



Ohio | Department
of Health



Land Use and Health Best Practices Report

April 2019



TABLE OF CONTENTS

KEY TERMS1

INTRODUCTION3

 The Intersection of Land Use and Public Health 3

 Health Issues in Different Land Use Contexts5

CASE STUDIES.....7

 Columbus Healthy Places Program..... 7

 Warren Complete Streets Policy 10

 From Suburban Big Box to Walkable Downtown: Oregon’s Vision 11

 Marion County Built Environment Committee..... 12

IMPLEMENTATION 14

 Create A Land Use Plan That Prioritizes Physical Activity 14

 Implement A Complete Streets Policy..... 15

 Provide Financial Incentives For Healthy Development..... 16

 Use Green Infrastructure And Green Space To Encourage Physical Activity 16

EQUITY CONSIDERATIONS..... 17

CONCLUSION..... 18

REFERENCES 19



Key Terms

- **Active transportation** - An umbrella term that describes all the ways people travel without using a motorized vehicle. The most common forms of active transportation are walking and bicycling. The term does not limit these activities to their recreational function, but instead considers them as healthy, sustainable, and practical ways to commute, run errands, connect to transit and carry out daily tasks, potentially reducing the need for private car ownership and improving the environment.
- **Complete Streets** - Complete Streets welcome all users. They make it easy to cross the street, take the bus, bicycle to work or school, and deliver freight. They also acknowledge the importance of private automobiles, and maintain access for motorists while increasing space for these other modes. Complete Streets are designed to enable safe and convenient access regardless of age, ability, or mode of transportation. They are context sensitive and come in many shapes and sizes depending on the surrounding land use.
- **Comprehensive plan** - A long-term plan that guides all aspects of a community's development over the next 20 or 30 years. The planning process involves significant public engagement and defines a vision, goals, and objectives for community growth. A comprehensive plan describes existing conditions and goals for housing, the economy, transportation, land use, public facilities, and the natural environment.
- **Density** - Density measures the intensity of a particular land use. Typically, high-density development occurs in compact, urban areas where land is more valuable, and low-density development occurs in suburban and rural areas. Generally, high-density development encourages walking and bicycling, while low-density development caters to automobile use.
- **Development application** - To build upon land, subdivide land, or otherwise carryout major alterations to a property, developers must submit an application to a local governing body, typically a planning or building department or a planning commission. Development applications include information about storm and sanitary plans, waterlines, streets and circulation, grading and excavation, and other site plan details for a specific property.
- **Displacement** - Displacement occurs when residents of historically low-income, underserved neighborhoods and communities of color are pushed out due to reinvestment, rising property values, and discriminatory or unfair public policies. Displacement changes the cultural, economic, political, and demographic composition of neighborhoods, often resulting in negative health, economic, and other impacts on long-time residents.
- **Facility** - In transportation planning, facility refers to the type of infrastructure that is used to accomodate various modes of travel. These include bicycle, pedestrian, transit, and vehicle facilities. Facilities come in all shapes and sizes, and can range from a highway to a crosswalk. Transportation planners and engineers must consider the type of user that a particular facility will serve. For example, a standard bike lane may be appropriate for confident adult bicyclists, but a shared use path would be safer and more comfortable for inexperienced riders and children.
- **Inclusionary zoning** - Inclusionary zoning (IZ) requirements can offset the potential displacement that redevelopment brings. Local governments require developers to dedicate a certain percentage of new housing units to low-income individuals. These units are listed at below market rate prices. IZ can encourage race and class mixing and allow long-time residents to remain in place as a neighborhood is redeveloped. However, critics argue that IZ constricts housing supply and raises the cost of market-rate units.
- **Infill development** - Infill development, also known as redevelopment, occurs on vacant parcels within existing built areas that are already served by roads, utilities, water, and other public infrastructure. This efficient use of land and resources encourages community revitalization, spurs economic development, and incentivizes active travel, as compared to a greenfield development on the edge of town that may only be accessible with a car. Infill can occur on vacant lots, in existing buildings that are adapted for different uses, and on former industrial sites, or brownfields.

- **Land use** - The practice of how communities manage and modify their physical space, which includes both the places that people occupy for living as well as natural habitats, open space, and agricultural land. Its main purpose is to ensure a community's economic, social, and environmental strength.
- **Mixed-use development** - Traditional zoning emphasizes the separation of land uses. Mixed-use development takes a different approach, encouraging a blend of uses in the same district or property. Homes and commercial activities that are within the same site or even the same building are an example of mixed-use development. This type of development usually occurs in high-density, urban areas where space is more valuable. Mixing uses allows more trips to be completed on foot or by bicycle.
- **Noxious land use** - Includes environmentally hazardous sites, such as landfills, slaughterhouses, and other heavy industrial sites. Noxious land uses disproportionately impact poorer communities and communities of color. They burden adjacent communities with adverse air quality, noise, traffic safety, congestion, and vibrations from heavy truck traffic; use and storage of hazardous materials; emission of hazardous and toxic substances; illegal dumping of hazardous materials; proliferation of waste handling facilities; and poor enforcement of environmental regulations and inadequate response to environmental complaints.¹
- **Rezoning** - Rezoning a property assigns it to a new zoning district with a different set of restrictions than its prior designation. It can be used to allow higher-density development and mixed uses. The process is typically initiated by a property owner.
- **Setback** - Zoning codes require a minimum distance between a building and the road that provides access to the property, called a setback. Large setbacks are typical in suburban areas to accommodate automobile use. Small setbacks are common in urban areas and are more conducive to pedestrian activity, as building entrances are closer to sidewalks, transit stops, and other public amenities.
- **Smart Growth** - Smart growth is an approach to development that encourages a mix of building types and uses, diverse housing and transportation options, development within existing neighborhoods, and community engagement.²
- **Zoning overlay district** - A zoning overlay district is applied on top of a pre-existing zoning district. It eliminates the need to obtain a special use permit or undergo a zoning change approval process for certain uses. For example, an affordable housing overlay can be used to encourage that type of development in specific areas by loosening restrictions. Alternatively, overlays can impose additional restrictions to protect and preserve desired features, such as historic buildings and wetlands.





