Collector Street Plan of Metropolitan Nashville, A Component of Mobility 2030*. Nashville, Tennessee. Retrieved from: <http://www.nashville.gov/mpc/docs/trans/2030MajorCollectorStreetPlan.pdf>.

to live in, near thriving business districts and served by more transportation choices. In addition, a survey of 1,100 households in a rural county found that when individuals were asked how the city should prioritize transportation dollars, transit rose to the top of the list. From that vision, staff drafted principles, goals and objectives for the RTP.



Figure 10: Since the completion of the new streetscape at the intersection of Main and Water Street, bicycle and pedestrian counts have demonstrated a nearly 300% increase in pedestrian traffic. *Photo: Leslie Meehan*

In addition to updating policy goals and objectives, the MPO staff altered the criteria for transportation project funding, making active transportation a central part of project selection. Projects were assigned points in a scoring system up to 100: 60% of those points emphasized transportation equity, active transportation, safety for all modes and other elements of complete streets. This strategy proved to be extremely successful in changing the types and designs of projects being submitted. Of the projects submitted by jurisdictions in 2010, three quarters included bicycle and pedestrian facilities, and the final project list in the RTP ultimately included active transportation facilities in nearly 70% of the cases (Figure 10).²⁷

Recognizing that the obesity epidemic has hit low income, minority and traditionally underserved communities the hardest, the MPO included yet another criterion aimed at prioritizing strategically placed projects to fight obesity. No data were available to chart the distribution of health and disease across the region. Instead, the staff mapped regional household income, minorities, and populations over 65 using census data. These areas were labeled “health impact areas,” which were used as a proxy for populations with high rates of chronic disease such as diabetes, hypertension and cancer. Projects were given points if they fell into a health impact area, and projects that had all three elements were given the most weight. In this way, the RTP not only provided non-motorized options for people with less access to automobiles. It was also provided opportunities for more physical activity to

²⁷ Nashville Metropolitan Planning Organization. (Date N/A). “Health and Well Being.” Retrieved from: http://www.nashvillempo.org/regional_plan/health/

populations who are more likely to have higher rates of chronic diseases as well as lower rates of vehicle ownership.

The Results

The elevated and sustained conversation about complete streets, public health and active transportation has spawned new partnerships, increased technical capacity, and created new funding priorities. Both at the city and regional levels, new positions for Directors of Health Programs, created from Bicycle and Pedestrian Coordinator positions, underscore importance of active transportation for improving public health and fitness.

The City of Nashville has seen a growing support for bicycling and walking infrastructure and planning. The number of multi-use paths, shared streets and bike lanes has increased from seven miles to over 100. The updated bicycle and pedestrian master plan has set a goal of doubling their bicycle mode share.²⁸

The MPO has facilitated a change in the types of tools the organization now uses to plan projects and chart progress. The organization's transportation modelers have begun using a latent demand travel model for walking and biking, using parcel-level data to project short trips.²⁹ With assistance from graduate students at Vanderbilt University, the MPO has also conducted its first Health Impact Assessment (HIA) as part of a corridor study for a proposed transit oriented development (TOD).

Data carry a great deal of weight among political decision makers, and until now much of the planning process for building bicycle and pedestrian infrastructure has been hampered by a lack of quality, up-to-date information about health and travel behavior. The MPO has launched two studies to build the data needed to demonstrate the importance of walking and biking and identify where investments are needed. The MPO has begun collecting data for a regional household travel survey, which includes questions about participants' health. In 2009, Nashville also conducted its first bicycle count as part of the National Bicycle and Pedestrian Documentation Project. When the second count was conducted in 2011, the counts were already 50% higher. Some areas with new pedestrian streetscaping and development saw a 300% increase in foot traffic. These data suggest that the investments made to promote transportation equity are working.

The conversation about active transportation and obesity has also reached the state level. A group of twelve policy makers and advocates started the Tennessee Obesity Taskforce (TOT), a group that drafted *Eat Well Play More Tennessee*, the state's first nutrition and physical activity plan. The TOT made equity and active transportation central to its policy objectives: one core section of *Eat Well Play More* is "The Built Environment and Transportation," and another is

²⁸ HBO Documentary Films. (2012). *The Weight of the Nation: Confronting America's Obesity Epidemic*.

