INDIANA
Active Living Guidebook

Acknowledgments

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>> Introduction

Hoosiers want their communities to be healthy, thriving and active places. Good health is a status that many communities in Indiana strive to achieve but few actually attain. We know that we can do a better job of creating healthy, active communities, but how do we do that? This guidebook will explore how communities and residents can use policy, systems and environmental change strategies to create active communities and support a culture of health, moving our communities toward a healthier future.

The built environment and the rates of physical activity and chronic disease among our residents are directly connected. It is well documented that identifying and removing environmental and policy barriers that hinder active living can increase levels of physical activity and reduce chronic disease among community residents. Recent studies show that communities supporting and promoting active living exhibit higher levels of both leisure- and transportation-related physical activity.

Built Environment

The built environment includes all of the physical parts of where we live and work, including homes, buildings, streets, open spaces and infrastructure.

Centers for Disease Control and Prevention

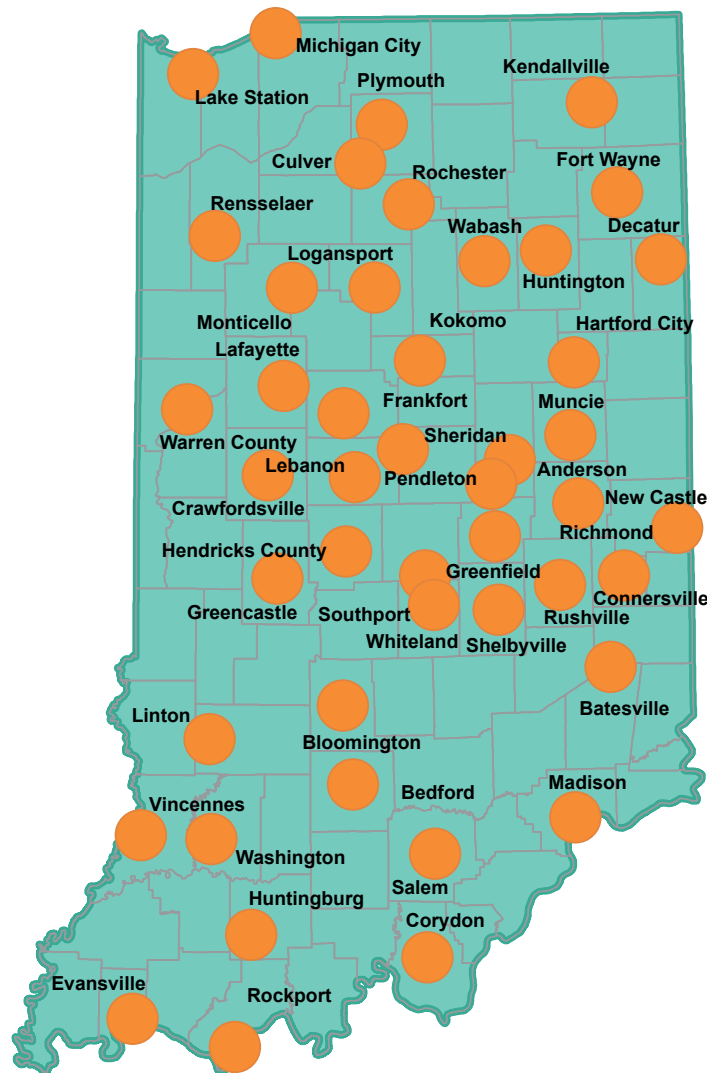## Active Living Workshops in Indiana

The Indiana State Department of Health, Division of Nutrition and Physical Activity (DNPA) received funding from the Centers for Disease Control and Prevention (CDC) to facilitate Active Living Workshops in 26 communities from 2014 – 2018. To run the workshops, DNPA partnered with Health by Design, a statewide nonprofit that collaborates across sectors and disciplines to ensure Indiana communities have neighborhoods, public spaces and transportation infrastructure that promote active living for all. In 2016, Purdue Extension Nutrition Education Program contracted with Health by Design to fund an additional 20 Active Living Workshops. DNPA and Purdue Extension provided over $300,000 in grant funding to conduct the workshops in 46 communities. The workshops were a first-time opportunity for many participants to discuss physical activity access issues.

The Active Living Workshops educated and motivated community leaders and residents by stimulating discussion and illuminating a path toward improving local livability, walkability and active transportation opportunities. More than 1,600 participants, including city planners, engineers, public health professionals, school administrators and community leaders, attended these workshops. During the workshops, participants learned about the connection between public health and the built environment and particpated in a walk audit and mapping exercise to assess

their community. Participants also learned the strategies described in this guidebook, chose the ones they wanted to apply to their community and voted for their top choices. Workshop leaders used the top community priorities to develop an Active Living Action Plan and agreed to a year-long process of follow-up activities, including providing status reports and submitting a success story to outline the community's greatest achievements.

Two Active Living Workshop Peer Summits have been held: one in August of 2016 and one in June of 2018. These summits provided an opportunity for community leaders to come together to learn, share ideas and build a network of healthy community champions across the state.

Active Living Workshops in Indiana, 2014 - 2018

Source: Indiana State Department of Health, Department of Nutrition and Physical Activity

How to Use This Guidebook

The information contained in this guidebook is based on the 46 Active Living Workshops conducted by DNPA and Health by Design. This guidebook is intended to be used by anyone interested in changing the built environment of their community to improve public health. While this guide was developed for use by Indiana residents, the majority of advice and guidance is applicable to any community. Information on how to plan an event similar to the Active Living Workshops can be found in Appendix A on pages 79 – 81.

The subsections titled "The Case for Active Communities," on pages 5 – 7, and "Elements of Active Communities," on pages 8 – 10, provide basic information that describes why this work is important and the characteristics of a healthy, active community. If using a workshop model, this information can be provided in introductory presentations. The remainder of the guidebook walks users through the process of assessing their community, identifying solutions, creating an action plan and measuring progress.

While the guide is organized in a step-by-step, progressive manner, it can be used in any order that is helpful for the community using it. Certain steps or strategies may not be applicable to every community.

DNPA and Health by Design are available as resources to communities; see page 76 for contact information.

Attendees at the Shelbyville Active Living Workshop create a "Human Bump-Out."

>> The Case for Active Communities

The Social Ecological Model

The information in this guidebook is grounded in the Social Ecological Model, a theory-based framework used to understand public health and health behavior. The model recognizes that many factors, at multiples levels, interact to influence health outcomes. Those factors are shaped by public policy; systems of power and oppression; community, institutional and neighborhood assets or barriers; friendship and familial relationships; and individual characteristics. The model explains an increasingly understood reality: that our ZIP code is more important than our genetic code in determining how well and how long we live.

Policy, Systems & Environmental Change Approaches

Public Policy

Community

Institutional

Interpersonal

Individual
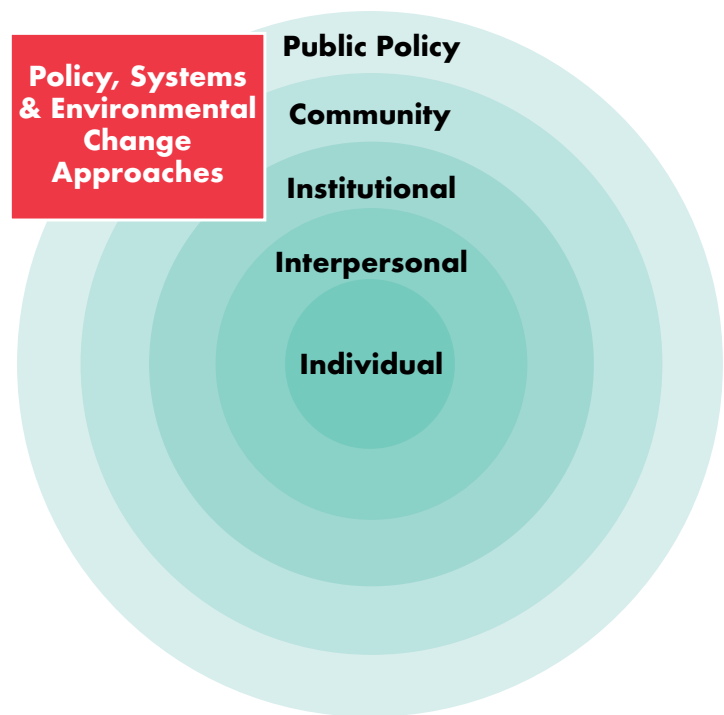
The Social Ecological Model

The choices people make are driven by the choices they have. If communities want to increase the number of people walking, biking and riding transit, they must create such opportunities by improving the built environment and offering more active transportation infrastructure.

Given that the environments in which most people live, work, learn and play are largely shaped by forces beyond their immediate control, if communities want to create change, they must first identify and understand how and why decisions are made. Then, they can begin to use strategies that address such decision-making processes.

More discussion of the above information can be found in the Health by Design Strategic Plan: http://www.healthbydesignonline.org/documents/FinalHbDStrategicPlan20182020.pdf

Policy, Systems and Environmental Change Approach

Increasingly in the field of public health, policy, systems and environmental change strategies are referenced in order to influence higher order, population-level transformation. To do this, communities must collaborate across sectors, disciplines and jurisdictions with an integrated approach that goes beyond simply building awareness or conducting educational campaigns and programs that target individual behavior.

Many communities in Indiana do not have safe places to walk, bike or be active outdoors, limiting access to opportunities for residents to be physically active. Referencing 2017 data, the Trust for America's Health reported that approximately 34% of adults living in Indiana were obese and 30% failed to meet physical activity guidelines. Obesity and chronic diseases associated with physical inactivity have reached epidemic proportions in our state. Research points to the fact that people who live in car-dependent environments walk less, weigh more and are more likely to suffer from related chronic diseases such as hypertension (high blood pressure). Policies and related changes to the built environment can encourage physical activity in communities by making it easier and safer to walk, bicycle and take transit.

Example of Policy, Systems and Environmental Change Approaches	
Policy	Complete Streets policy
System	Everyday decisions that impact the transportation system are changed so that biking, walking and transit are seen as integral parts of the transportation system
Environment	An environment is created where people are able to walk, bike and/or take transit easily and comfortably

The Healthy Communities Movement

A new movement has emerged across the globe that looks to community-wide policy, systems and environmental change interventions as a means to address many of the root causes of obesity and associated chronic diseases that plague Indiana communities. The CDC recognizes that community-wide approaches to these issues are valid public health interventions. Through DNPA, the CDC funded a number of healthy community programs and projects in Indiana, working through local, regional and statewide organizations. Projects in Indiana included community-wide Active Living Workshops, bicycle and pedestrian master plans, Safe Routes to School projects and food access initiatives.

Mayor Joe Yochum addresses the Vincennes Active Living Workshop.

>> Elements of Active Communities

Active communities make physical activity a safe, comfortable and convenient part of everyday life. Many communities have been designed around the automobile as the main form of transportation, though, making it difficult for residents to make the healthy choice of walking or biking to destinations. Communities that support active living make it easy for people of all ages and abilities to choose to be physically active, whether through planned exercise or routine daily activity. Active communities use a combination of land use and design, active transportation networks, and places to play and be active to make the healthy choice the easy choice.

Active Transportation

Active transportation is any type of transportation that is self-propelled and human-powered. Walking, including using a wheelchair, and biking are the most common forms of active transportation, but it also includes riding a scooter or skateboard, rollerblading and many other activities. Communities can encourage active transportation by creating comprehensive bike and pedestrian networks that connect residences to common destinations, such as schools, employment centers, shopping opportunities and other services.

Active transportation networks should be context sensitive and will look different in every community. Most communities will use a combination of multiuse trails, sidewalks and bikeways to create a network.