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Introduction

Communities across Ohio are realizing the significant impact that our built and natural environments have on public health outcomes. Built and natural environments are in turn shaped by land use, or the policies and regulations communities use to manage their development. Communities can control land use through zoning regulations, building and maintaining transportation infrastructure, preserving or maintaining open space, or creating financial or policy incentives for certain types of development. All of these strategies have implications for public health. For example, requiring compact, mixed-use development in certain areas encourages physical activity through active transportation, which reduces the risk of chronic diseases.

This report introduces fundamental planning and land use concepts and explores their connections to health outcomes. It first examines health issues in different land use contexts, including urban, suburban, and rural communities. It then provides a series of case studies that highlights communities across Ohio that are working to improve public health outcomes with land use and transportation policies. Finally, it contains strategies and best practices for land use which can create healthier communities.

Certain terms and concepts may be unfamiliar to public health professionals. A glossary of terms can be found at the beginning of this report to familiarize the reader with common land use and transportation planning terms.

The Intersection of Land Use and Public Health

Land use is the practice of how communities manage and modify their physical space, which includes both the

places that people occupy for living as well as natural habitats, open space, and agricultural land. Its main purpose is to ensure a community's economic, social, and environmental strength. Land use policies can determine where different kinds of activities, such as living, working, and recreating, best fit in a community. These policies can also stipulate how buildings and sites should be laid out and configured.

In Ohio, land use is the exclusive responsibility of village, township, city, or county governments. Decisions about land use policies are often made through an extensive public process. To guide land use decisions, local government officials typically create a long-term plan, known as a comprehensive plan, that guides all aspects of a community's development over the next 20 or 30 years. Often, officials gather considerable input from community members to aid in the decision making process.

Land use planning is a crucial opportunity for local governments to shape public health outcomes. It shapes the way that people live, what forms of transportation

are available to them, and what amenities they can access. In addition to these behavioral factors, land use can also affect environmental health. Regulations that permit low-density development encourage travel by car, which increases exposure to pollution. Similarly, allowing noxious land uses, such as landfills, to locate near residential areas can cause major hazards to community health.

The connection between land use and health is complex and multifaceted. For example, land use that encourages walkable places can be both beneficial because it increases opportunity for physical activity, and harmful because that physical activity exposes people to more pollutants. While the net effect is positive because the physical activity benefits are greater than harm from pollution, communities must take a nuanced and comprehensive approach to land use to consider all of these potential outcomes.

There are many ways that officials can control land use and design to impact public health. Examples of these strategies include:³

- **Design to increase physical activity:** Increased levels of physical activity can reduce the risk of chronic diseases, such as cardiovascular disease, stroke, diabetes, osteoporosis, obesity, or respiratory problems. Design can encourage physical activity by making it safe, easy, and comfortable to walk or bicycle for both recreation and transportation. Effective active transportation networks create pedestrian and bicycle connections to important destinations including shops, grocery stores, job centers, public services, schools, community centers, and houses of worship.
- **Design for mental health:** Communities can be designed to improve residents' access to parks, recreation centers, or community facilities. This strategy gives people more exposure to recreational activities, contact with nature, and increased social

interaction, all three of which are shown to improve mental health. People who exercise more and spend more time outside or around other people are shown to have lower rates of depression, reduced anxiety, and an improved ability to cope with stress.⁴ Consequently, those outcomes can reduce an individual's susceptibility to other health issues.⁵

- **Design for children:** Accommodating children is an important part of encouraging and establishing lifelong active living habits early on. Communities can create opportunities to play in a safe environment by providing parks close to where people live, calming traffic on residential streets where children are likely to play, and creating a network of safe walking and bicycling routes that connect to parks and recreation facilities. Children who have safe places to play are shown to have faster physical and mental development and to have better health outcomes as adults.⁶ Exposure to air pollution should be minimized in areas where children are likely to play outside due to possible increased negative effects it can have on youth.
- **Design for environmental justice:** A primary goal of environmental justice is improving public health outcomes for disadvantaged populations. The issues of poor air quality and traffic violence tend to burden communities of color and low-income populations the most. Providing multiple options for safe, convenient, and efficient travel helps to reduce private vehicle use, which improves air quality, and fewer cars on the road can also reduce the rate of severe injury and death from traffic crashes. Additionally, improving access to shopping, jobs, education, recreation, or public amenities can provide substantial increases in social capital and social equity. Finally, land use decisions should not place environmental hazards (such as polluting industries, highways, etc.) near historically marginalized populations who often have worse health outcomes.