²⁹ Meany, Jessica. (31 January, 2011). Nashville MPO: Engaging Active Transportation at the Regional Level. Retrieved from: <http://saferoutescalifornia.wordpress.com/2011/01/31/how-to-develop-a-regional-bicycle-and-pedestrian-model/>

“Vulnerable Populations.”³⁰ The TOT has grown to 800 members, increasing conversations about public health and the connection to active transportation throughout the state. The Taskforce has become a resource for information sharing among Tennessee cities, counties and MPOs.

The Future

Nashville’s investments in infrastructure, tools and planning have brought positive results and are a prime example of how a region can take actions to support walking and bicycling. The elected leaders, policy makers and the public have all begun a long and difficult process of retrofitting the city’s transportation. The city and the MPO of Nashville are equipping themselves with the data, tools and resources needed to proceed with implementation. Future bicycle and pedestrian counts, better local household travel data, more fine-grained travel demand modeling and updated plans with modern design guidelines reveal a region that is leading the way in creating healthy mobility options. As the city builds out its bicycle and pedestrian network, policy makers and the public are hopeful that these investments will result in a healthier, economically and physically thriving community.

³⁰ Tennessee Obesity Taskforce. (2012). Progress Report 2011-2012. Nashville, Tennessee. Retrieved from: http://healthpsych.psy.vanderbilt.edu/TOT/Documents/Progress_Report_2011.pdf

CITY OF PORTLAND, OREGON

The City of Portland, Oregon (Figure 11) has earned a nationwide reputation for its progressive investments in alternative transportation. Since the 1970s, the city has made significant investments in light rail, streetcar and bikeway networks. Portland's walkable, bikeable and transit-accessible central city is the most visible manifestation of a state-wide complete streets regulation, the first of its kind. Rising bicycling rates, accompanied by aggressive mode share goals for reduced drive-alone trips, reflect a city that has successfully created a multimodal transportation system.

Despite these achievements, not everyone shares equally in the benefits of the transportation system. Within the central city, citizens have access to the dense network of sidewalks, bikeways and transit connections Portland is known for. In East Portland, the city's outer-east region beyond 82nd Avenue and I-205, the streets more closely resemble suburban, automobile-oriented development (see Figure 12). Since 2000, East Portland has experienced a sharp increase in transportation-underserved populations, including children, older adults, people of color and immigrants. The city is just beginning to recognize and address disparities in the provision of transportation services.

In recent years, community and transportation advocacy groups, city planners and public health officials have begun designing new policies to ensure that future transportation investments take equity into account. The story of Portland's rising awareness of its transportation equity challenges sheds light on the limitations of Oregon's highly respected and well intentioned complete streets policy. The lesson from this case study emphasizes the importance of building explicit equity criteria into transportation planning at a project level.

History and Context

From the beginning, Oregon's complete streets policy was supposed to be about providing transportation choices to vulnerable roadway users. Oregon's statewide complete streets legislation, ORS 366.514, fondly known as the Bicycle Bill, was sponsored by a state representative who wanted his children to be able to safely bike to school. The bill established the groundwork for active transportation infrastructure in Oregon through two key elements: once adopted, all new roads and reconstructed roads must include bicycle and pedestrian facilities, and one percent of state transportation funds must be devoted to bicycle infrastructure projects. But at the time the legislation was enacted in 1971, jurisdictions remained unclear whether the bill applied to roads or just off-street paths. Portland built a trail along I-205 and a



Figure 11: Portland, Oregon, the largest city in the state, is often considered a national leader for multimodal transportation.

small cluster of bicycle boulevards in the early years of the legislation's passage. By the 1980s, support for alternative transportation had fizzled, and no Oregon city, including Portland, was taking the bill's mandate seriously.

In 1990, the Bicycle Transportation Alliance (BTA) was formed to advocate for safe, comfortable bicycling conditions for all Portland roadway users, especially children. More importantly, the fledgling organization wanted to hold the city accountable for implementing the Bike Bill. In 1995 they filed and won a lawsuit against the City of Portland, demanding that they include bike lanes in the designs for new streets to be built around the Portland Trailblazers basketball stadium. The case set a precedent that jurisdictions across the state must adhere to the bill, a radical shift in the transportation paradigm for the state, representing a move away from traditional highway-oriented policies and creating a foundation for building a more multimodal system.