Connectivity

Communities that have well-connected transportation networks can facilitate biking and walking by increasing the number of routes and decreasing travel time to reach destinations. A connected active transportation network will have continuous sidewalks and bike infrastructure and limited barriers or dead-ends, allowing for direct routes to employment, education, shopping and other destinations. Increased connectivity has shown to increase levels of physical activity by making active transportation easy and convenient.
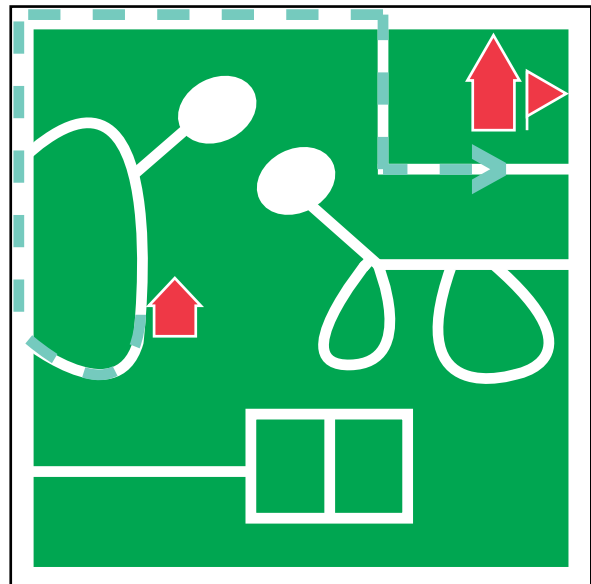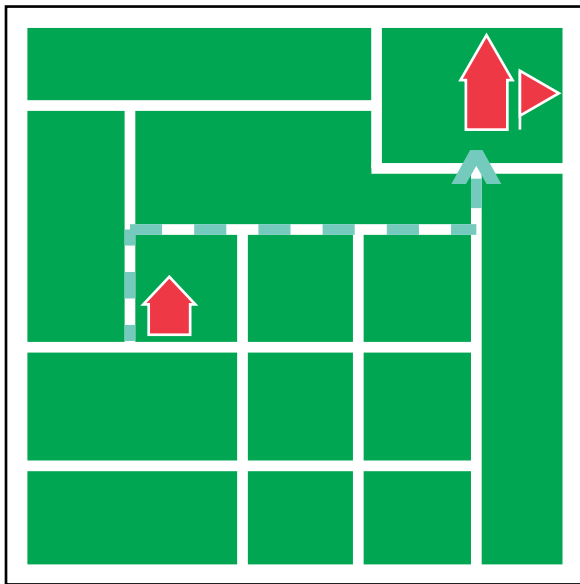
A connected community (left) presents many options to travel to destinations; a disconnected community (right) can make walking and biking trips inconvenient and lengthy.

Universal Design

Universal design means that an environment is designed so anyone can access it, no matter their age or ability. Curb ramps, audible pedestrian signals and braille on signage are all examples of universal design. While universal design is often described as a benefit to people with disabilities, it can have positive impacts for everyone. For example, curb ramps are helpful for people pushing strollers or a cart of groceries. Additionally, as our population lives longer, universal design can keep public spaces accessible for older adults.

Curb ramps are an example of universal design.
Source: pedbikeimages.com/DanBurden

The Americans with Disabilities Act (ADA), passed in 1990, prohibits discrimination based on disability and sets forth standards for accessible design. Public agencies with more than 50 employees are required to adopt an ADA transition plan that describes how it will address barriers to accessibility. For many communities, ADA transition plans include priorities, policies and procedures to ensure the public right-of-way is open to all, such as filling in sidewalk gaps, updating curb ramps or improving complex intersections. New developments and street projects should comply with ADA standards to ensure public places are open to all.

Transit

Transit access is an important element of an active community and can work hand-in-hand with walking and biking by expanding the distance people are able to travel. Communities in Indiana typically have one of the transit system types described below.

The community of Washington has a small fixed-route transit system.
Source: City of Washington

Types of Transit Systems	
Fixed Route	Fixed route transit is common in larger communities; the bus travels along the same route(s) at scheduled times and is usually accompanied by a designated bus stop.
Demand Response	Demand response transit is common in smaller communities. This type of transit typically runs during specified hours and requires users to secure an appointment ahead of time; users are picked up and dropped off at requested destinations.
Deviated Route	Deviated route transit travels along a pre-determined route but accommodates requests for pick-up and drop-off within a specified zone.

>> **Step One:**
Community Assessment

An assessment of a community's built environment is an important first step when determining strategies to increase active living. This section describes two different types of assessments: walking and bicycling audits and a mapping exercise. These assessments will help community members and leaders understand both what is working well and what needs improvement. If using a workshop model, it is important to complete the assessment(s) prior to choosing strategies described in the next section. Information collected during these assessments can help determine which strategies will be most effective.

Walking and Bicycling Audits

Most communities in Indiana are designed primarily for automobile travel, with minimal accommodation for people who walk, ride or use a mobility device. Lack of sidewalks, high-speed traffic, unsafe street crossings and inaccessible transit stops discourage people from using active transportation.

Audits are unbiased reviews of the conditions that influence the safety, access, comfort and convenience of walking and biking environments. Audits can take different forms and involve varying levels of detail. They can also be used to identify potential alternatives or solutions, such as engineering treatments, policy recommendations, education activities or enforcement measures.

A walk audit at the Michigan City Active Living Workshop

Audits involve the collection, review and analysis of information for a specific location, such as an intersection, school site or transit stop, or an entire street corridor. Informal audits can be performed by individuals or groups in a community and are a powerful tool to increase awareness of accessibility and safety issues. More formal audits include a set procedure for collecting information and are usually conducted by planners, engineers or community members trained in conducting and documenting audits. The more formal audits can result in a summary document that includes the audit findings along with recommendations for improvements. The results of an audit typically provide new ideas for improving the conditions for active transportation along a community's streets.

There are many audit tools available, and they vary in their level of detail. It is important to understand who will participate in the audit, the level of data collection necessary and the resources available before choosing which tool to use. Training of leaders may be required to conduct more detailed audits, while untrained volunteers may conduct informal audits.

The results of an audit can be used to inform both broad accessibility and mobility issues within a neighborhood or corridor as well as more detailed site-specific recommendations. The design of the audit process should consider the desired level of detail of the audit results and include necessary training and supporting materials. Results from the audit can also be combined with follow-up walking, bicycling and accessibility review activities to support the implementation of recommendations.

A walk audit at the Lake Station Active Living Workshop

Resources
Walking and Bicycling Audits – Safe Routes to School Online Guide: guide.saferoutesinfo.org/engineering/walking_and_bicycling_audits.cfm
Taking Steps Towards Equitable Park Access – Safe Routes to School National Partnership: https://www.saferoutespartnership.org/sites/default/files/resource_files/ safe_routes_to_parks_walk_audit_toolkit.pdf
Walkability Survey – Health by Design: www.healthbydesignonline.org/documents/WalkabilitySurvey_HbD.pdf
Walk Audit Toolkit – AARP: https://www.aarp.org/content/dam/aarp/livable-communities/docu-ments-2016/Walk-Audit-Tool-Kit/AARP-Walk-Audit-Tool-Kit-100416.pdf

Mapping exercise at the Crawfordsville Active Living Workshop

Mapping Exercise

Maps can be a powerful tool for residents, planners and community leaders to analyze current walking and biking conditions and to identify opportunities for improvement. Small group exercises allow people to naturally engage with each other. Using maps requires some coordination and forethought.

Determining the area to be included in the maps is an important first step. Typically, the entire area within the limits of the incorporated community should be included in the mapping exercise, but it can be broken into quadrants or neighborhoods if the area seems too large for small groups. Good sources for maps include the county surveyor's office or the county Geographic Information System (GIS) coordinator's office. The city or town engineer or planner may also have detailed maps available for use. The county's 911 emergency services coordinator may also be the GIS coordinator. Some communities charge a fee to prepare and print these maps, but many times they are provided free to use for public workshops.

Sample map from the Greater Southport/Perry Township, Indianapolis Active Living Workshop

Sample Mapping Exercise Activites
Label common destinations
Circle challenging intersections
Mark roads green that are very safe and comfortable for biking and walking
Mark roads yellow that are somewhat safe and comfortable for biking and walking
Mark roads red that are very unsafe for biking and walking

>> **Step Two:** *Strategies to Increase Active Living*

In order to increase active living and improve health in a community, it is important to choose priorities that will create an environment where it is safe, easy and convenient for people to be physically active. The assessment activities on pages 11 – 14 can help determine some of the built environment needs in the community. Other needs may be determined by either having representatives from various sectors in attendance at the workshop or consulting with them separately.

This guidebook provides a 5-P approach with recommended policies, plans, programs and projects targeted to support community stakeholder goals. Each P is described on the following pages along with best practices and recommendations. The fifth P, performance measures, is discussed in the section titled "Step Four: Measuring Success," beginning on page 67.

If using a workshop model, these strategies may be introduced to attendees in a presentation. Alternatively, partcipants may divide into different prioritiy areas and go through the guidebook on their own. Suggested priority areas include:

- Walking

- Biking

- Land Use and Public Places

- Parks and Greenspace

- Schools

- Transit

Report out of priorities at the Kokomo Active Living Workshop

Not all priority areas will be applicable to every community, and some communities may have additional priority areas they would like to address. Posterboards describing the priority areas that were used in the Active Living Workshops can be found in Appendix B, beginning on page 82.

In order to develop priorities, brainstorming questions are suggested on the following page. These questions will help participants think through the needs in their community and develop solutions using the strategies outlined in this guidebook.

This section also includes information on the concept of "Lighter, Quicker, Cheaper," a strategy communities use to implement projects.

What assets does this community have to support active living?
What barriers to active living exist in this community?
What policies, plans, programs and/or projects should the community use to increase active living? (Refer to strategies in this section.)

Answers to the final question listed above can become priorities the community will work toward. These answers should begin with an action word; a list of suggested action words can be found in Appendix C on page 89. This question can also be structured to divide priorities into shorter-term goals, i.e., they could be accomplished within six – twelve months, and longer-term goals, i.e., they will take more funding or time to accomplish.

Depending on the number of workshop attendees and topic areas discussed, priorities may need to be narrowed down in order to focus future activities. One method to narrow down priorities is to ask each group to choose its top three "short-term" and top three "long-term" goals. Each priority should be written on a separate sheet of paper and taped to a wall. The workshop participants receive six dot stickers to vote on their personal top three "short-term" and top three "long-term" priorities; see the example below. These priorities will form the goals used in the action plan described on pages 63 – 65.
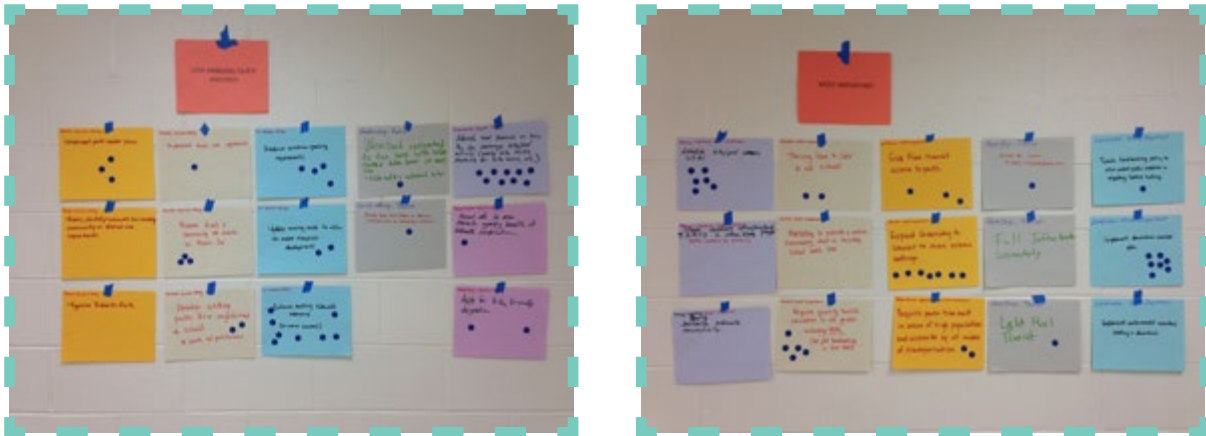
Examples of dot voting at the Evansville Active Living Workshop

>> **Policies**
that Support and Encourage Active Living

Community policies, such as zoning ordinances, funding priorities and related laws, have great potential to influence the health of a community in a positive or negative manner. For example, policies embedded in local planning and zoning regulations influence the placement of sidewalks, either encouraging or limiting access for walking. Other policies, such as bike parking requirements or street design standards, can have a great impact on active living.

