



ACTIVE LIVING AND RECREATION RESOURCES

Active Living – General Resources

Active Living by Design, <http://www.activelivingbydesign.org>. This organization helps communities create environments that support health-promoting behavior, especially physical activity.

Accommodating Bicycle and Pedestrian Travel: A Recommended Approach, Federal Highway Administration. Available at: <http://www.fhwa.dot.gov/environment/bikeped/Design.htm>, 1998. This policy statement was adopted by the U.S. Department of Transportation to encourage advocacy groups and others to find ways to integrate bicycling and walking into the transportation mainstream.

Active Community Environments, Centers for Disease Control and Prevention, <http://www.cdc.gov/nccdphp/dnpa/aces.htm>. Encouraging environmental and policy interventions will result in increased levels of physical activity and improved public health. This initiative promotes walking, bicycling, and the development of accessible recreation facilities.

Creating a Healthy Environment: The Impact of the Built Environment on Public Health, by Richard Jackson and Chris Kochtitzky, Centers for Disease Control and Prevention, Sprawl Watch Clearinghouse Monograph Series. Available at <http://www.sprawlwatch.org>. This guide, written by respected professionals from the Centers for Disease Control and Prevention, is a helpful tool for understanding the impact of land use and design on the health of a community. The writers suggest that to enhance the health and quality of life of people in the United States, land-use and urban design guidelines should integrate public health criteria.

Healthy Places, Healthy People: Promoting Public Health and Physical Activity Through Community Design, 2000. Available at <http://www.rwjf.org>. This is the report of an Experts Meeting held in November 2000, convened by the Robert Wood Johnson Foundation, to exchange information, identify barriers, and formulate possible

strategies for reintegrating physical activity into community design.

“Increasing Physical Activity Through Community Design: A Guide for Public Health Professionals,” National Center for Bicycling and Walking, May 2002. Available at <http://www.bikewalk.org>. This guide is a great resource for community leaders, designers, and land-use planners. It gives advice for improving walking and biking conditions in and around the community. The guide also provides a section on how to secure project funding, which can be an essential part of establishing an active community.

Improving Conditions for Biking and Walking: A Best Practices Report, Federal Highway Administration, 1998. This guide provides examples of pedestrian and bicycle projects that have been successful from around the United States.

National Center for Bicycling and Walking, <http://www.bikewalk.org>. This site tells you how to help create neighborhoods and communities where people walk and bicycle. This doesn't just mean sidewalks, bike lanes and trails, though these will certainly be elements of an overall plan. Creating active community environments means taking a look at the broader scope of where there are and aren't opportunities to walk and bicycle safely, easily, and conveniently.

Pedestrian and Bicycle Information Center, <http://www.pedbikeinfo.org>. The mission of this organization is to improve the quality of life in communities by increasing safe ways to walk and bike for transportation and physical activity. Resources include information about health and safety, engineering, advocacy, education, enforcement, access, and mobility.

Walkable Communities, Inc., <http://www.walkable.org>. The site of this Florida-based organization dedicated to helping communities become more pedestrian friendly includes articles and suggestions for assessing and improving walkability.

Designing for Pedestrians

The Michigan Department of Transportation's Intermodal Services Unit. Phone: (517) 335-2923. This office has resources available to provide non-motorized training and guidance on state and national best practice. www.michigan.gov/mdot.

MDOT Transportation Enhancement Program, Michigan Department of Transportation. Available at <http://www.michigan.gov/tea>. This program provides funding for transportation projects to improve the transportation network and quality of life in Michigan. This includes projects involving non-motorized transportation such as bicycle and pedestrian facilities.

Engineering Treatments. The Pedestrian and Bicycle Information Center. Available at <http://www.walkinginfo.org/de/tools.cfm?codename=1a>. This site contains detailed information about best practices for pedestrian design, including Pedestrian Facility Design, Roadway Design, Intersection Design, Traffic Calming, Traffic Management, Signals and Signs, and Other Measures.

"Pedestrian Facilities Reference Guide," National Center for Bicycling and Walking. Available at <http://www.bikewalk.org>. This document provides detailed information on topics such as intersections, crosswalks, signs and markings, and maps for walking routes. The comprehensive website offers many other resources as well.

How to Develop a Pedestrian Safety Action Plan, U.S. Department of Transportation, Federal Highway Administration. Available at <http://www.walkinginfo.org/pp/howtoguide2006.pdf>. This how-to manual presents an overview and framework for state and local agencies to develop and implement a Pedestrian Safety Action Plan tailored to their specific problems and needs.