Children who have safe places to play are shown to have faster physical and mental development and to have better health outcomes as adults.

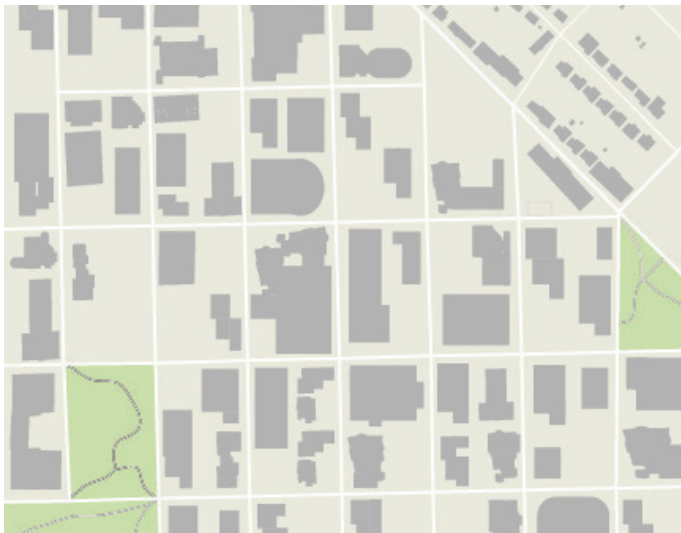


Health Issues in Different Land Use Contexts

While many communities across the state share the goal of improving public health, challenges vary depending on the land use context. In Ohio, most communities fall into one of three categories: urban, suburban, and rural. Below are characteristics of all three contexts followed by a table that shows the specific health issues that communities in each category most commonly face.

- **Urban communities:** These include large or medium-sized cities or portions of small towns. They are characterized by a compact layout, a fine-grained mix of different uses like homes and businesses, and a traditional, tightly-connected street grid. Many may have been developed during the 19th or early 20th century, when automobiles were less common and most people traveled shorter distances by foot, bicycle, or transit.
- **Suburban communities:** These include the areas around most of the state’s large or medium-sized cities. They are characterized by low-density development patterns where different uses, like homes or businesses, are separated from one another. Suburban communities may have a more disconnected street system that includes cul-de-sacs and loop streets. Many suburban communities were developed during the mid to late 20th century, when automobiles were very common. As a result, these communities were designed primarily for longer-distance trips by car. Different land uses, such as residential and industrial, have traditionally been separated in these areas.
- **Small town/rural communities:** These include the state’s small towns and villages as well as the lightly settled areas around them. They can be fairly diverse in nature, but are typically very spread out, with long distances between different uses and extensive open spaces. They may have been developed at any time and may have a very sparse street system with few connections and more natural barriers, such as rivers. Rural communities are often dependent on the automobile, though they may also have large populations that either cannot drive or cannot afford a car.

The table on page 6 shows common land use-related health challenges in urban, suburban, and rural communities.



Typical urban land development pattern























Typical suburban land development pattern



Typical rural land development pattern

Common Land Use-Related Health Challenges

Common Health Challenges	Community Type		
	Urban	Suburban	Small Town/Rural
			
			
			
			
			
			
			
			
			
			

^a Greenfield development encroaching on farmland reduces the supply of locally available fresh food.

^b Traffic and other noxious land uses cause air pollution, particularly near large highways.

^c Lack of sewer infrastructure can lead to contamination; poorly planned/unregulated development can compromise natural ability of water systems to remove pollutants.

^d Auto-oriented layouts encourage driving, reducing physical activity from walking or biking.

^e Low-density single family housing, auto-dependent lifestyles, and long distances to centers of social activity can lead to isolation and mental health challenges.



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Case Studies


Communities across Ohio already employ land use policies that serve to improve community health and address these issues. Below are several case studies from urban, suburban, and rural communities around the state.

Columbus Healthy Places Program

The Healthy Places Program works to create a built environment that encourages walkable and bikeable places and physical activity through community design processes, such as land use and transportation planning.⁷ A program of Columbus Public Health's Division of Neighborhood Health, Healthy Places employs a host of activities and policies to accomplish its goals. It began by establishing simple, but impactful objectives for the development process such as sidewalk requirements, to start the conversation around development and public health. As the program has grown and become a part of the local development process, its goals and recommendations have become institutionalized across city departments, with buy-in from other decision makers. The Healthy Places Program uses a variety of strategies described below to improve health via land use.

Health Impact Assessment (HIA)



A Health Impact Assessment (HIA) is a tool used to ensure that health is considered in all policies, projects, plans, or key decisions within a community. HIAs pull from a variety of data sources and input from the community. The goal of a HIA is to develop recommendations on how to monitor positive and



Location:
Columbus, Franklin County

Issues Addressed:

- Lack of physical activity
- Pedestrian and bicyclist safety





The Healthy Places Program encourages businesses to incorporate healthy design elements.

negative health effects that could occur based on findings. This is a proactive approach to mitigating and managing any negative health impacts that may occur from changes in the built environment.