>> Complete Streets Policies
Priority Areas: Walking; Biking; Land Use and Public Places

Indiana communities face numerous challenges in the need to plan, design and maintain streets that are able to accommodate a wide range of users. Complete Streets are designed, operated and maintained to enable safe access for all users; pedestrians, bicyclists, motorists and public transportation users of all ages and abilities are able to safely move along and across a Complete Street.

Many communities across Indiana lack an overall policy for consistently considering all users in the planning, design and maintenance of local streets. The unintended consequence is that many streets limit access for people to be more physically active because they do not include basic infrastructure to allow for walking, bicycling and/or access to transit.

Complete Streets can be achieved through a variety of policy changes. These policies take many forms: executive orders by mayors; stand-alone ordinances, resolutions and policies adopted by city councils; language in comprehensive and transportation plans; and policies adopted by regional transportation agencies. Ideally, a Complete Streets policy should include the ten elements on the following page as outlined by the National Complete Streets Coalition.

Complete Street Element	Crash Reduction Rate
Sidewalks	88%
Medians	40%
Road Diets (see page 51)	49%
Countdown Pedestrian Signals	25%

Source: Federal Highway Administration

Main Street, a Complete Street in South Bend
Source: American Structurepoint

Ten Elements of a Complete Streets Policy

1	Includes a vision for how and why the community wants to complete its streets
2	Specifies that "all users" includes pedestrians, bicyclists and transit passengers of all ages and abilities, as well as trucks, buses and automobiles
3	Applies to both new and retrofit projects, including design, planning, maintenance and operations, for the entire right-of-way
4	Makes any exceptions specific and sets a clear procedure that requires high-level approval of exceptions
5	Encourages street connectivity and aims to create a comprehensive, integrated, connected network for all modes
6	Is adoptable by all agencies to cover all roads
7	Directs the use of the latest and best design criteria and guidelines while recognizing the need for flexibility in balancing user needs
8	Directs that Complete Streets solutions will complement the context of the community
9	Establishes performance standards with measurable outcomes
10	Includes specific next steps for implementation of the policy

National Complete Streets Coalition, https://smartgrowthamerica.org/resources/the-ten-elements-of-a-complete-streets-policy/

>> Indiana Success Story: Complete Streets in Bedford

The City of Bedford and Purdue Extension-Lawrence County held an Active Living Workshop in September of 2016. Community members identified adopting a Complete Streets policy as a top priority. This initiative aligned with Mayor Shawna Girgis' goals of increasing active lifestyles and diversifying transportation options.

After the workshop, a series of action planning meetings was scheduled to detail project goals. A small committee was formed to work on a draft Complete Streets proposal. After researching policies in the state and around the country, committee members met with the Mayor's Office staff to discuss process and goals, and an initial policy was drafted. Committee members collaborated with students from the Indiana University Hoosier Sustaining Communities program to organize a series of public education and input sessions about Complete Streets. On April 10, 2018, Mayor Shawna Girgis presented the Complete Streets policy to the City Council and it passed without opposition.

After the policy passed, Mayor Girgis assembled a Complete Streets Task Force. The objective for the first year of the Task Force is to evaluate existing city ordinances and align them with the new policy. Additional Task Force goals and responsibilities are detailed in the policy.

View the Bedford Complete Streets ordinance here: http://www.allianceforhealth.org/docu- ments/BedfordCSOrdinance.pdf

Mayor Girgis addresses the Bedford Active Living Workshop.

>> Zoning, Subdivision Regulations and Design Standards
Priority Areas: Walking; Biking; Land Use and Public Places

Ordinances, such as the zoning and subdivision control ordinance, are the local laws that implement the vision and goals outlined in the Comprehensive Plan and other community planning documents. Elements that support active living include requirements for bike parking, sidewalk standards, street design and sustainable development requirements. Landscape and tree planting standards can promote more walkable communities by enhancing pedestrian comfort and safety. Overlay districts can include design elements such as building and parking placement requirements and pedestrian access standards to promote safe and inviting walking environments.

>> Sidewalk Policies and Programs
Priority Areas: Walking; Land Use and Public Places

The design, placement and maintenance of sidewalks can either encourage or discourage walking in a community. Many communities have polices that regulate sidewalks scattered throughout various ordinances and regulations, making the management and maintenance of sidewalk networks unclear and disconnected. Communities can ensure that their sidewalk networks are predictable and sustainable by adopting a unified sidewalk program that includes clear guidance for sidewalk placement, funding and maintenance. The process for issuing sidewalk waivers for private development should be clearly outlined and used sparingly, if at all.

Sidewalk policies can create a clear process for improving deteriorated walkways, such as this one in Sheridan.

The following issues may be addressed in a unified sidewalk program:

1. Require sidewalks to be part of all new development.

2. Create a sidewalk inventory for the community.

3. Minimize or eliminate sidewalk waivers.

4. Clearly define who is responsible for sidewalk maintenance and construction.

5. Create a sustainable source of funding for new sidewalk networks, such as using the Barrett Law funding process, similar to funding the construction of sanitary sewers in existing neighborhoods, or cost sharing between the municipality and homeowner.

6. Determine a defensible and sustainable process to fund ongoing sidewalk maintenance.

7. Construct safe and accessible roadway crossings that connect sidewalks.

8. Clearly define sidewalk snow clearing and hazard removal responsibilities and procedures.

Resources
Sidewalk Ordinance – America Walks: http://americawalks.org/planning/
"How Do We Pay for Sidewalks (and Other Infrastructure)?" – Mark Fenton: www.markfenton.com/resources/SidewalkFundingSummryFenton.pdf
City of Fort Wayne Barrett Law Loan Program – City of Fort Wayne, IN: https://www.cityoffortwayne.org/images/stories/public_works/doc/Traffic_engineering/City_Of_Fort_Wayne_Barrett_Law_Loan_Program.pdf
Snow Removal Policies – Pedestrian and Bicycle Information Center: http://www.pedbikeinfo.org/data/faq_details.cfm?id=4125

>> Shared Use of Public Facilities
Priority Areas: Parks and Greenspaces; Schools

Many Indiana communities have facilities and outdoor spaces, such as school playgrounds or tracks, that could be used by residents to become more active. Unfortunately, potential users are locked out or have limited access. These places have been purchased and constructed with public funds and can be better utilized. A shared-use approach to these facilities and public lands will create better access for those who desire to use them to become more active.

Shared use agreements are formal agreements between two separate governmental entities, often a school district and a city or county, that set forth the terms and conditions for the shared use of public property. Shared use ensures that outside of regular hours, schools and other public buildings can support healthy, active lifestyles by providing convenient access to recreational facilities for everyone in the community, at little to no additional cost.

Resources
Unlocking the Gates: Implementing Shared Use Agreements – Top 10, YMCA of Greater Indianapolis: https://www.in.gov/isdh/files/Shared%20Use%20Toolkit%20(2)_new%20logo.pdf
Shared Use of School and Community Facilities – National Safe Routes to School Partnership: http://saferoutespartnership.org/state/bestpractices/shareduse
Model Joint Use Agreement Resources – ChangeLab Solutions: http://changelabsolutions.org/publications/model-JUAs-national

>> School Siting
Priority Areas: Land Use and Public Places; Schools

Schools are increasingly being located on the edges of cities and towns where land is less expensive and where larger numbers of students are able to be accommodated. Students are often unable to walk or bike to these locations due to both distance and to the lack of safe walking or biking infrastructure. Adopting a model school siting policy at the local level helps to ensure that new schools are built in walkable and bikeable locations.

Resources
School Siting – National Safe Routes to School Partnership: http://saferoutespartnership.org/state/bestpractices/schoolsiting
Smart School Siting – ChangeLab Solutions: http://www.changelabsolutions.org/sites/default/files/Smart_School_ Siting_FactSheet_FINAL_%28CLS-20120530%29_20120312_0.pdf

>> Wellness Policies
Priority Area: Schools

Federal law requires most schools to develop a wellness policy. A wellness policy can be an important tool for parents and school districts to address obesity and promote healthy eating and physical activity through changes in school environments. A wellness policy can include language that directly addresses encouraging and enabling students to walk and bike to school. Schools may also develop policies independent of the wellness policy to encourage walking and biking to school.

Resources
School Walking and Biking Policies – Safe Routes to School National Partnership: http://www.in.gov/indot/files/TipSheetSBWPolicies.pdf
Indiana Healthy Schools Toolkit: http://www.indianaobesity.org/wp-content/uploads/2017/05/indiana-healthy-schools-toolkit.pdf
Wellness Policies – Safe Routes to School National Partnership: http://saferoutespartnership.org/state/bestpractices/wellnesspolicies

>> **Plans**
that Create a Vision of What Could Be

Residents, planners and community leaders can advocate for inclusion of the factors that influence public health into planning processes in their communities. Working in partnership with health stakeholders on land use and community design initiatives can leverage community-wide support for these issues. Health should be part of a system-wide approach that touches all planning activities from visioning, to goal setting, to the permitting for construction of built projects. The following pages include various ways to account for public health in planning documents and procedures.

>> Comprehensive Plans
Priority Areas: Biking; Walking; Land Use and Public Places; Parks and Greenspace; Schools; Transit

A Comprehensive Plan is a document that outlines goals and objectives for the future development of a community. In general, the plan will cover topics such as land use, transportation and housing. Comprehensive Plans should be updated regularly to ensure that they reflect the current values of the community. Many Comprehensive Plans now include public health as a topic or incorporate health into each topic area. Health stakeholders, such as county health department officials and local hospital representatives, should be part of the project advisory team that provides input into the planning process. Health data should be part of the analysis of existing conditions, and recommendations from community health needs assessments prepared by local hospitals should be considered during the planning process. Additional community plans, such as bike and pedestrian plans or Safe Routes to School plans, can be adopted as amendments to the Comprehensive Plan.

Resources
Comprehensive Plans and Health Toolkit – American Planning Association Plan 4 Health: http://www.plan4health.us/tools-and-resources/toolkits/comprehensive-plans-and-health-toolkit/
Citizen Planner Guide – American Planning Association Indiana Chapter: http://www.indianaplanning.org/?page_id=1221

>> Transportation Plans
Priority Areas: Walking; Biking; Land Use and Public Places; Transit

Transportation plans, also commonly called thoroughfare plans in Indiana, can be part of Comprehensive Plans or stand-alone documents that guide the planning and development of transportation improvements. Transportation plans should include goals, objectives and strategies for increasing levels of safe, active transportation. Bicycle and pedestrian plans can be included as a chapter of a transportation plan or can be stand-alone documents that specifically include language for policies, projects, and programs that support active transportation.

Resources
Integrate Health and Transportation Planning – U.S. Department of Transportation: https://www.transportation.gov/mission/health/Integrate-Health-and-Transportation-Planning
Transportation and Health – American Public Health Association: https://apha.org/topics-and-issues/transportation
Transportation and Health Resources – Centers for Disease Control and Prevention: https://www.cdc.gov/healthyplaces/healthtopics/transportation/planning.htm

>> Bicycle and Pedestrian Planning
Priority Areas: Walking; Biking

Developing a pedestrian, bicycle and/or trails master plan is an important first step in identifying the needs and desires of residents, planning for an interconnected network of pedestrian and bicycle infrastructure and prioritizing projects. These plans can be included as a chapter of a transportation or Comprehensive Plan or can be a stand-alone document that specifically includes language for policies, projects and programs that support active transportation. Nontraditional stakeholders such as hospital administrators, YMCA directors, school administrators and wellness coordinators for local businesses should be an integral part of the active transportation planning process.

The primary intent of the planning process should be to:

1. Create an understanding of current and future demand for walking and bicycling in the community;
2. Increase walking and bicycling for everyday transportation purposes such as commuting to work, getting to school and running errands; and
3. Provide guidance and priorities for implementing programs, policies and projects to support walking and bicycling with a broad range of funding and support.