Design Guidance Accommodating Bicycle and Pedestrian Travel: A Recommended Approach, U.S. Department of Transportation (USDOT). Available at <http://www.fhwa.dot.gov>. This document is a policy statement adopted by the USDOT, which hopes that public agencies, professional associations, advocacy groups, and others commit to this approach to integrate bicycling and walking into the transportation mainstream.

Guide for the Planning, Design, and Operation of Pedestrian Facilities, American Association of State Highway and Transportation Officials, 2004. Available at <http://www.aashto.org>. This guide, aimed at planners, roadway designers, and transportation engi-

neers, provides instructions for integrating pedestrian facilities along streets and highways. It includes advice on how to safely and effectively accommodate pedestrians on public rights-of-way.

Creating Walkable Communities: A Guide for Local Governments, Bicycle Federation of America Campaign to Make America Walkable, 1998. Available at <http://www.bikewalk.org>. This report serves as a tool for local governments and concerned citizens in the Kansas City region. It presents guidelines, suggestions, and techniques on how to make communities more walkable and pedestrian-friendly.

Pedestrian Facilities Users Guide: Providing Safety and Mobility, Federal Highway Administration, 2002. Available at <http://www.walkinginfo.org>. This guide publishes the results from research conducted as part of a large FHWA study, "Evaluation of Pedestrian Facilities." Useful information covers walkable environments, pedestrian crashes and their countermeasures, and engineering improvements for pedestrians. This guide will help transportation engineers, planners, and safety professionals involved in increasing pedestrian safety and mobility. Citizens may also use this guide for identifying tools to improve the safety and mobility of all who walk.

How Communities Benefit from Access Management, Michigan Department of Transportation. Available at http://www.michigan.gov/mdot/0,1607,7-151-9621_11041_29705-87917--,00.html. This website provides a general description of the benefits of access management as well as an overview of the Michigan Department of Transportation's access management program. Links to related information as well as contact information are also provided.

Designing for Bicycling

The Michigan Department of Transportation's Intermodal Services Unit. Phone: (517) 335-2923. This office has resources available to provide non-motorized training and guidance on state and national best practice. www.michigan.gov/mdot.

MDOT Transportation Enhancement Program, Michigan Department of Transportation. Available at <http://www.michigan.gov/tea>. This program provides funding for transportation projects to improve the transportation network and quality of life in Michigan. This includes projects involving non-motorized transportation such as bicycle and pedestrian facilities.

Design and Engineering. The Pedestrian and Bicycle Information Center. Available at <http://www.bicyclinginfo.org/de/index.htm>.

This site contains detailed information about best practices for bicycle design, including on-street facilities, signs and markings, bicycle parking, traffic calming and intersections.

"Bicycle Facility Selection Guide," The Pedestrian and Bicycle Information Center. Available at http://www.bicyclinginfo.org/de/bike_selection.htm. This guide is a must-read for those interested in learning more about designing for bicyclists.

"Bicycle Facilities Reference Guide," National Center for Cycling and Walking. Available at <http://www.bikewalk.org>. This section of the organization's useful website details how to successfully implement many bicycle facility elements.

Bicycle transportation and safety information. For materials regarding bicycle transportation and facilities, injury prevention, and sharing the road, for example, What Every Bicyclist Should Know and information about Smart Commute, contact the League of Michigan Bicyclists, (517) 334-9100 or <http://www.lmb.org>.

Guide for the Development of Bicycle Facilities, 3rd edition, American Association of State Highway and Transportation Officials, 1999. Available at <http://www.aashto.org>. This booklet is a complete guide to implementing bicycle facilities in your community. It takes you from the planning, design, and construction phases of your project all the way through operation and maintenance of your new facilities.

Bike Lane Design Guide, The Pedestrian and Bicycle Information Center, 2002. Available at <http://www.bicyclinginfo.org>. This helpful guide is a complete resource on signing, striping, and marking bike lanes on city streets. It highlights the city of Chicago for its efforts to overcome obstacles such as intersections, bus stops, and on-street parking. This guide also addresses issues that many communities share and answers many frequently asked questions about implementing bike lanes.