During the planning phase of any project, such as a new road or development, a HIA should be conducted to predict the project's potential impact on community health. In addition to infrastructure projects, HIAs can also be used to evaluate potential health impacts of plans, policies, or programs. For example, Columbus Public Health conducted an HIA for Columbus' School Travel Plan in 2013 to highlight the plan's positive health benefits.

The Healthy Places Program created HIA checklists for land use development and transportation decision makers. The checklists act as a guide for health considerations. They are used during preliminary design review for new development and sites undergoing redevelopment. They also cover items during initial review and project scoping for transportation planning projects, such as sidewalks, bicycle lanes, and roads. When checklists were distributed during a pilot phase of the program, 65 percent of the recommendations were voluntarily accepted by project managers.⁸ The Healthy Places Program's HIA checklist was foundational to the program and its goals. By defining best practices for health and development and integrating it into the review process, many of the recommendations are becoming standard practice. This progress has allowed the Healthy Places Program to push for greater enforcement of HIA strategies.

Rezoning Review

As part of the city's rezoning process, the Healthy Places coordinator provides educational recommendations

on development applications to increase active living amenities in private development. From 2006 through 2011, the Healthy Places coordinator reviewed 159 rezoning applications. Through this process, 55 percent of private developers voluntarily adopted and implemented one or more of the active transportation elements that were recommended by the zoning code. During the review process, the Healthy Places coordinator looks for design elements that encourage active living, such as sidewalks, bicycle racks, zero setback site plans, and building entrances that connect to sidewalks rather than parking lots. Through the HIA and rezoning process, the Healthy Places Program also calls attention to marginalized neighborhoods, such as communities of color and low-income populations, to create a more equitable built environment. It poses important questions about how regulatory and other changes might exacerbate health inequities and disparities.

Parking Code Changes

In May of 2010, Columbus passed a new parking code requiring parking lots to incorporate walking and bicycling facilities recommend by the Healthy Places Program. Recommendations included bicycle racks, sidewalk connections to building entrances, and shade trees. The Columbus Board of Health adopted a Resolution of Support for the code due to the increased opportunities it provided for safe and active transportation. Since the passage of the new parking code, private developers have voluntarily adopted 43 percent of the rezoning recommendations for active transportation elements, including wider sidewalks, enhanced crosswalks, and more walking paths.⁹

Lessons Learned

Participating in the community development process helped the Healthy Places Program establish good relationships with community leaders. By maintaining a seat at the table and building trust within the community, the program has been successful in shaping Columbus's built environment to include more activity-friendly destinations, which helps foster better health outcomes. A key factor in the program's success is the program's Healthy Places coordinator, a Columbus Public Health staff member who has an urban planning background but is fluent in both public health and planning cultures. To replicate this success in other communities, public health professionals should work with planners to identify a similar checklist targeting smaller, achievable goals; find ways to influencing basic design; and build trust with local developers and decision makers.

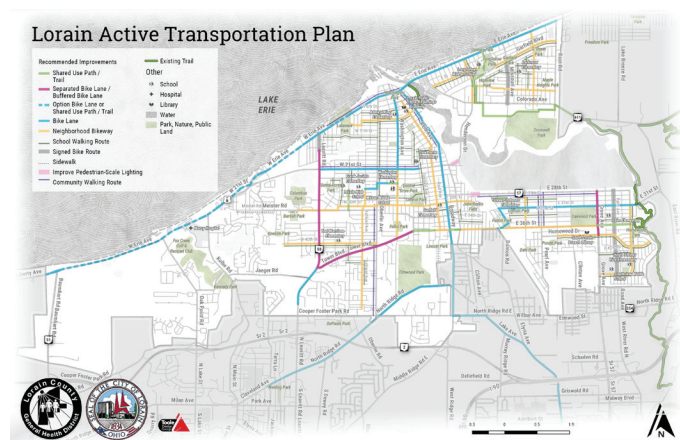
Lorain Active Transportation Plan

An Active Transportation Plan (ATP) takes a system-wide approach to develop a comprehensive set of strategies that ensures better options for bicycling, walking, and transit. An ATP guides the planning, design, construction, and maintenance of a safe roadway network for all travel modes, and its strategies should accommodate users of all ages, abilities, and income levels. At its core, an ATP must identify land uses that attract or generate travel demand among active transportation users, such as schools, employment centers, parks and recreational opportunities, and downtowns. It then recommends safe, convenient, and comfortable infrastructure to connect these destinations with residential neighborhoods and other population centers.

The City of Lorain took a hybrid approach to creating its ATP by incorporating many Safe Routes to School elements, culminating in its Active Transportation-School Travel Plan. The plan was led by a public health official from the Health Promotion and Chronic Disease Prevention Division at Lorain County Public Health, with a team of local professionals from the City, Metro Parks, and School District serving in supporting roles.

During the public outreach process for this project, residents were surveyed as to which mode of transportation they relied on to get to work or school and for making other daily trips. In addition, a mapping survey was used to collect information on which destinations residents would like to reach by foot or bicycle, and which barriers prevented those trips. Respondents also provided feedback on places where they considered walking or bicycling conditions to be good versus those they felt needed improvement.