This change at the state-level was accompanied by the adoption of Portland's first Bicycle Master Plan in 1996. At the time, although Portland had just been named the most bike-friendly city in the US by Bicycling Magazine, only about 2% of all trips in the city were by bicycle, and the bikeway network remained incomplete and disconnected.³¹ The plan identified a recommended bikeway network, as well as support such as education, strong transit connections and end-of-trip facilities. However, the planning process and the document itself did not include any other explicit priorities for serving diverse communities.

The plan itself was largely technical, outlining a bicycle street classification and prescribing treatments for different roadway types. For example, projects would be prioritized for funding and implementation if they made important connections in the network, served a high volume of cyclists, served intensive land uses such as commercial districts, or were easy to fund and implement. In the years that followed, these criteria were used to prioritize investments. The city pursued projects that were economical and strategic and Portland saw bicycle usage rates rise precipitously. But most of these changes were happening in the semicircle of inner east neighborhoods around downtown. Indeed, the Portland Bureau of Transportation's (PBOT's) main means of measuring increases in bicycling traffic was bridge counts, measuring cyclists trips in and out of downtown from the inner east side.

Because of the project priorities established in the Bicycle Master plan, very little attention was paid to areas where topography or incomplete networks made bicycle-friendly design challenging. East of 82nd Avenue, many streets were unimproved gravel lanes, or required expensive sidewalk infill, and the only through streets were large arterials that most bicyclists would find unattractive and unsafe.

³¹ Portland Department of Transportation. (2006). Portland Bicycle Master Plan. Portland, Oregon.

The city's 1998 *Pedestrian Master Plan*³² responded to these shortcomings, developing a Deficiency Index, based on sidewalk gaps, and a Potential Index, based on density of destinations. Projects that scored high on both indices were made a priority. But the needs identified in East Portland and illustrated on the deficiency map were enormous. Again, projects were advanced based upon the overall goals of completing the network in the central core and the ability to complete projects economically by capitalizing on other roadway investments, rather than the needs identified in surrounding communities. With the best of intentions, the city had inadvertently developed implementation priorities that would privilege some residents over others.

The Place

Developed concurrently with the I-205 bypass, East Portland's streets are wider, and the adjacent land uses less dense, than the older streetcar-shaped developments of inner Portland. The City of Portland annexed the area in the 1980s and 1990s, inheriting an incomplete, disconnected pedestrian and bicycle network.

Rising housing costs in the inner city led many lower-income households to migrate to the suburbs where housing was more affordable. The gentrification of North and Northeast neighborhoods in Portland spurred an outward migration of the city's African-American population. By 2010, data from the Census cemented what Portland officials already suspected: East Portland had become the most racially and ethnically diverse region in the state of Oregon, with a 39% non-white population. From 2000 to 2010, the Hispanic population inside the city east of 82nd Avenue doubled, and the African American population nearly tripled.³³ East Portland is also the home to a growing number of Somali, Russian, and Vietnamese residents, among others; in all, 67 documented languages are spoken at home throughout the community.³⁴

In addition to racial and cultural diversity, East Portland also includes a high concentration of vulnerable populations such as the elderly, children, and the poor. The median household income in the area is 23% lower than that of the rest of