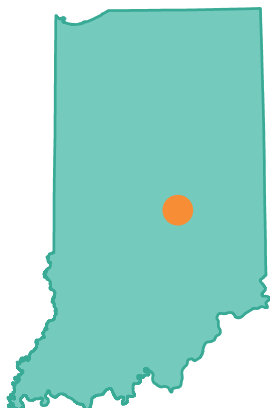| Resources |
| --- |
| *Pedestrian and Bicycle Planning: A Guide to Best Practices* – Victoria Transport Institute: <br> www.vtpi.org/nmtguide.doc |
| *Sample Plans* – Pedestrian and Bicycle Information Center: <br> http://www.pedbikeinfo.org/planning/sample_plans.cfm |
| *Bicycling and Walking in the United States: 2016 Benchmarking Report* – Alliance for Biking and Walking: <br> https://www.aarp.org/content/dam/aarp/livable-communities/docu-ments-2016/2016-WalkingBicyclingBenchmarkingReport.pdf |

>> Indiana Success Story: Hancock County Trails Plan

The City of Greenfield held an Active Living Workshop in July of 2016. The workshop identified the community's desire for more trails, bike lanes and connections between parks. Many workshop attendees represented interests at the county level, which triggered a series of conversations amongst these individuals and the other municipalities in Hancock County. This group decided it would be best to develop a county-wide trails plan to connect the City of Greenfield and the towns in Hancock County.

In 2017, The City of Greenfield, along with the Town of Cumberland, the Town of Fortville, the Town of McCordsville, the Town of New Palestine, the Town of Shirley and the Town of Wilkinson, created a steering committee and applied for a Big Impact Grant from the Hancock County Community Foundation. The grant application was a momentous step for Hancock County because the communities agreed to work together to apply rather than competing for individual projects. In addition to receiving grants through Hancock County Tourism, Hancock Health and Hancock Economic Development Council, each municipality contributed matching funds and signed a memorandum of understanding detailing an agreement.

The steering committee hired a consultant, and work began on the plan in December of 2017. The plan was adopted by Hancock County Commissioners in late 2018 as an amendment to the county's Comprehensive Plan.

Learn more: http://hancockcountytrail-plan.com/

A public particpation meeting in Greenfield for the Hancock County Trails Plan

>> Small Area Plans
Priority Areas: Biking; Walking; Land Use and Public Places; Parks and Greenspace; Schools; Transit

Small area and neighborhood plans, including downtown and corridor plans, can include numerous healthy community elements that support safe and active living environments. Goals and objectives that address better food access and urban agriculture can increase access to healthy food for neighborhood residents. Promoting the expansion of safe bicycle and pedestrian networks at the neighborhood level can increase connectivity and safety where people live, work, learn and play.

Resources
The Benefits of Street-Scale Features for Walking and Biking – American Planning Association: https://planning-org-uploaded-media.s3.amazonaws.com/publication/download_pdf/Benefits-of-Street-Scale-Features-Walking-Biking.pdf
Small Area Plan and Health Impact Assessment – Lincoln Park: http://www.ourlincolnpark.com/planning-a-more-vibrant-neighborhood/small-area-plan-health-impact-assessment/
Northside Neighborhood Plan Update – City of Fort Wayne: http://www.fwcommunitydevelopment.org/images/community_planning/docs/NORTHSIDE_CDAP_PLAN_FINAL.pdf

>> Transit Needs Assessment
Priority Area: Transit

A transit needs assessment will help the decision-makers to understand unmet demand for transit. The data collected as part of a transit study provides useful information about potential expansion of service beyond what is currently provided. These assessments typically highlight the many benefits of public transit to the community, prove useful in demonstrating the types and areas of unmet need and provide a starting point and plan for how and where to better invest resources. Contacting one of Indiana's transit organizations in the following resources box is the best starting point for more information on a needs assessment process.

Resources
Indiana Citizens' Alliance for Transit: http://www.indianacat.org
Indiana Transportation Association: https://www.indianatransportationassociation.com
Indiana Rural Transit Assistance Program: http://indianartap.com

>> First Mile/Last Mile Connections to Transit
Priority Area: Transit

First and last mile connections refer to the movement required for a person using transit to travel to/from the bus stop and to/from their destination. A lack of safe and comfortable infrastructure such as sidewalks or bikeways can make it difficult for people to access and use transit. To evaluate first and last mile infrastructure, an inventory and assessment of all stops should be completed. This information should be analyzed in order to prioritize and schedule improvements. Cost sharing among different city departments and collaboration with a variety of stakeholders can increase funding options. The information from this inventory should be incorporated into the city's ADA transition plan for long-term scheduled infrastructure upgrades.

Resources
First Mile, Last Mile: How Federal Transit Funds Can Improve Access to Transit for People who Walk and Bike – Advocacy Advance: http://www.advocacyadvance.org/docs/FirstMileLastMile_August2014_web.pdf
Manual on Pedestrian and Bicycle Connections to Transit – Federal Transit Administration: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/64496/ftareportno0111.pdf
Transit Planning Resources – Pedestrian and Bicycle Information Center: http://www.pedbikeinfo.org/planning/transit_planning.cfm

>> Transit Stop Assessment
Priority Area: Transit

It is important to ensure that stops have adequate pedestrian infrastructure that is accessible for all ages and abilities. Infrastructure in the public right-of-way and private property where stops are located should be accessible and safe for everyone boarding and leaving the bus. An effective way to ensure stops meet accessibility standards and best practices is to conduct assessments of the total number of bus stops and prioritize improvements based on need and ridership.

Resources

Toolkit for the Assessment of Bus Stop Accessibility and Safety – National Aging and Disability Transportation Center:

http://www.nadtc.org/wp-content/uploads/NADTC-Toolkit-for-the-Assessment-of-Bus-Stop-Accessibility.pdf

Checklist for Assessing the Accessibility of Transportation and Mobility – National Aging and Disability Transportation Center:

http://www.nadtc.org/wp-content/uploads/NADTC-Checklist-for-Assessing-the-Accessibility-of-Transportation-and-Mobility.pdf

>> School Safety Audits
Priority Area: Schools

Safety audits of the infrastructure surrounding schools is necessary to identify access barriers and to develop a strategic approach for making improvements. Walking and bicycling audits are also important steps for Safe Routes to School planning.

Resources

Walking and Bicycling Audits – Safe Routes to School Online Guide:
http://guide.saferoutesinfo.org/engineering/walking_and_bicycling_audits.cfm

Walkability Checklist – Pedestrian and Bicycle Information Center:
http://www.pedbikeinfo.org/cms/downloads/walkability_checklist.pdf

>> Safe Routes to School Plans
Priority Area: Schools

Bartholomew Consolidated School Corporation Safe Routes to School Plan
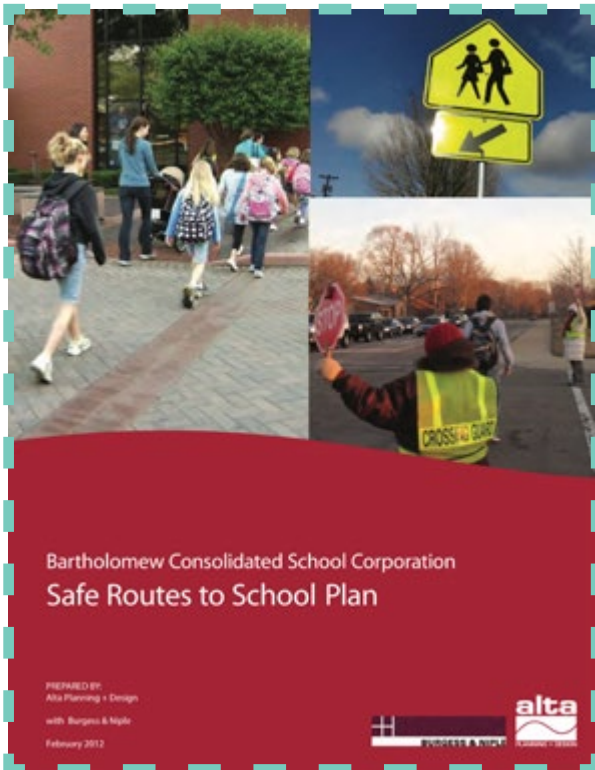
Creating a Safe Routes to School plan is a key step toward developing a comprehensive Safe Routes to School program. It is helpful to begin by conducting an audit and inventory of the existing infrastructure around schools and along common biking and walking routes; see previous page. The plan should be developed collaboratively by school leaders, staff, parents, community members and students and include strategies for education, enforcement, encouragement and engineering. The plan should also include a map of the area encompassing where students live to help the community identify key routes and prioritize infrastructure projects for funding.

Resources
National Center for Safe Routes to School: www.saferoutesinfo.org
Starting and Running a Safe Routes to School Program – Safe Routes to School National Partnership: https://www.saferoutespartnership.org/safe-routes-school/srts-program
Indiana Safe Routes to School Guidebook – Indiana State Department of Health: http://www.in.gov/isdh/files/SRTS_Guidebook%202016.pdf
Safe Routes to School Plan – Bartholomew Consolidated School Corporation: https://www.crh.org/docs/default-source/PDF/Healthy-Communities/ bartholomew-county-school-corporation-safe-routes-to-school-plan. pdf?sfvrsn=0

>> Parks and Greenspace Master Plan
Priority Area: Parks and Greenspace

Adopting a Parks and Greenspace master plan that identifies and prioritizes potential walking and bicycling connections to parks is a critical first step in guiding future funding and infrastructure decisions. Diverse stakeholders should be involved in this planning process, including public health professionals, schools and active transportation advocates. Direct involvement from neighborhoods on planning issues is a proven way to create community-based recommendations. Trails planning may also be a part of a Parks and Greenspace master plan.

Assessment of park access is an important part of a master plan; this park in Culver is connected to many residences by a trail.

Resources
Park Planning Information and Guidelines – Indiana Department of Natural Resources: http://www.in.gov/dnr/outdoor/2603.htm
2016 – 2020 Statewide Comprehensive Outdoor Recreation Plan (SCORP) – Indiana Department of Natural Resources: http://www.in.gov/dnr/outdoor/4201.htm
Parks, Trails, and Health Workbook: A Tool for Planners, Parks & Recreation Professionals, and Health Practitioners – National Park Service: https://metrocouncil.org/Handbook/Files/Resources/Best-Practices/Parks,-Trails,-and-Health-Workbook.aspx

>> Park Audits
Priority Area: Parks and Greenspace

Greenspaces and parks are great places for residents to be active. Research has shown that residents who live within a 10-minute walk from a park are more likely to be physically active and have lower rates of obesity. To ensure that people have access to existing parks, communities need to assess the built environment around greenspaces and provide solutions to any barriers.

Children from a YMCA camp conduct an audit of Ellenbarger Park in Indianapolis.

Source: YMCA of Greater Indianapolis

Resources
Safe Routes to Parks – Plan4Health: http://plan4health.us/tools-and-resources/toolkits/safe-routes-to-parks/
Community Park Audit Tool – Active Living Research: https://activelivingresearch.org/sites/default/files/CPAT_AuditTool_v3.pdf
Taking Steps Towards Equitable Park Access – Safe Routes to School National Partnership: https://www.saferoutespartnership.org/sites/default/files/resource_files/safe_routes_to_parks_walk_audit_toolkit.pdf

>> Food Access Planning
Priority Area: Land Use and Public Places

Access to healthy foods is essential for residents to improve and maintain their health. In the short-term, food access issues can begin to be addressed through a variety of innovative solutions, such as mobile markets or community gardens. Ideally mobile markets and other retail establishments would accept food benefits (SNAP and WIC) to serve the communities most in need. According to USDA research, 2.3 million low-income households nationally do not have access to a vehicle and live more than a mile from the closest supermarket.

Barriers to healthy food can also be addressed in long-term planning documents. Plans should include goals and objectives to make it easier for residents to access healthy food close to where they live. The creation of a local food council is one way to organize local food advocates and producers around the idea of supporting better food access. Purdue Extension educators and Community Wellness Coordinators are good sources of technical assistance for local food access programs and projects.

Resources
Purdue Extension Nutrition Education Program: https://www.purdue.edu/hhs/extension/programs/detail.aspx?program-Id=5&category=food
Safe Routes to Food – Safe Routes to School National Partnership: http://saferoutespartnership.org/sites/default/files/resource_files/safe_routes_to_healthy_food.pdf
Healthy Food Access – USDA: https://www.usda.gov/sites/default/files/documents/7-Healthyfoodaccess.pdf
Food Systems – American Planning Associate Plan 4 Health: http://plan4health.us/wp-content/uploads/2016/11/Toolkit-Plan-4Health-Food-Systems.pdf

>> **Programs**
that Integrate Active Living into Everyday Life

There are a number of programs available for communities to use in promoting active living. Establishing and sustaining programs that support active living can help to educate the public and provide much-needed technical assistance in sustaining active living efforts. Many of these programs are managed by national not-for-profit organizations and include free guidance along with various levels of professional staff support.