From the project's public involvement and existing conditions analysis, the team determined that gaps



Recommended improvements from the Lorain ATP

Location:

Lorain, Lorain County

Issues Addressed:

- **Lack of physical activity**
- **Pedestrian and bicyclist safety**
- **Traffic injuries and fatalities**

and barriers to active transportation around the City of Lorain fell into three primary categories: land use, streetscapes, and facilities. Issues specific to land use included large commercial parcels located away from residential areas with poor pedestrian and/or bicycle access and general lack of activity in the downtown. The team identified priority routes by analyzing the spatial relationship between existing residences, schools, parks, grocery stores, medical offices, and other key destinations around the city. These routes were then targeted for active transportation enhancements as they were the most viable for improving and increasing active transportation in the community.

Lessons Learned

The Lorain ATP shows the importance of engaging a broad group of stakeholders for both a comprehensive assessment of community challenges and opportunities and to create buy-in from the groups that are essential to implementing the plan. It draws a clear connection between land use and transportation and uses these elements to create a healthier built environment.


Warren Complete Streets Policy

Communities across the country are adopting Complete Streets policies to address gaps in various modes of transportation. When streets are only designed for cars, they discourage individuals from choosing more active modes of travel. Even if sidewalks exist, large intersections and speeding traffic make them uninviting or unsafe for pedestrians. Complete Streets provide people who are walking and bicycling with safe and convenient facilities, which is a vital part of promoting non-motorized travel. A study in the *American Journal of Public Health* found that 43 percent of people with safe places to walk within 10 minutes of home met recommended activity levels; among those without safe places to walk, just 27 percent met the recommendation.¹⁰ Residents are 65 percent more likely to walk in a neighborhood with sidewalks than in one without.¹¹

While ATPs focus on community-wide networks, Complete Streets policies take a project-level approach, focusing improvements on specific corridors and intersections. They ensure that any new projects will include design elements or land use adjustments that support active transportation modes. Complete Streets policies look different in every community because they respond to local built environments. Smart Growth America lists sidewalks, frequent and safe crossing opportunities, bicycle lanes, narrower travel lanes, comfortable and accessible public transportation, and other treatments as potential elements to include in a Complete Streets policy.¹²

The City of Warren, in Trumbull County, adopted its own Complete Streets policy in 2019 with a vision to “provide a safe and accessible, well-connected and visually attractive surface transportation network, that balances the needs of all users... and promote a more healthy and livable community for citizens of all ages and abilities.” Directives within this policy cover infrastructure, urban design, and land use recommendations. The policy sets standards for all transportation projects, from planning to construction to maintenance. Improved facility maintenance to ensure smooth and safe surfaces is also listed among the directives.


While infrastructure type plays an important role in promoting active transportation, it is only one component of providing a friendly environment for people walking and bicycling. Urban design and land use directives are also included in Warren’s policy. The policy lists streetscaping, such as trees, greenspace, street furniture, bicycle parking, and landscaped buffers as options for creating an accommodating street-side environment. The policy’s land use directives require convenient and



Location:
Warren, Trumbull County

Issues Addressed:

- **Lack of physical activity**
- **Pedestrian and bicyclist safety**
- **Poor air quality**



safe pedestrian and bicycle connections between the public right-of-way and private development. In addition, businesses are encouraged to provide bicycle parking near the front door of the business for staff. The policy encourages neighboring businesses to share parking facilities to reduce curb cuts and points of conflicts between motorists and active transportation facilities. Infrastructure, urban design, and land use destination goals come together to provide a framework for creating the environment in which a community can become more active and healthier.

Lessons Learned

While ATPs take a system-wide approach to address the network between high demand land uses, a Complete Streets policy is a method for focusing on and improving physical conditions at specific places in the transportation network. Policies should include land use requirements that are not already codified in local zoning regulations, such as the City of Warren’s directive to include bicycle parking on-site and near the business front door.

From Suburban Big Box to Walkable Downtown: Oregon's Vision

The City of Oregon, a suburb of Toledo, evolved out of a rural township with no urban center or small town at its core. Like many Ohio suburbs, Oregon's land use patterns are characterized by low-density development that caters to automobile users. Fast food restaurants, convenience stores, and large-scale retail with plentiful parking normalize sedentary lifestyles and poor dietary choices and increase the risk of chronic disease.

Much of the city's land cover remains agricultural and rural, transitioning to suburban-style subdivisions on its west side, closer to Toledo. Retail is one of Oregon's biggest industries; however, a slew of big box stores has closed across the Toledo area in recent years, including in Oregon. Most recently, the last Kmart in the region closed on Oregon's main business corridor, Navarre Avenue, in 2018. In 2019, the City of Oregon accepted an offer to enter into a lease-purchase agreement with the owner of the former Kmart site. The City intends to hire a developer to build mixed-use housing, small-scale retail and healthcare, restaurants, and other service, employment, and entertainment uses on the site to create a walkable town center. Oregon City Council approved a zoning overlay for the area in 2017, which allowed residential, commercial, and mixed-use development.

Oregon is using a Smart Growth strategy to pursue its vision for a walkable downtown. By focusing economic and community development on an existing site, the city can curb suburban sprawl and its consequent negative impacts on the environment. Infill development also offers economic benefits. The City will avoid the major costs associated with building on undeveloped land, such as new sewer, water, and other utility lines; roads; and increased demand on police and fire services. All of these elements would exacerbate auto-oriented sprawl and degrade the community's rural character and agricultural heritage.