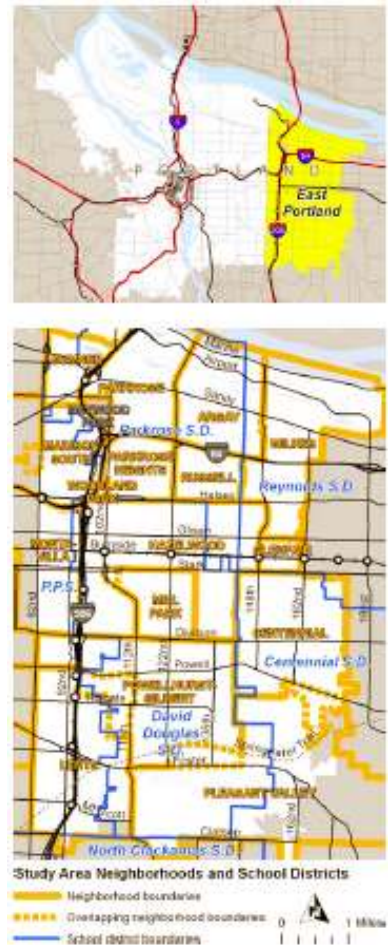


Figure 12: The City of Portland and detail of East Portland. Image: City of Portland

³² Portland Office of Transportation Engineering and Development. (June 1998). *Portland Pedestrian Master Plan*. Portland, Oregon.

³³ Pein, Corey. (October 12th, 2011). "The Other Portland." *Willamette Weekly*. Portland, Oregon.

³⁴ City of Portland Bureau of Planning and Sustainability. (2009). *East Portland Action Plan*. Portland, Oregon.

Portland. East neighborhoods host 261 adult-care homes, compared with 89 adult-care homes to the west.³⁵ Lastly, lower housing costs have attracted larger families to the area, and 40% of Portland's school-age children now live in East Portland.³⁶

The Catalyst for Change



Figure 13: The planned improvements to East Portland as a result of the increased focus on geographic equity.

Source: "East Portland in Motion: A Five Year Implementation Strategy for Active Transportation". Portland Bureau of Transportation, City of Portland, Oregon.

The City of Portland formally recognized the overlap in poor transportation services and classically underserved populations in East Portland through the latest Bicycle Master Plan. The final plan, called the *Portland Bicycle Plan for 2030*, was officially adopted by City Council in 2010.³⁷ More than an update, this was an entirely new plan with a new goal to make bicycling "a pillar of Portland's transportation system." The Plan envisioned for Portland a dense network of family-friendly bikeways within a quarter of a mile of every resident in the city, allowing a quarter of all trips to be made by bike. In order to achieve these goals, the city could no longer ignore the needs of the newest part of the city. Portland contracted Portland State University to conduct an equity gap analysis, using GIS data to map census tracts with a high percentage of "historically disadvantaged populations"³⁸ and low access to bicycle facilities with low vehicular traffic and high bicycle accommodation. Not surprisingly, many census tracts in East Portland scored high in both categories.

Ironically, at the time the plan was adopted, East Portland had more lane miles of bike lanes than anywhere else in the city. These bike lanes, often disconnected and mostly along five-lane arterials carrying an excess of 20,000 cars per day, had not led to increased cycling. The existing facilities did very little to serve the surrounding populations of new immigrants, children and senior citizens.

³⁵ Pein, Corey. (October 12th, 2011). "The Other Portland." *Willamette Weekly*. Portland, Oregon.

³⁶ City of Portland Bureau of Planning and Sustainability. (2009). *East Portland Action Plan*. Portland, Oregon.

³⁷ Portland Bureau of Transportation. (2010). *Portland Bicycle Plan for 2030*. Portland, Oregon.

³⁸ Portland Bureau of Transportation. (2010). *Portland Bicycle Plan for 2030*. Portland, Oregon.

In the same time frame that the Bicycle Plan for 2030 was being developed, the Portland Bureau of Planning and Sustainability also conducted the *East Portland Action Plan (EPAP)* and an accompanying active transportation implementation strategy, *East Portland in Motion* (Figure 14).³⁹, ⁴⁰ EPAP used community committees to generate a list of 300 action items to improve livability in East Portland. Active transportation was high on the list of strategies, driven by the EPAP Bike committee. East Portland in Motion, EPAP and the Bicycle Plan for 2030 were all building on a growing awareness of the needs of the transportation disadvantaged in East Portland at both a community and city level.