>> Bicycle Friendly Community
Priority Area: Biking

A Bicycle Friendly Community Sign in South Bend

Source: South Bend Tribune

Bicycle Friendly Communities is a national recognition program run by the League of American Bicyclists. It provides a roadmap to improve conditions for bicycling, as well as guidance to make your vision for a bikeable community a reality. Becoming a Bicycle Friendly Community builds recognition for a community's accomplishments, attracts residents and visitors, and supports applications for project and program funding. The application itself is a useful tool in understanding what your community needs to do to become more bikeable. All applicants for the designation receive customized feedback on the application and access to technical assistance from national-level bicycle professionals.

In 2017, Indiana was ranked the 38th most Bicycle Friendly State in the country. Ten communities, forty-three businesses and two universities have applied for and received bicycle friendly status. Designated Bicycle Friendly Communities represent around 25% of Indiana's population.

Resources
Becoming a Bicycle Friendly Community – League of American Bicyclists: http://bikeleague.org/content/communities

>> Walk and Bike to School Days
Priority Areas: Walking; Biking; Schools

Participating in National Walk to School and National Bike to School Days is a great way to educate students and parents and to encourage walking and biking as a daily activity. Many schools find these events to be so successful that they transition to holding walk and bike to school days monthly or even weekly.

Resources
Walk and Bike to School Day: http://www.walkbiketoschool.org
Teaching Children to Walk Safely as They Grow and Develop – National Center for Safe Routes to School: http://guide.saferoutesinfo.org/graduated_walking/index.cfm

>> Indiana Success Story: Walk to School Days in Rochester

The City of Rochester and Purdue Extension-Fulton County hosted an Active Living Workshop in August of 2016. One of the top priorities for workshop participants was to "develop a positive reinforcement plan for children who walk and/or bike to school." Prior to the workshop, the City of Rochester had received a Safe Routes to School planning grant but had not fully utilized the funds, so this priority aligned well with available city resources.

After the workshop, leaders formed the Rochester Safe Routes to School committee, which included participation from the Rochester School Corporation, Rochester Police Department, students and parents from Riddle Elementary School and other organizations. The committee decided to hold weekly Walk to School Days using a Walking School Bus method where students meet along a specified route.

The committee produced flyers, newspaper articles, Facebook posts and school newsletters to promote Walk to School Days. These materials included information on why it is beneficial for students to walk to school, safety concerns and logistical information. The number of students walking each week was tracked by committee members, and students received a card that was punched each time they attended. The number of students walking to Riddle Elementary School doubled over the 2016-2017 school year, and the program has continued into 2018.

Learn more: https://www.facebook.com/RochesterSafeRoutestoSchool/

A Walk to School Day in Rochester

Source: Rochester Safe Routes to School

>> Walk Friendly Community
Priority Area: Walking; Land Use and Public Places

Walk Friendly Communities is a national recognition program developed to encourage towns and cities to establish a high priority for supporting safer walking environments. The program recognizes communities that are working to improve a wide range of conditions related to walking, including safety, mobility, access and comfort. The application allows communities to assess and collect pedestrian-related data in one location. Communities receive detailed feedback and techincal assistance along with their applications. Bloomington is the only Walk Friendly Community to be designated in Indiana.

Resources
Walk Friendly Communities: www.walkfriendly.org

>> Bike and Pedestrian Advisory Councils
Priority Area: Walking; Biking

Advisory councils provide guidance on developing and implementing policies, plans, programs and infrastructure projects. Advisory councils can be especially useful for developing priorities, reviewing projects, identifying funding opportunities and guiding the collection of performance measures. Ideally, bicycle advisory councils and pedestrian advisory councils are created separately so that each mode may receive equal attention.

Resources
Best Practices for Bicycle and Pedestrian Advisory Committees – League of American Bicyclists: http://bikeleague.org/sites/default/files/bpac_best_practices%28web%29.pdf
Bicycle and Pedestrian Citizen Advisory Committee – City of Lafayette: https://www.lafayette.in.gov/2343/Bike-Pedestrian-Advisory-Committee

>> Bicycle and Pedestrian Safety Programs
Priority Areas: Walking; Biking; Schools

Bicycle and pedestrian safety education campaigns are a great way to improve behavior among all users of the roadway. Education also encourages children and adults to use active transportation more often by improving awareness and comfort in doing so. Safety education can be done in conjunction with other activities and celebrations such as National Bike and Walk to School Days in May and October or community rides and walks.

A bike rodeo in Lafayette
Source: Bike Walk Greater Lafayette

Resources
Smart Cycling – League of American Bicyclists: http://bikeleague.org/ridesmart
Bicycle Safer Journey – Federal Highway Administration: http://www.pedbikeinfo.org/bicyclesaferjourney/
Bike Walk Greater Lafayette: http://bikewalkgreaterlafayette.org
Civil Streets Bloomington – City of Bloomington, IN: https://bloomington.in.gov/transportation/bike/civilstreets

>> Active Living Campaign
Priority Areas: Walking; Biking; Land Use and Public Spaces; Parks and Greenspace; Schools; Transit

An informational campaign about the benefits of active living is highly valuable in today's increasingly sedentary society. There are several examples of communities that have held similar campaigns, sometimes addressing both walking and biking, but other times separately. For example, Indianapolis launched a walking campaign called WalkWays, with one goal to inform people about walking and its benefits.

Resources
Promote Walking and Bicycling – Pedestrian and Bicycle Information Center: http://www.pedbikeinfo.org/programs/promote.cfm
Indy WalkWays: http://indywalkways.org
Effective Messaging for Promoting Biking and Walking: Best Practices and Media Inventory – Safe Routes to School National Partnership: http://www.saferoutespartnership.org/sites/default/files/resource_files/effective_messaging_for_promoting_biking_and_walking.pdf

>> Crime Prevention through Environmental Design
Priority Area: Land Use and Public Spaces

Crime Prevention through Environmental Design (CPTED) is a partnership between law enforcement, residents and community partners to reduce opportunities for crime by focusing on design elements. The perception or reality of crime can have a large impact on residents' willingness to walk and bike places, and CPTED principles can help people feel safer in their community. CPTED often focuses on the following:

- Windows and natural surveillance
- Lighting
- Landscaping
- General maintenance

Resources
International CPTED Association: http://www.cpted.net

>> Walk with a Doc
Priority Area: Walking

Walk with a Doc is a national program with local physicians who lead participants in regular walks in their communities. The doctor leading the walk gives a brief presentation on a health topic and then leads the participants on a walk at their own pace. Healthy snacks, drinks and a blood pressure check are optional parts of a Walk with a Doc event. The walks are a great way for local physicians to reach out to the community and model walking behavior. In 2018, Indiana has Walk with a Doc programs in Crown Point, Huntington, Lafayette, Zionsville, McCordsville, Plainfield, Greenfield, Mooresville, Sunman and Vincennes.

Participants in a Walk with a Doc program in Huntington
Source: Walk with a Doc

Resources
Walk with a Doc:
https://walkwithadoc.org

>> Park Prescription Program
Priority Area: Parks and Greenspace

Park Prescription programs give healthcare providers a new set of tools to inspire patients to take proactive steps to improve their health. Parks and public lands are free or low-cost resources in many communities and provide excellent areas to recreate and play. Additionally, parks provide patients with exposure to nature, which has been scientifically proven to improve mental, physical and social health. Park Prescription programs happen throughout the country and are designed to encourage overall behavior change, improve individual and community health and foster the growth of new stewards and advocates for public lands.

Resources
Park Rx:
http://www.parkrx.org

>> **Projects** *that Implement Community Change*

Projects are changes to the built environment that support the policy and program initiatives mentioned in previous sections. Projects do not need to be expensive or complex; simple changes can have a large impact on a community or neighborhood. Using a lighter, quicker and cheaper approach with a pilot project can be a good way to introduce an idea to the community; see pages 60 – 62.

>> Pedestrian Safety Improvements
Priority Area: Walking

One way to have an immediate impact on public health in a community is to make improvements to increase the safety of people walking. Rates of pedestrian crashes are too high across Indiana, impacting people walking along and across streets. Vehicular speed is a major contributor to pedestrian injury and death. The probability of a person dying from being hit by a vehicle increases as the speed of the vehicle increases. The infographic on the next page shows that a person has a 10% chance of dying from being hit by a vehicle traveling at 20 miles per hour, but a 90% chance of dying if the vehicle is traveling at 40 miles per hour, clearly illustrating why vehicle speed reduction is a primary focus of pedestrian safety.

The following pages detail specific infrastructure projects that can improve safety for people walking, along with sketches produced for Active Living Workshops and other projects in communities throughout Indiana.

Person hit at	Person hit at	Person hit at
20 MPH	**30 MPH**	**40 MPH**
90% chance of survival	50% chance of survival	10% chance of survival
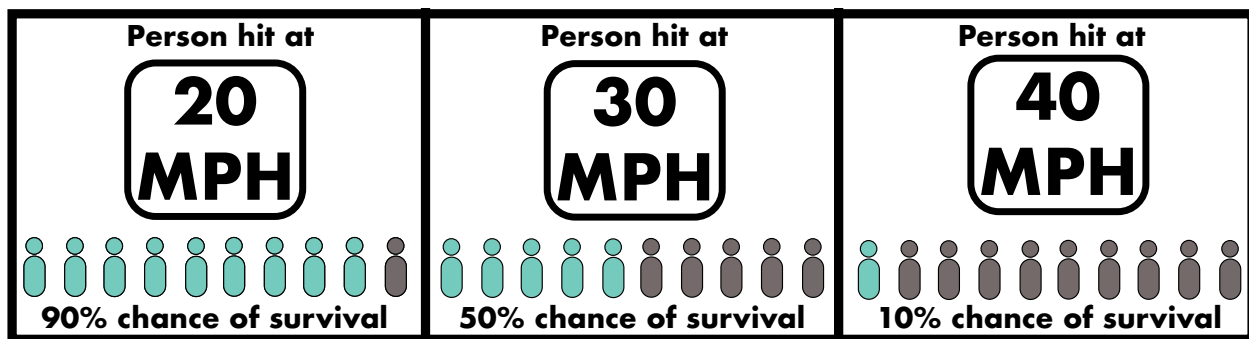
Source: National Transportation Safety Board Safety Study, https://www.ntsb.gov/safety/safety-studies/Pages/SS1701.aspx

>> HAWK Signals
Priority Area: Walking

High-intensity Activated crossWalk (HAWK) signals provide protected pedestrian crossings where a traffic signal may not be warranted but people still need a safe way to cross a street. A HAWK signal consists of lights that are darkened until a person walking pushes a button to activate it. Once the button is pushed, a flashing yellow light warns drivers approaching the crosswalk that a person wishes to cross. The flashing yellow light is followed by a solid yellow light telling drivers to prepare to stop. The signal changes to solid red for drivers to stop at the intersection, allowing people to cross safely. The solid red will change to flashing red to allow drivers to proceed safely through the intersection and will again darken after a predetermined time.

This sketch illustrates a HAWK signal in Connersville with high-visibility crosswalk markings that improves the safety of pedestrians crossing a busy four-lane street to access a public park.

>> Medians
Priority Area: Walking

One proven pedestrian safety countermeasure is a raised median, also known as an island. A median is an area between opposing lanes of traffic. It can either be "open," which means it uses pavement markings only, or be "channelized," which means it is a raised area that separates road users. These medians provide refuge for pedestrians crossing the roadway and are best placed in or near a pedestrian crossing. Medians also provide a space to include lighting and have been shown to lead to a reduction in pedestrian fatalities at night.

The sketch above shows a mid-block crossing in Plymouth for a multiuse trail. Improvements shown include pedestrian-activated flashing beacons with warning signs, a pedestrian refuge in the roadway and high-visibility crosswalk pavement markings. Using multiple pedestrian safety improvements at a mid-block crossing increases safety for pedestrians.