The town center will anchor the existing businesses along Navarre Avenue and attract new ones. The site is within walking distance of many residential neighborhoods on Oregon's west side. Investments in bicycle and pedestrian infrastructure would improve access to the site and encourage healthier, more active lifestyles among Oregon's community members.



Location:
Oregon, Lucas County

Issues Addressed:

- **Lack of access to healthy food**
- **Lack of physical activity**
- **Pedestrian and bicyclist safety**
- **Increased risk of chronic disease**



Lessons Learned

While it is too soon to predict whether Oregon's visionary town center will be a success, other suburban communities across Ohio are pursuing similar strategies. Smart Growth initiatives have also played a major role in revitalizing urban neighborhoods in major cities, such as Cincinnati's Over-the-Rhine and Columbus' Short North Arts District. While suburbs face different challenges in redevelopment, a Smart Growth approach can help transform auto-oriented developments into walkable communities.

Marion County Built Environment Committee

The Marion County Built Environment Committee is one of several action-oriented committees developed by the local Creating Healthy Communities (CHC) program. The committee's activities have included demonstration projects, programing, public engagement, leadership, community education, and more. Led by Marion Public Health and the Marion County Regional Planning Commission, the group also includes representatives from:

- » Marion Police Department
- » Marion Township Roads Department
- » City of Marion Engineer
- » Paul Omness Designs
- » County Parks Board
- » The Ohio State University Marion
- » Downtown Marion Inc.
- » Tri-County Mobility Manager
- » Marion Area Transit
- » United Way
- » Marion City Parks
- » YMCA
- » Marion County Engineer
- » Marion Police Department

The Committee provides a strong example of cross-sector collaboration between health, planning, and transportation professionals. This multi-disciplinary group takes a comprehensive and informed approach to tackle Marion's health and transportation-related challenges. Since its formation in 2011 the Committee has been instrumental to the success of many programs and policies, including:



The Built Environment Committee organizes a weekly Downtown Marion Market



Location:
Marion County

Issues Addressed:

- Lack of access to healthy food
- Lack of physical activity
- Pedestrian and bicyclist safety
- Limited access to green space
- Increased risk of chronic disease



- » **Shared/open use agreements with churches and community organizations.** The CHC coordinator worked with the Marion First Church of the Nazarene to allow for community use of its playground. Marion Public Health assisted with the funding, design, and community outreach for the construction and purchase of equipment for a community park on church property. In return, the church agreed to maintain permits and equipment while also advertising the park as a public space open to the community. This agreement activated an unused space and made the playground more accessible to the public. It continues to encourage physical activity, which is a key element in preventing chronic disease.
- » **Passage of the City of Marion's Complete Streets policy.** This policy promotes an integrated and balanced transportation network. Complete Streets strive to provide the best possible blend of service, mobility, and safety for citizens of all ages, income levels, and abilities. The Committee also hosted a Complete Streets training with the Ohio Department of Health.

» **Involvement in the OSU Extension program known as Healthy Eating Active Living Mapping Attributes using Participatory Photographic Surveys (HEAL MAPPS).** The program equips local students and families with GPS devices to capture their lived experiences when trying to access food and community resources. Participants document physical, social, and perceived barriers in the built environment—as well as land use and development patterns—that inhibit access to healthy food resources. The program seeks to implement community-level strategies to address healthy food access and food insecurity among children and families.

» **Leading active transportation planning efforts throughout the City and County.** Committee members have organized bicycle safety events at Marion City Schools, were involved in the State Route 309 and State Route 95 bicycle lane projects, developed a 10-mile signed and marked bicycle route in the city, hosted a professional bicycle ride, and implemented a bicycle valet at the Marion Popcorn Festival. In 2019, the Committee facilitated an active transportation workshop, which resulted in a map of community-vetted priority bicycle and pedestrian projects throughout the county.

Lessons Learned

By establishing working relationships between health, planning, and transportation professionals, Marion's Built Environment Committee leverages local expertise, a multidisciplinary perspective, and a strong commitment to improving health through Policy, Systems and Environmental (PSE) Change.

Not all land use changes must be an overhaul of the existing system. Incremental but impactful changes, such as working with churches on shared use agreements, can leverage funds and support local organizations while also improving the built environment. By focusing on a variety of issues, from shared use to food access to active transportation mobility, the committee has become a catalytic force for change in Marion County.



Field work to designate the Marion marked bicycle route



Yay Bikes! operated a bike valet at the Marion Popcorn Festival.



Implementation

As these case studies show, there are a variety of tools available for communities in Ohio to create a built environment that encourages physical activity and improves public health. The following strategies help implement healthier land use patterns, many of which have already been used around the state in different land use contexts.

Create a land use plan that prioritizes physical activity

Local planning and zoning departments are responsible for a variety of functions that can impact physical activity and public health, such as zoning, development and design review, parking codes, and open space requirements. These tools can be used to create better public health outcomes for a community's residents and visitors. Strategies include:

» **Zoning changes that prioritize compact, walkable development:** Throughout much of the 20th century, communities instituted single-use zoning (also known as Euclidean zoning, after Euclid, Ohio, where it originated) that required separation between homes, businesses, public buildings, and other uses. Euclidean zoning creates long distances between jobs, homes, and other daily needs, which incentivizes car use. Communities should consider updating their zoning codes to encourage smaller setbacks between buildings and mixed-use development, where homes and commercial activities are within the same site or even the same building. Zoning codes should also incorporate design requirements that make buildings more accessible to people on foot or bicycle, such as sidewalk-facing entrances (as opposed to facing a parking lot or rear entrance), street trees, and secure bicycle parking.