Figure 14: East Portland Action Plan Meetings, which were all held in outer East Portland and started with dinner, generated diverse public participation and input on neighborhood livability improvements. Photo: *East Portland News*

Awareness and planning alone could not get projects on the ground without funding. By the end of 2010, as the city began to tighten its belt in the ongoing recession, complete streets programs such as sidewalk infill and curb cut installation were in danger of losing funding. The city had a routine update of the mandatory Transportation System Plan (TSP) in 2012. The new priorities of EPAP and the Bicycle Plan for 2030 had not yet been incorporated into the TSP. Updating the TSP to reflect the changing city-wide emphasis on equity could prioritize project funding to serve the transportation disadvantaged for the next twenty-five years.

The Results

Portland needed a review of the TSP through an equity lens to inform the 2012 TSP update, but the catalyst for the review came from outside the transportation bureau. In 2011, the Multnomah County Health Department received a Communities Putting Prevention to Work Grant for obesity prevention. Inspired by a growing body of research connecting active transportation with health, the health department used the money to form a committee to review opportunities to incorporate *health equity* into the Portland TSP. The group defined health equity as “the absence of systematic barriers in health between groups with different levels of underlying social advantage/disadvantage.”⁴¹ A review committee included a number

³⁹ City of Portland Bureau of Planning and Sustainability. (2009). *East Portland Action Plan*. Portland, Oregon.

⁴⁰ Portland Bureau of Transportation. (March 2012). *East Portland in Motion: A Five Year Implementation Strategy for Active Transportation*. Portland, Oregon.

⁴¹ Portland Bureau of Transportation. (2011-2012). *Incorporating Health into the City's update of the Transportation System Plan*. Portland, Oregon. <http://www.portlandoregon.gov/bps/article/409527>

of important community stakeholders from transportation advocacy and health and cultural organizations, including: the Bicycle Transportation Alliance, the Willamette Pedestrian Coalition, the Coalition for a Livable Future, Oregon Public Health Institute, Upstream Public Health, El Programa Hispano, Ride Connection and the Portland Commission on Disabilities.

In the past, the majority of Portland Bureau of Transportation's work was focusing on the physical environment, rather than the needs of people in those locations. A close review of the TSP revealed that the problem was not one of policy, but of process. There were already policies in the TSP that directly related to equity, but the language and format was so confusing that not even city staff could easily navigate it. In addition, the process for choosing which projects received funding was not clear. The group consensus was that the process for choosing projects to include in the TSP needed to be more transparent, open to community stakeholder input, and guided by a set of explicit equity-based criteria in addition to the usual technical and geographic considerations.

The most important outcome of the committee was a new set of equity-oriented project prioritization criteria. These new standards assign points to projects that:

- Promote active transportation,
- Are located in a block group with higher than average underserved populations,
- Improve safety,
- Reduce exposure to air toxins, and
- Complete ADA, pedestrian, bicycle or transit network gaps.

Unlike the Bicycle Bill or the Bicycle and Pedestrian Master Plans, this new criteria for the TSP finally establishes equity as a guideline for choosing projects to fund and implement.

The Future

Portland has come a long way since the adoption of the Bicycle Bill. At that time, transportation activists perceived bicyclists and pedestrians as the group suffering from inequitable treatment. No one anticipated that the technical focus of earlier policies would bias some communities over others. The strategies to provide more non-motorized facilities in places where they were easy to implement and most likely to see frequent and immediate use inadvertently and disproportionately advantaged some groups over others. It has taken leadership at the state, county, city and neighborhood levels to both draw attention to this inequality and to craft policy solutions that provide complete streets for all Portland residents.

East Portland has already started to see more active transportation projects than in the past. If PBOT incorporates the Health Equity Committee's recommendations into their TSP update, the community will likely see many more complete streets projects in the coming years. Portland has learned to engage a diverse community of stakeholders early on in projects, be transparent in project selection, and include equity criteria for multi-modal project selection at a city level.

LESSONS LEARNED

The communities featured in these case studies are very distinct and were selected to capture a range of places. They vary in size, geographic location, socio-demographics, urban context and transportation environment. They also have differing levels of civic capacity, government resources and expertise, and social organization. The challenges to and opportunities for residents' mobility and accessibility are also different, as are the goals and desires for the future of their transportation system. Each community has a unique social history and set of political actions that led to the policy changes highlighted here and thus, each has its own story to tell in its desire to offer multimodal mobility.