The sketch above shows pedestrian safety and traffic calming improvements along the busy commercial corridor of McGalliard Road in Muncie at an intersection that serves residential neighborhoods and a school. There is an opportunity to slow traffic and increase pedestrian safety at this intersection by adding high visibility cross walks, narrowing portions of the street, adding a median with a pedestrian refuge and planting new street trees.

<div style="border:2px solid red">

Resources

State Best Practice Policy for Medians – Federal Highway Administration:

http://safety.fhwa.dot.gov/ped_bike/tools_solve/fhwasa11019/

Median Refuge Island – National Association of City Transportation Officials (NACTO):

https://nacto.org/publication/urban-bikeway-design-guide/intersection-treatments/median-refuge-island/

</div>

>> Traffic Calming
Priority Areas: Walking; Biking

Traffic calming is a term used to describe a wide range of physical design measures used to slow vehicle speeds and improve safety for motorists, pedestrians, cyclists and other street users. A major goal of traffic calming is to reduce vehicle speed while increasing nonmotorized use of the street. Studies have shown that the use of effective traffic calming measures have increased the number of people walking and biking.

Many intersections in Indiana have street pavement that is wider than it needs to be according to current engineering standards. Traffic calming at these intersections can be accomplished by extending the curbs or grass areas at the four corners of the intersection. These curb extensions are sometimes called "bumpouts." These curb extensions reduce the paved areas at the intersection and have the following benefits:

1. The crossing distance for pedestrian crosswalks is significantly reduced.

2. The narrowing of the street entering the intersection slows vehicular traffic, increasing pedestrian safety.

3. The additional pedestrian or landscape area created by extending the curbs provides a buffer from vehicles and an opportunity for placement of landscape improvements and other features, such as benches.

4. The additional sidewalk area at the crosswalks allows the placement of curb ramps for people with disabilities.

5. The curb extensions prevent parked cars from blocking the crosswalks.

The sketch above illustrates a curb extension, or bumpout, at an intersection in downtown Logansport. Landscaped areas, a street tree, new curb ramps and seating are added where there was previously a no-parking zone.

Traffic islands are another proven solution to help calm traffic at intersections or along streets. Temporary traffic islands can be installed using traffic cones or even chalk to verify that emergency vehicles can maneuver through the intersection. The sketch above from Columbus illustrates a proposed traffic island in a residential neighborhood with high visibility crosswalks and new sidewalks.

The sketch above shows another location in a Columbus neighborhood with proposed medians or traffic islands, a high-visibility crosswalk and a new sidewalk. The improvements are meant to slow traffic along the street and make it more accommodating to pedestrians and bicyclists who regularly use the corridor to travel to a local school and park.

>> Road Diets
Priority Areas: Walking; Biking

A road diet is a common roadway reconfiguration that involves converting an undivided four-lane roadway into three lanes made up of two through lanes with a center two-way left turn lane. In locations where roadways are too wide, road diets are implemented for a variety of reasons, including reducing vehicle crashes, improving pedestrian safety, decreasing speeds while maintaining capacity and adding bike lanes and/or street parking. Road diets are implemented simply by re-striping the pavement, making them a very effective and low-cost way to achieve multiple benefits. According to the Federal Highway Administration, a roadway with average daily traffic counts of 20,000 or less may be a good candidate for a road diets. Road diets are known to reduce crashes by 19-47%, reduce vehicle speeds, provide more consistent traffic flow and decrease stop-and-go traffic.

The photos above show the traffic lane configurations before and after a road diet was applied to the street.

Source: City of Urbana, IL

>> Crosswalks
Priority Area: Walking

High-visibility crosswalks are a critical part of the active transportation network. There are a variety of ways a crosswalk may be designed, but conventional design that involves large white "ladder" or "piano-key" bars is widely recommended because research indicates that it is the most visible to drivers. Additionally, including appropriate and sufficient signage is important to ensure motorists are aware of the potential for pedestrians in the area.

Resources
Marking and Signing Crosswalks – Safe Routes Info: http://guide.saferoutesinfo.org/engineering/marked_crosswalks.cfm
Crosswalks and Crossings – NACTO: https://nacto.org/publication/urban-street-design-guide/intersection-design-elements/crosswalks-and-crossings/

>> Bikeways
Priority Area: Biking

Providing dedicated space for bicyclists is known to increase the safety of all users of the street. The presence of a bike lane on a street reduces the speed of vehicular traffic and provides for predictable movements of bicyclists and vehicles. Adding a striped buffer or a physical separation of the bike lane from vehicle traffic will attract riders with a wider range of abilities. Most communities will need a variety of bikeways, from wide street shoulders to single bike lanes to multiuse paths. Creating a diverse network of bikeways that are appropriate to the needs of bicyclists and the physical setting of each corridor will ensure safe travel throughout the community.

Reducing or eliminating a vehicular travel lane or on-street parking to allow the placement of a bikeway is an effective technique to increase safety for bicyclists while slowing vehicular traffic along the street. The sketch above from Fort Wayne shows the elimination of parking along a portion of one side of a very wide local street. A painted protected bikeway, curb extensions and a high-visibility crosswalk are also added.

Resources
Accommodating Bicycle and Pedestrian Travel: A Recommended Approach – Federal Highway Administration: https://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/design.cfm
Small Town and Rural Multimodal Networks – Federal Highway Administration: https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/small_towns/fhwahep17024_lg.pdf
Urban Bikeway Design Guide – NACTO: http://nacto.org/publication/urban-bikeway-design-guide/

Types of Bikeways

Sharrow
Source: pedbikeimages.com/HeatherBowen

Bicycle Boulevard
Source: ruraldesignguide.com

Bike Lane
Source: Journal & Courier

Buffered Bike Lane
Source: pedbikeimages.com/ChicagoDOT

Protected Bike Lane

Multiuse Trail
Source: Butler Fairman & Suefert

>> Vacant Lot Reuse
Priority Area: Land Use and Public Places

Unattended vacant space discourages active living by making it less appealing for residents to walk and bike in their neighborhoods. Reclaiming vacant and blighted properties with community gardens, neighborhood improvement projects and natural ecosystems can improve social interactions, build community pride, improve safety and create new walking and biking destinations. Community gardens and orchards require different types of planning and management, so it is important to collaboratively choose the best option for your community. Be sure to also work with the local health department to ensure safety of the soil for plantings.

Resources
The Bloomington Community Orchard: http://www.bloomingtoncommunityorchard.org/site/
Strategies for Vacant and Abandoned Property Reuse – HUD User: https://www.huduser.gov/portal/pdredge/pdr_edge_featd_article_050514.html

>> Wayfinding
Priority Areas: Walking; Biking

Wayfinding signage is an important way to guide people biking and walking to various destinations. Signs can help familiarize people with the bike and pedestrian network, identify the best route to a destination and make people driving aware that people biking may be on the road. Wayfinding signage that includes approximate travel times in addition to distance can help encourage people to travel by bike or foot.

Wayfinding systems can also be developed for people driving, though they are different in design and implementation and should be a separate system. Many communities install creative wayfinding signs that are unique to their community.

A wayfinding sign in Salem, created through walkyourcity.org

Source: Purdue Extension - Washington County

Resources
Bike Route Wayfinding Signage and Markings System – National Association of Transportation Officials: https://nacto.org/publication/urban-bikeway-design-guide/bikeway-sign-ing-marking/bike-route-wayfinding-signage-and-markings-system/
Bicycle Wayfinding – Pedestrian and Bicycle Information Center: http://www.pedbikeinfo.org/planning/facilities_bike_wayfinding.cfm
Pathways to Better Community Wayfinding – CDC Healthy Aging Research Network: https://www.aarp.org/content/dam/aarp/livable-communities/documents-2014/Pathways%20to%20Better%20Community%20Wayfinding-AARP.pdf
Walk Your City: https://walkyourcity.org

>> Placemaking
Priority Areas: Walking; Biking; Land Use and Public Places

It is well understood that the physical aspects of a place impact the health of people in a community. Levels of obesity, chronic disease, depression and exposure to environmental pollutants are all directly related to the design, management and operation of public spaces.

A community can improve the health of its citizens and support active living through the use of placemaking techniques and processes. The deliberate design of streets as public places is seen as a best practice in community planning and design. Communities of all sizes can implement placemaking projects to support better health outcomes.

"With community-based participation at its center, an effective Placemaking process capitalizes on a local community's assets, inspiration and potential, and it results in the creation of quality public spaces that contribute to people's health, happiness and well-being."

**Definition of Placemaking
–
Project for Public Spaces**

A parklet is an extension of an adjacent sidewalk into a car parking space or a no-parking zone near an intersection. In the sketch from Batesville above, a parklet is shown with outdoor seating next to a coffee shop.

Small public plazas can sometimes be created by reconfiguring awkward street intersections, finding new spaces for destinations for bicycling and walking. The sketch above from Huntington illustrates the closing of a short street segment that had created a small, unusable island surrounded by pavement.

Resources
What is Placemaking? – Project for Public Spaces: www.pps.org/reference/what_is_placemaking/
Tactical Urbanism Guide: http://www.tacticalurbanismguide.com
Creative Placemaking Toolkit – Indiana Arts Commission: http://in.gov/arts/cptoolkit/index.htm

>> Public Art
Priority Areas: Walking; Biking; Land Use and Public Places

Public art contributes to placemaking and active living by energizing spaces and creating points of interest. By making public spaces more interesting, art installations make walking and bicycling more enjoyable. Public art can also create destinations for bicycling and walking while enlivening the experience along a street.

An art alley in Kokomo

Resources
Arts, Culture, and Transportation – Transportation for America: http://t4america.org/maps-tools/creative-placemaking-field-scan/
Public Art Master Plan – City of Michigan City: http://www.emichigancity.com/cityhall/boards/art/pdf/MAC-Master-Plan.pdf

>> Indiana Success Story: Public Art in Plymouth

In September of 2016, the City of Plymouth and Purdue Extension-Marshall County held an Active Living Workshop. One of the priorities that rose to the top with participants was to "install art everywhere" in the city. Discover Plymouth, the city's main street organization, took ownership of the workshop follow-up and immediately divided the work into subcommittees.

Members from the Art Everywhere committee attended the Indiana Arts Commission's (IAC's) 2017 placemaking conference and learned about a consultancy grant. They applied and were awarded 50 hours of arts consultancy from the IAC. These opportunities led the committee to establish an "alley gallery" in downtown Plymouth.

The alley gallery runs from Garro Street to LaPorte Street just east of Michigan Street, Plymouth's main street, and is a highly used pedestrian corridor. The alley was cleaned, a fence was painted a bright color and a splatter art design that the public made during a downtown art festival was hung from the fence. Two other murals have since been added, including a Frida Kahlo portrait and an interactive umbrella mural.

Discover Plymouth has also ensured that the community stays engaged in the follow-up work from the workshop. Committee members made a presentation to the City Council and have been doing a "road show," bringing the presentation to several other community groups, such the Lions Club and the Optimist Club.

Learn more: https://www.facebook.com/discoverplymouthin/

The splatter paint mural created by the public in Plymouth
Source: Discover Plymouth

>> Lighter, Quicker, Cheaper

Communities often approach changes to the built environment from the top down, with inflexible infrastructure budgets set years in advance and little room for community engagement. In recent years, however, a movement to implement changes more quickly has emerged under the name "lighter, quicker, cheaper," coined by Eric Reynolds, a planner with Urban Space Management. This movement emphasizes public involvement and creativity to make short-term, do-it-yourself-type solutions to infrastructure issues.

Below and on the following page are "lighter, quicker, cheaper" projects from communities around Indiana.

>> Parklet

A parklet in Kendallville
Source: KPC News

Parklets repurpose unused street space or parking spots as places for people. Parklets are a great low-cost way to increase public open space, calm traffic, provide outdoor seating, enhance walkability and bikeability, encourage social interaction on streets and express local character. They can provide amenities like seating, plantings, bike parking or art.

>> Pop-Up Traffic Calming

A pop-up traffic circle in South Bend
Source: Smart Growth America

Many of the traffic calming tactics described on pages 48 – 51 can be implemented in a temporary fashion. Communities often use low-cost materials such as painted tires, duct tape and chalk paint to create temporary bumpouts, crosswalks and other infrastructure elements. Data collection of vehicle speeds and other information during the pop-up can help make the case for permanent changes.