» **Updating parking codes:** Minimum parking requirements often mandate large parking lots, which not only consume additional land but also create more low-density development. Walking or bicycling across vast expanses of surface parking is not an attractive option for most people and encourages travel by car. Communities should consider updating their parking codes to be more pedestrian- and bicycle-friendly by requiring parking lots with sidewalks, clear and direct connections from the street through a parking lot to the front door, and lower parking minimums. Some communities have embraced parking maximums, which represents a strong shift in priority from vehicles to people walking and bicycling.

» **Allowing mid-rise, mixed-use development along all main thoroughfares and transit corridors:** Concentrating development along signature corridors increases density and walkability. The presence of high-quality, frequent, and affordable transit can attract further development. The HealthLine, Cleveland's Bus Rapid Transit service, is a prime example.

» **Creating mixed-use nodes along neighborhood collector streets:** Strive for all areas to be within a half mile walking distance to a commercial node or corridor to increase services within walking and bicycling distance.

» **Reducing or eliminating front building setbacks:**

Commercial setbacks usually allow for parking to be placed in front of buildings. This degrades street character, creates less pleasant walking environments, and introduces more conflicts among motorists and between other users. Communities should discard setbacks that encourage parking in the front and require parking to be placed behind buildings, especially in compact or urban settings. Flipping site layouts in this manner creates more inviting store fronts and stimulates street-level, pedestrian-oriented activity.

- » **Removing single-family zoning districts:** Allow by-right multi-family dwelling units and accessory dwelling units in all areas. In addition to combating displacement of low-income people and communities of color, eliminating single family zoning and allowing for accessory dwellings helps build dense communities and allows for more services within walking and bicycling distance.

Implement a Complete Streets policy

Across Ohio and nationwide, communities are recognizing that streets must be designed to accommodate a variety of travel modes. Complete Streets policies ensure that people who either cannot drive, cannot afford to drive, or simply do not want to drive have equal access to transportation and basic needs. These policies also have a significant impact on public health by making walking and bicycling safer, more convenient, and more enjoyable, thus encouraging people to partake in more physical activity.

Complete Streets policies ensure that people who either cannot drive, cannot afford to drive, or simply do not want to drive have equal access to transportation and basic needs.

Complete Streets policies explain how to build and maintain multimodal streets. They can take a variety of forms and will look different in each community depending on the land use context, but generally contain the following elements:

- » A menu or toolbox of different design strategies that prioritize walking and bicycling - common items include sidewalks, crosswalks, accessible pedestrian signals, curb extensions, pedestrian refuge islands, narrower travel lanes, bicycle lanes, and transit lanes. This may include specific information such as dimensions and placement.
- » Directions for planning and transportation officials for how to use these elements in a street design or construction project, such as how they should be used together, and how they should be maintained once built.
- » Policy directives for decision makers that require the consideration of all travel modes when deciding which transportation projects to pursue or as a condition for transportation funding.
- » Requirements to create a more connected street network by filling in holes or gaps in an existing street grid, or mandating that new development have a highly connected street grid.
- » Changes to how the city measures traffic congestion, shifting the focus on how many cars can travel through a given street to how many people it can support while considering a variety of travel modes. Traditional measures of traffic congestion, such as Level of Service (LOS), creates a disincentive to infill development that produces fewer car trips and incentivizes sprawl development on the edge of town that may only be accessible with a car.



Complete Streets incorporate multiple transportation modes.

Provide financial incentives for healthy development

In addition to zoning and transportation planning, community leaders can incentivize land use patterns that encourage physical activity by other means, such as the power of the pocketbook. Local, county, and state governments spend substantial amounts of money providing public amenities for their communities, which can be designed and located to encourage more walking and bicycling. Likewise, incentives for private development should be used to advance communities' public health goals.

- » Require public buildings, including parks, schools, libraries, community and recreation centers, medical facilities, and municipal service buildings, to be in pedestrian- and bicycle-accessible locations. Many municipalities choose to locate new public amenities at the edge of town, where land is most affordable and plentiful and where there are fewer abutting neighbors. Unfortunately, amenities in places like these are often only accessible by car. Instead, use public funds to provide these amenities in established communities, close to existing residents who may be able to walk or bicycle to them. Investments like these also create opportunities to provide transportation improvements, such as new sidewalks or expanded transit service.
- » Use financial incentives for private development to prioritize compact, walkable communities. Many municipalities offer tax subsidies or special financing to attract private developers to build within the community. This is a good way to provide important community needs, such as access to full-size grocery stores and job opportunities. These incentives improve the community's public health outcomes. Incentives should only be offered in established communities, where new development will be within walking or bicycling distance for most people and serve as a potential anchor for additional investment in the area.