Despite these unique circumstances, there are some common themes in these stories. Our hope is that these lessons offer some guidance and inspiration to other communities, which are struggling with similar transportation challenges and looking to establish complete streets policies as a part of the solution.

One champion can make a big difference.

In each case described here, community champions within public agencies stepped up to write grants, lead committees and influence policy adoption. Program coordinators were able to facilitate change on behalf of the underserved by applying for outside funding and gathering public support. The combination of a supportive elected official, supervisor or administration and a motivated project coordinator or planner allowed agencies to take advantage of available grant funding to launch new projects or committees.

Community support is critical.

When dealing with disadvantaged populations, it is critical to have public involvement and engagement be a driving force behind the visioning and the planning process. This is particularly important when soliciting ideas and input from communities such as the disabled, low income families, and communities of color. Although individuals within public agencies were able to take a leadership role, this was often heavily influenced and complemented by strong public support. Planners went to great lengths in each community to draw information and perceptions from the public through tools such as surveys, workshops or walking audits. All found support for increased walkability, bikeability and transit service. The sustained engagement helped to build relationships and trust to help move ideas and policies forward.

Coalitions can bring together diverse community stakeholders.

By creating a coalition or taskforce to write or review a plan, communities have been able to bring stakeholders and representatives from many under-represented groups together to discuss active transportation issues and bring their own unique perspectives to the table. Local level taskforces can give community groups a voice in the planning process. At a regional and statewide level, coalitions and taskforces can serve as an opportunity for knowledge and resource sharing.

Transportation equity is a critical public health objective.

Sometimes funding is more readily available for bicycle and pedestrian projects through community health grants, thanks to the Centers for Disease Control and Prevention, the Robert Wood Johnson Foundation, and other foundations or public agencies that support improving the built environment to encourage active living. But beyond receiving external grant funding, planning biking and walking infrastructure in concert with planning for new schools, grocery stores, and parks can help people make the connection between active transportation and their daily routine. In communities that are just beginning to build biking and walking infrastructure, health considerations can ensure that bike routes and sidewalks serve the most vulnerable populations, such as older adults and children, first.

Transportation equity must be explicit in goals, objectives, and project criteria.

All transportation projects and facilities start as a project on a list, either within a local street plan or a regional transportation plan. In order to see real changes on the ground, communities have begun to recognize the importance of changing the criteria for what that list looks like. By making walking, biking and serving disadvantaged communities central criteria, jurisdictions and MPOs can shift funding allocation away from strictly automobile-oriented projects and towards a balanced set of transportation projects also serving active transportation, transit and freight.

Data are compelling

Data collection for non-motorized modes of transportation is still a relatively new area for many communities. As they begin efforts to collect and assemble data, engaging the public in this effort can serve two ends – helping to provide much-needed labor in the effort and providing a mechanism to educate and converse about community assets and needs. Some of the communities profiled here have started to use GIS visualizations, travel demand modeling and other tools to analyze where investments are most needed. Some of the other increasingly common tools used in these cases included bicycle and pedestrian counts, Health Impact Statements, walking audits, and food desert mapping. Beyond their use in planning, data are also critical for gaining support from political leaders and from the public, as they gather objective evidence to support communities in their pursuit of change.

A policy by any other name...

Although some of the communities profiled here adopted explicit complete streets policies, all have developed multimodal planning and projects independent of the policy, and some chose intentionally to avoid using the term “complete streets” altogether. Some planners found the term polarizing or exclusive when interacting with underserved communities. Others feared that creating a separate policy from routine plans and projects would not effect as much change as incorporating the concepts into plans themselves. Regardless, all the case study communities found ways to effect change through multi-modal policies, plans and projects, demonstrating a variety of means towards building streets that serve all users.

In sum, these lessons focus on the process of how these policies and plans are initiated in these communities, rather than the physical changes that have resulted from their implementation.

Moving from policy adoption to implementation takes time and there are few projects one can point to that have been realized since complete streets policies were adopted by these communities. In the near future, the hope is that there will be a wealth of positive changes on the ground that will demonstrate the abilities of complete streets. In the meantime, communities can move forward in realizing these end goals by actively working to change their local transportation system policies and plans to better reflect the needs of their population.