>> Temporary/Interim Plaza

A temporary plaza in West Lafayette
Source: Big Car

Temporary or interim plazas use underutilized road space to create public spaces. Excess roadway is transformed into public gathering places using low-cost materials. These changes can contribute to traffic calming and create walkable and bikeable areas. Most temporary plazas are the result of a successful partnership between the city or town and adjacent businesses, neighborhood groups or other associations.

>> Artistic Crosswalks

An artistic crosswalk in Seymour
Source: Healthy Jackson County

Crosswalks that are embellished with art can help to encourage walking in a community by making it interesting. If concentrated in one area, these crosswalks can serve as a way to identify a business district or neighborhood. Strategies for installing these crosswalks include holding a call for artists or developing a policy and allowing neighborhood groups or artists to apply for a permit.

>> Indiana Success Story: Better Blocks in Fort Wayne

The City of Fort Wayne and Purdue Extension-Allen County held an Active Living Workshop in June of 2017. During the workshop, Pete Fritz of ISDH, DNPA presented a sketch that depicted bicycle and pedestrian improvements to the intersection of Columbia Avenue and St. Joseph Boulevard; this sketch can be seen on page 53. The image sparked inspiration in community advocates who wanted to make this intersection work better for people walking and biking.

After the workshop, advocates applied for a Community Challenge grant from AARP and were selected to participate in a pilot project with Team Better Block, an organization that conducts pop-up projects nationwide.

The City of Fort Wayne's Community Development Division and Engineering Department were critical partners to the success of the project, though city partners were not supportive of all the proposed project elements. Advocates and city staff negotiated several times and were able to create a plan that worked for everyone. A coffee shop owner whose property is adjacent to the intersection was another important partner, providing meeting space and other support.

A one-day demonstration project was held in November, with advocates and other team members using paint, potted plants, bollards and other temporary materials to create a reimagined street for one block. The event was a great success and helped neighbors see the possibilities their street holds. Advocates and city staff hope to replicate the project in other areas of the city.

Learn more: https://www.aarp.org/livable-communities/getting-around/info-2018/build-a-better-block/

The pop-up project in Fort Wayne
Source: AARP Indiana

>> **Step Three:**
## *Creating an Action Plan*

Once the community has identified and prioritized the strategies it wants to pursue to increase active living, it is important to develop an action plan. An action plan will break down priorities into smaller, achievable steps. In order to create an action plan, a core team is needed to direct its development. Depending on priorities chosen the core team may want to expand to include smaller, dedicated teams to focus on individual goals.

An action plan template can be found in Appendix D on pages 90 – 91. Many other action plan templates and examples can be found. At a minimum, an action plan should include the overall goal and action steps, the responsible party or parties and a timeline for completion of the goal.

Some priorities desired by community residents may seem completely out of reach due to politics, funding or other reasons. While it may seem futile to develop an action plan to achieve these goals, it can be helpful to think through what steps would be necessary to achieve them or to brainstorm interim steps that may begin to accomplish the larger goal.

Overall Goal

The overall goal is the big-picture priority the team wants to accomplish. The methodology described on pages 16 –17 is a good way to choose overall goals for the community.
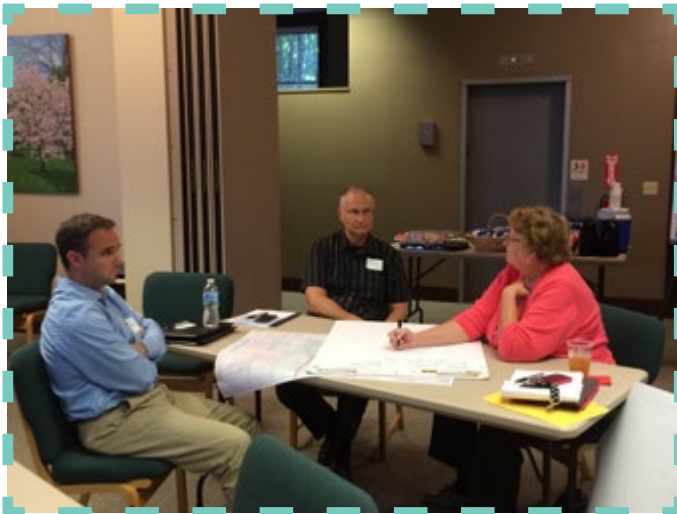
Action planning at the Rensselaer Active Living Workshop

Action Steps

Action steps are the tactics that need to take place in order to achieve the overall goal. The team may not know all the necessary action steps while the action plan is being written. Action steps should be added, subtracted or adjusted as work on the plan progresses. Steps should be specific and measurable; See Step Four: Measuring Success beginning on page 67 for more information.

Responsible Party or Parties

Each action step should be assigned to a person or an organization that is responsible for accomplishing it. If the person or organization is not represented on the team creating the action plan, the team should ensure that the person or organization agrees to accomplish it. If advocacy is needed to gain their support, action steps should be written to describe that need. It is possible to tentatively assign responsible parties without their support; however, the action plan should be updated regularly to reflect their current status of commitment.

Timeline

It is important to establish a clear deadline for each action step to be completed. While it is essential to keep the team moving forward, initial timelines are often overly ambitious. The team should continuously update the action plan's deadlines while still maintaining momentum.

Active Living Action Plan			
GOAL	ACTION STEPS	RESPONSIBLE PERSONS & ORGS	TIMELINE
Create and implement a connected trail system through and around Huntingburg	Explore existing sidewalk/trail plans	Park Board, Region 15, Stellar Committee	3/1/17
	Form an advisory committee	Stellar Committee, Park Board, Mayor, Schools	4/1/17
	Create a preliminary plan	Advisory Committee	12/1/17
	Host public informational sessions	Advisory Committee	4/1/18
	Research potential funding sources	Advisory Committee, Mayor/City, Region 15, Schools, Park Board	6/1/18
	Develop Request for Proposals for project	Advisory Committee, Mayor/City, Region 15, Schools, Park Board	3/1/19
	Hire planning firm	Advisory Committee	5/1/19

*Example of an Action Plan from the Huntingburg Active Living Workshop*

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>> Step Four: *Measuring Success*

It is important to measure the impact of changes a community makes to support active living. Local politicians, community members and funders want to see proof that initiatives have made a difference in order to support current and future projects. When possible, teams should consider potential markers of success during the action planning stage described on pages 63 – 65 to ensure appropriate measurements are taken throughout implementation.

Measuring Biking and Walking Impacts

Measuring biking and walking usage is a great way to estimate how many people are using a city or town's bikeways, walkways and/or trails. This information can assist in determining how to allocate resources, which routes attract the most users and where improvements need to be made. These counts can be done manually with staff members or volunteers marking down users on paper, or equipment can be purchased and installed on sidewalks, bikeways or trails to automatically count users. Manually counting people is less expensive, though it can be time-consuming. It could be helpful to partner with a local college or university to determine if the project would work well with a class.
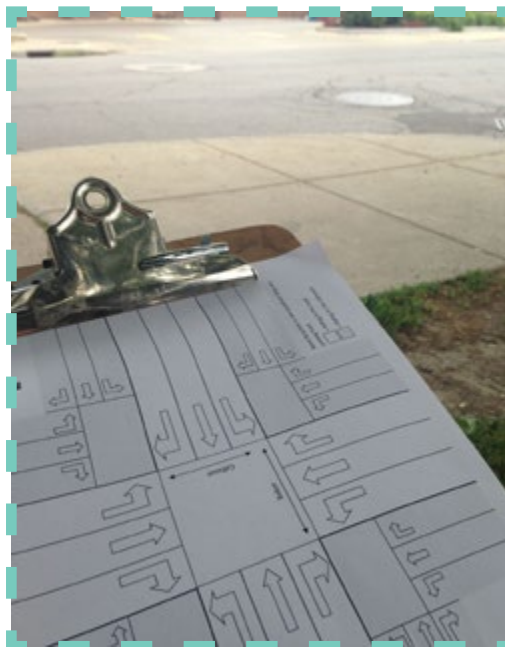
A manual bike count sheet in Fort Wayne

Measuring Health Impacts

Measuring the impacts of active living improvements on health outcomes is important, though it is difficult to see short-term successes. Not-for-profit hospitals are currently required to prepare community health assessments every three years. Data from these assessments can be used to monitor community health outcomes. Increasingly, local data is available on various community health measures, such as levels of obesity and rates of physical activity and chronic disease. Tracking these health measures through time can be a powerful way to evaluate the effectiveness of active living initiatives in a community or region.

Other Data Sources and Measurements

- Total miles of bike lanes/trails built or striped

- Linear feet of new pedestrian accommodations

- Number of Americans with Disabilities Act (ADA)-compliant accommodations built

- Number of accessible transit accommodations built

- Number of new curb ramps installed along city/town streets

- Number of new street trees planted

- Bicycle, pedestrian and multimodal levels of service (LOS)

- Transportation mode shift, provided by the Household Travel Survey

- Crosswalk and intersection improvements

- Percentage of transit stops accessible via sidewalks and curb ramps

- Rates of crashes, injuries and fatalities by mode

- Rates of children walking or bicycling to school

- Vehicle miles traveled (VMT) or single occupancy vehicle (SOV) trip reduction

- Park and recreation acreage and facilities

- Compliments and complaints

Resources
Counts – Pedestrian and Bicycle Information Center: http://www.pedbikeinfo.org/planning/tools_counts.cfm
National Bike and Pedestrian Documentation Project: http://bikepeddocumentation.org
Community Health Assessments and Health Improvement Plans – Centers for Disease Control and Prevention: https://www.cdc.gov/stltpublichealth/cha/plan.html
Measurement Tools – Build Healthy Places Network: https://buildhealthyplaces.org/measureup/measurement-tools/

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>> Keys to Success

The 46 Indiana cities and towns in which workshops were held represent a mix of settings, sizes and community contexts. Despite their diversity and the range of partners involved, almost all were able to create positive change and achieve active living successes. Those successes can be attributed to a strengthening of the "civic infrastructure" needed to implement policy, systems and environmental change strategies that lead to active, healthy communities. Those civic infrastructure factors relate to shifting social norms, strengthening alliances and the base of support, and increasing community and organizational capacity. The keys to success are described in more detail below.

A Dedicated Team or Coalition

Achieving significant community change will require the dedication of a core team or coalition. This team can involve political or community leaders as discussed below but may also be made up solely of interested residents; advocates; and/or staff of organizations like hospitals, schools, YMCAs and other entities. It is important to include representation from community populations that may experience health disparities due to age, race, disability, income or other factors in order to ensure the group's efforts improve quality of life for everyone.

A strong coalition has been integral to success in Frankfort.

Source: Healthy Communities of Clinton County

Political Will

Support of community leaders and residents is important to create healthy communities, but it is more difficult to achieve significant changes without the support of political leaders. Elected and appointed officials need to consider more than the naysayers and should rely on evidence-based planning and research to make policy decisions. Grassroots efforts and advocacy can help influence decision-makers if they are not initially supportive.

Multi-Sectoral Community Leaders

Creating a healthy community requires the dedication of many different sectors. Using a workshop model to bring leaders from economic development, employers, schools and other major community influencers together will allow them to understand their role in impacting public health. Some leaders may not have the capacity to remain involved in follow-up coalition or team meetings; it is important to keep them up to date with progress, however, as they may have the necessary political influence and connections to make bigger changes in the community.

Public Involvement

Involving the wider public early and often is important to ensure the success of active living and healthy community work. If a workshop is used to determine community priorities, consider the timing and structure of it to ensure residents with full-time jobs are able to attend. Special efforts should be made to ensure people from historically underserved populations are involved. Reach out to naysayers early to learn their point of view and to inform them of the importance of this work. Careful planning of outreach and engagement early in the process will make it easier to implement. Some examples of outreach can include a routinely updated website or social media page, a regular column or op-ed in the local newspaper and other media campaigns.

Good Planning and Prioritization

Finding funds to implement active living projects and programs can be intimidating and overwhelming. However, many ideas contained in this guidebook are inexpensive to implement and are well within the range of funding available to communities in Indiana. Money tends to follow good ideas, and many Indiana communities have the capacity to create and follow through with active living initiatives. It has been stated that how a community spends its money is a better indicator of its values than its vision statement is. In other words, a community's annual budget should reflect the goals, desires and dreams of its residents. It might take time, but great ideas that inspire residents to live active and fulfilling lives will eventually find supporters and funding.