Use green infrastructure and green space to encourage physical activity

In urban environments, there are many benefits to installing green infrastructure. Green infrastructure can calm traffic, capture airborne pollutants and storm water runoff, and ultimately improve community health and safety. Common green infrastructure includes:

- » Street trees: Street trees shelter and protect pedestrians, provide habitats for native ecosystems, and—most importantly for public health outcomes—reduce noise, air, and light pollution. Together, these elements encourage street-level activity and more walking and bicycling. Regarding land use, street trees can serve as an economic development tool. Planting street trees entices businesses to locate to vacant properties, leading to infill development and generating economic activity in depressed areas.
- » Increasing access to green space and parks for recreation is a winning strategy to improve mental and physical health, especially in urban areas. The Trust for Public Land's ParkScore is an online tool that rates cities based on how well they are meeting the community's need for parks and green space. It helps planners identify neighborhoods that are underserved by parks and determine the best locations to invest in new facilities. Land use policies that require a certain amount of green space based on residential zoning density codify the need for green space access in local regulations.



Green spaces are good for mental and physical health.



Equity Considerations

It is critical that equity and racial justice are held at the center of any decisions around land use and health. If communities do not apply an equity lens to their selected land use and health strategies, they risk exacerbating health, economic, and other disparities among their community members.

Many of the strategies suggested in this report that seek to improve health outcomes via built environment changes have resulted in displacement and marginalization of people of color, low-income people, and other underserved groups. For example, the rise of compact, mixed-use development often pushes existing residents out of revitalizing areas due to higher rents and increased police presence, among other factors. Similarly, introducing bicycle lanes and other active transportation facilities is often used as a deliberate tool to attract young, white, wealthy people to gentrify neglected neighborhoods and spark redevelopment.

These strategies should not be discarded because of the risks they entail but should rather be employed to serve those community members with the greatest need. Requiring affordable housing units in any new development, giving priority to existing residents for new housing, and other inclusionary zoning practices can offset the potential displacement that redevelopment brings. Working with marginalized groups to design active transportation facilities that meet their needs can make roadway improvements work for everyone. Each strategy in this report should be adapted to improve the health and welfare of underserved neighborhoods while also uplifting community health as a whole.

Displacement and other changes that disenfranchise low-income people and people of color are never an acceptable consequence of improving public health through built environment changes. Addressing the historic and present-day oppression that these communities face must be a priority for any collaboration between land use and health professionals. While it can be daunting to tackle such a complex problem, equity-focused planning and an inclusive public engagement process are clear and proven strategies to find solutions that benefit the entire community.



Conclusion

Historically, many common land use policies and practices have led to negative health outcomes, such as reduced physical activity, exposure to traffic pollution, and lack of access to healthy foods and medical services. While these issues vary based on the land use context, all communities, from major cities to rural counties, suffer from land use-related health challenges. Fortunately, communities of all types are using proven and innovative strategies that use land use policies to improve public health. The first step to doing this is acknowledging the intersection of land use and health, which this report clearly establishes. Cross-sector dialogues between planners and health professionals can help find common ground and focus efforts on improving quality of life for all community members.

References

1. Maantay, J. (2001). Zoning, Equity, and Public Health. American Journal of Public Health. Retrieved from: <https://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.91.7.1033>
2. Smart Growth America. (2019). What is Smart Growth? Retrieved from: <https://smartgrowthamerica.org/our-vision/what-is-smart-growth/>
3. Centers for Disease Control, Division of Emergency and Environmental Health, National Center for Environmental Health Services. (2008). Tools to Assess Health Impacts of Land-Use Policies and Programs: An Introduction to Health Impact Assessment and Evaluation for Land-Use Agencies. Retrieved from: https://www.cdc.gov/healthyplaces/factsheets/Tools_to_Assess_Health_Impacts_factsheet_Final.pdf
4. Bratman, G.; Hamilton, P.; Hahn, K.; Daily, G.; and Gross, J. Nature experience reduces rumination and subgenual prefrontal cortex activation. Proceedings of the National Academy of Sciences Jul 2015, 112 (28) 8567-8572; DOI: 10.1073/pnas.1510459112. <https://doi.org/10.1073/pnas.1510459112>
5. Ibid
6. American Planning Association. (2016). Planning & Zoning for Health in the Built Environment. Retrieved from: <https://planning-org-uploaded-media.s3.amazonaws.com/document/EIP38.pdf>
7. City of Columbus. (2019). Healthy Places. Retrieved from: www.columbus.gov/publichealth/programs/healthy-places/
8. Georges, B. and Hubsmith, D. (n.d). "Promoting Active Transportation: An Opportunity for Public Health." Safe Routes Partnership, American Public Health Association. Retrieved from: www.saferoutespartnership.org/sites/default/files/pdf/The_Final_Active_Primer.pdf
9. Ibid
10. Powell, K.E.; Martin, L.; and Chowdhury, P.P. (2003). "Places to walk: convenience and regular physical activity." American Journal of Public Health, 93, 1519-1521.
11. Giles-Corti, B., and Donovan, R.J. (2002). "The relative influence of individual, social, and physical environment determinants of physical activity." Social Science & Medicine, 54 1793-1812.
12. Smart Growth America. (2019). What are Complete Streets? Retrieved from: <https://smartgrowthamerica.org/program/national-complete-streets-coalition/publications/what-are-complete-streets/>