A Sense of Urgency

Health issues faced by Indiana communities can feel too big to tackle, but without deliberate, urgent effort, the situation will only worsen. Community leaders, politicians and residents need to join together to address these issues. Identifying issues and using policy, systems and environmental change strategies will begin the process of implementing long-term, sustainable solutions to the state's health crisis.

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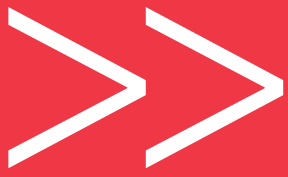
>> Moving Forward

The Active Living Workshops conducted in 46 communities around Indiana provided a great opportunity for many stakeholders to learn about the critical connection between health and the built environment. Moving forward, both the Indiana State Department of Health, Division of Nutrition and Physical Activity and Health by Design are committed to advancing healthy communities work in Indiana. The two organizations will be resources to interested cities and towns and provide funding as available.

To learn more about hosting an Active Living Workshop in your community, contact the Indiana State Department of Health, Division of Nutrition and Physical Activity at www.dnpa.isdh.in.gov or Health by Design at www.healthbydesignonline.org.

>> Appendices

>> Appendix A: Planning a Workshop

Healthy communities work can begin in a number of ways. Using a workshop model can bring together a diverse group of community stakeholders from different sectors to work toward the common goal of improving residents' health. Workshop activities can be designed to ensure collaborative participation that might not otherwise happen. The following steps describe how to plan for a workshop.

Assemble a Team

A core planning team of three – five people is helpful for the success of a workshop. Suggested members include city staff, community foundation directors, hospital employees and active transportation or other health advocates in your community.

Possible roles for team members include:

- Organize, host and promote workshop
- Lead follow-up action planning process and implementation of priority strategies
- Be responsible for ongoing monitoring, reporting and evaluation

Choose a Date

In general, Tuesdays, Wednesdays or Thursdays work best. Be mindful of circumstances that may inhibit participation, such as Spring Break or large community events. To ensure the participation of key decision-makers in the community, contact them early to determine dates that will work for them. See "Invite Stakeholders" below for more information. Workshops can take place all in one day or be split up over two or more days to accommodate participants' schedules.

Selecting a Location

When selecting a workshop location, consider both the physical space and the location within the town or city. The physical space should be large enough to comfortably accommodate all invited people. If group work is planned, ensure that the room and table set-up is conducive for activities. Consider the walk, bike and/or transit routes to the workshop location so people have the opportunity to arrive using active transportation. Location is also important to consider if the workshop will include a walking or biking assessment or audit; see pages 12 – 13.

The Huntingburg Active Living Workshop was held in the heart of downtown.

Invite Stakeholders

The workshop's success will depend in large part on having the right mix of people in the room. It is important to have key decision-makers present as they are the people who will be responsible for implementing many of the priorities. While people and positions will vary by community, the following tend to be the key community decision-makers:

- Local elected officials
- Board of Zoning Appeals, Plan Commission, Redevelopment Commission
- City/Town staff: planning, engineering, parks, etc.
- School superintendent and other administrators
- County health commissioner and/or appropriate staff
- Hospital administrator and/or appropriate staff
- INDOT district staff

In addition to the individuals and organizations listed on the previous page, the following are groups that should be invited. This list is not exhaustive, and not every community has these types of organizations:

- Organizations for people with disabilities
- Arts organizations
- Students (high school or older), youth student government, Scouts, 4-H
- Youth commission
- PTA, school board, teachers
- Workers' unions
- Chamber of Commerce, economic development agencies, businesses
- Community development corporations
- AARP, senior centers
- Organizations and advocates for bicyclists, pedestrians, trails, etc.
- Law enforcement
- Fire department
- Utilities
- Churches and faith-based groups
- Neighborhood associations
- Community groups (Lions, Legion, VFW, etc.)
- Healthy community coalitions
- Local YMCA
- Metropolitan Planning Organization (MPO)
- Library staff
- Interested residents

>> Appendix B: Priority Area Posters

Walking

Walking is the oldest and simplest form of human transportation. It is also the most popular form of physical activity in the U.S. and an easy way to meet daily physical activity recommendations. Walkable communities support independence for people of all ages and abilities, and contribute to a greater quality of life for all residents. Studies show that walking is good for physical and mental health because it reduces stress, improves concentration and lowers blood pressure. Walking is also a fun and easy way to connect with the community!

- **One-third of Americans do not drive, including the young and elderly, people with disabilities, people who cannot afford to drive, and people who choose not to drive. (American Community Survey)**

- **Although 27% of trips made in the U.S. are shorter than one mile, 62% of those trips are currently made by car. (NHTS, 2009)**

- **Walking 6 miles per week can halve the risk of Alzheimer's disease over 5 years. (www.everybodywalk.org)**

Best practices for creating a walkable community include:

1. Adopting a Pedestrian Master Plan and a Pedestrian Safety Action Plan
2. Adopting a sidewalk ordinance that requires sidewalks in all new private development
3. Convening a pedestrian advisory council and becoming a Walk Friendly Community
4. Installing pedestrian countdown signals and wayfinding signs
5. Encouraging Crime Prevention Through Environmental Design (CPTED)

Biking

Bicycling is the second most popular outdoor activity in the United States and a means for people of all ages and abilities to get out and move, whether for recreation or transportation. Bicycling can help individuals meet recommended amounts of daily physical activity through everyday trips like biking to work, the coffee shop, or the grocery store. By offering bicycling education and encouragement and routinely including bicycle facilities in transportation projects, a community can provide residents with a fun, healthy and practical transportation choice.

- **Adolescents who bicycle are 48% less likely to be overweight as adults. (Menschik, D., 2008)**

- **The average annual cost of operating a bicycle is $308, while the average annual cost of operating a car is $8,220. (Forbes, 2012)**

- **Research shows that increasing the number of bicyclists on the street dramatically improves bicycle safety. (Jacobsen, P., 2003)**

Best practices that support biking and increase ridership include:

1. Adopting a community-wide Bicycle Master Plan
2. Promoting bicycle events like Bike to Work Day and community bike rides
3. Becoming a Bicycle Friendly Community
4. Encouraging or requiring businesses to provide bicycle parking
5. Installing bicycle infrastructure and wayfinding signs

Land Use and Public Places

The way a community plans and zones its land determines how connected, walkable and bikeable that community will be. Sprawling land use patterns and roads designed only for cars force people to drive to meet even the most basic daily needs. Compact, connected development and "complete streets," on the other hand, provide options for everyone and allow residents to choose active transportation on a daily basis. Mixing land uses and connecting a variety of walkable destinations is vital to building an active living community.

- **People who live in walkable neighborhoods weigh 6-10 pounds less and are twice as likely to get enough physical activity as those who don't. (Active Living Research, 2013)**

- **Homes with higher Walk Scores sell for $4,000-$34,000 more. (CEOs for Cities, 2009)**

- **Approximately one-third of Americans live in communities without sidewalks or bike lanes. (National Household Transportation Survey, 2009)**

Best practices for supporting active living through land use include:

1. Adopting land use plans that mix uses and encourage community-wide connectivity
2. Developing a thoroughfare plan that prioritizes Complete Streets
3. Amending the zoning code to allow and encourage mixed-use and infill development
4. Adopting a subdivision control ordinance that sets maximum lot sizes and requires sidewalks on all new development

INDIANA COMPLETE STREETS COALITION

INDIANA SAFE ROUTES TO SCHOOL PARTNERSHIP

Health by Design
creating built environments to foster healthy living
an ALLIANCE FOR HEALTH PROMOTION initiative

INDIANA CITIZENS' ALLIANCE FOR TRANSIT
icat

Indiana State Department of Health
Division of Nutrition and Physical Activity

Parks and Greenspace

Parks and greenspace are an important part of an active community. They provide destinations within the active transportation network, spaces for physical activity, and opportunities for recreation and fun. Parks and greenspace also improve mental and social health through exposure to nature; reduce pollution; improve nearby property values; and contribute to healthy, vibrant communities.

- **A study in Nebraska found that for every $1 spent on trails, almost $3 were saved in direct medical costs. (Active Living Research, all)**

- **Homes near parks can sell for up to $2,262 more than homes without parks nearby.**

- **People who live near trails are 50% more likely to meet physical activity guidelines.**

Best practices to encourage active living through local parks and greenspace include:

1. Adopting a Parks Master Plan
2. Adopting a Trails and Greenways Master Plan
3. Promoting parks and the benefits of supporting and using them
4. Assessing infrastructure near parks for safety and accessibility
5. Developing shared use agreements between local schools, parks and municipalities

Schools

In recent decades, it has become virtually impossible for children to travel to school by foot or bike. Nearby streets often lack sidewalks and are designed only for fast moving cars. Schools have been built far from where people live. Some schools have banned walking and biking because of liability concerns, even in cases where children live directly across the street. Safe opportunities for walking and biking to school increase children's physical activity, reduce pollution, boost learning and attention, and help kids develop independence and valuable social skills.

- **Within the span of one generation, the percentage of children walking or bicycling to school has dropped dramatically, from approximately 50% in 1969 to just 13% in 2009. (Safe Routes to School National Partnership, all)**

- **Walking and biking to school reduces transportation costs for school districts and households. Eliminating one bus route could save a school district ~$45,000 per year.**

- **10-14% of morning traffic in communities is associated with families dropping children off at school.**

Best practices to encourage active living through schools include:

1. Developing a Safe Routes to School plan and program
2. Participating in National Walk to School Day each October and National Bike to School Day each May
3. Conducting safety audits and securing funding for infrastructure projects near schools
4. Developing shared use agreements between local schools, parks and municipalities

Transit

Public transit is an important element of physically active, car-light and car-free lifestyles. Every transit trip begins and ends with some form of active transportation such as walking or biking, meaning that most transit riders meet daily physical activity requirements on basic trips. Mixed-use transit oriented development, designed to maximize access to public transportation and support economic development, allows residents to easily access jobs, entertainment, and essential services without needing an automobile.

- **73% of Americans feel they have no choice but to drive as much as they do. (National Household Transportation Survey, 2010)**

- **Transit-oriented development has only one-quarter of the per capita traffic fatality rates of automobile-dependent and sprawling communities. (American Public Transportation Association, 2010)**

- **66% of Americans say that they would like more transportation options. (National Household Transportation Survey, 2010)**

Key public transit strategies that support active living include:

1. Developing a local and stable funding source for transit service
2. Conducting transit stop assessments to gauge accessibility and maintenance needs
3. Regularly riding existing transit services and encouraging others to do the same
4. Adopting a zoning code that encourages mixed-use and infill development

>> Appendix C: Vocabulary for Change

The following is a list of action words that can be used to create community priorities. This list is courtesy of Phil Stafford, IU Center on Aging and Community.

Optimize	Initiate	Reward	Decrease
Maximize	Undertake	Provide	Encourage
Reorganize	Create	Collaborate	Assist
Redefine	Develop	Coordinate	Fund
Strengthen	Start	Communicate	Underwrite
Expand	Address	Remove	Finance
Rethink	Sponsor	Promote	Enable
Renew	Build	Use	
Educate	Establish	Recognize	
Inform	Design	Reach	
Build awareness	Organize	Include	
Market	Enhance	Engage	
Celebrate	Improve	Foster	
Inspire	Continue	Explore	
Support	Change	Research	
Facilitate	Hold	Recruit	
Incentivize	Advocate	Identify	

>> Appendix D: Action Plan Template

Please see the following page for the Action Plan Template.

Active Living Action Plan

Goal	Action Steps	Responsible Persons & Organizations	Timeline

>> Appendix E: Additional Resources

Indiana State Department of Health, Division of Nutrition and Physical Activity
http://dnpa.isdh.in.gov

Health by Design
http://healthbydesignonline.org

Active Living Research
https://activelivingresearch.org

Centers for Disease Control and Prevention, Community Health:
https://www.cdc.gov/nccdphp/dch/index.htm

Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity and Obesity
https://www.cdc.gov/nccdphp/dnpao/index.html

Healthy Places by Design
https://healthyplacesbydesign.org

National Physical Activity Plan
https://activelivingresearch.org

Physical Activity Guidelines for Americans
https://health.gov/paguidelines/guidelines/