Design Guidance Accommodating Bicycle and Pedestrian Travel: A Recommended Approach. U.S. Department of Transportation (USDOT). Available at <http://www.fhwa.dot.gov>. This document is a policy statement adopted by the USDOT, which hopes that public agencies, professional associations, advocacy groups, and others commit to this approach to integrate bicycling and walking into the transportation mainstream.

Creating a Bicycle Friendly Community, League of American Bicyclists. Available at <http://www.bikeleague.org>. The League of

American Bicyclists provides an online guide for communities that outlines steps a community can take to become bicycle friendly. This website offers a complete resource section and provides information about how other communities have succeeded in implementing plans. You can also schedule a "Bicycle-Friendly Community" workshop in your area.

Bicycle Parking Standards. The Pedestrian and Bicycle Information Center has two resources available on-line at http://www.bicyclinginfo.org/de/park_basics.htm and <http://www.bicyclinginfo.org/de/parkguide.htm>. Two examples of bicycle parking requirements are available at <http://www.mass-bike.org/bikelaw/pcamb.htm> (Cambridge, MA) and http://admin.denvergov.org/Bicycle_Program/template2606.asp (Denver CO).

Designing for Disabilities

Americans with Disabilities Act Technical Assistance CR-ROM, U.S. Department of Justice. This CD offers a wide range of resources from the ADA webpage including the ADA regulations, design standards and recommendations, frequently asked questions and much more. A great resource for every community! Available online at: <http://www.ada.gov/adatacd1.htm> or by calling 1-800-514-0301.

ADA Standards for Accessible Design, U.S. Department of Justice. This document provides technical design assistance regarding ADA standards for buildings, parking, sidewalks and much more. Available at: <http://www.ada.gov/stdspdf.htm>

Guidelines for Accessible Public Right-of-Way, U.S. Access Board, July 17, 2002 (draft version). Available at <http://www.access-board.gov/rowdraft.htm>. The Access Board is dedicated to promoting accessibility for people with disabilities. Your community can use these guidelines when building or altering pedestrian facilities to ensure they meet the standards of the Americans with Disabilities Act.

Building Coalitions/Tools for Advocacy

"Developing Effective Coalitions: An Eight Step Guide," The Prevention Institute, 2002. Available at <http://www.preventioninstitute.org>. This paper is a guide to coalition building "from the perspective of an organization considering initiating and leading a coalition but [it] can be helpful to anyone eager to strengthen a coalition in which he or she participates" (p. 1). While originally

written for injury prevention coalitions, the guidelines and examples can be applied to all health-related coalitions.

“Building a Team,” Minnesota Department of Health. Available at <http://www.health.state.mn.us>. This section of the Minnesota Department of Health’s website houses useful information and practical handouts in the form of tip sheets and worksheets for emerging or established coalitions. The information may also be valuable for coalitions that are changing or more specifically defining their missions.

“Non-Motorized Advisory Committee Creation,” League of Michigan Bicyclists. Available in “Advocates Toolkit” at <http://www.lmb.org>. This document provides information on how to start a non-motorized advisory committee as well as sample charter and bylaws.

Community Audits

Walkability

Walkable Communities, Inc. Available at <http://www.walkable.org>. Dan Burden is the director of Walkable Communities and is a nationally recognized authority on bicycle and pedestrian facilities and programs. He assists communities across the country in developing, promoting, and evaluating alternative transportation facilities, traffic calming practices, and sustainable community design. MDOT has brought Dan Burden to Michigan several times for his expertise. If you are interested in more information, please contact at the Michigan Department of Transportation at (517) 335-2923.

Walkability checklist. Available at <http://www.walkinginfo.org/walkingchecklist.htm>. Use this checklist to evaluate your community’s walkability.

Bikeability

Bikeability checklist. Available at <http://www.bicyclinginfo.org/cps/checklist.htm>. Use this checklist to evaluate your community’s bikeability.

Bicycle Friendly Communities Campaign. Application available at <http://www.bicyclefriendlycommunity.org/>. This awards program recognizes municipalities that actively support bicycling. People who live in communities that are bicycle friendly can experience reduced traffic demands, improved air quality, and greater physical fitness. In addition, bicycle-friendly towns are often seen as places with a high quality of life. This can translate into higher property values, business growth, and increased tourism.

Community Resources

Walking incentive programs. Several walking programs require little staff time or funding. Programs used successfully in Michigan communities include:

- **Walk Michigan**, available from the Michigan Recreation and Parks Association.
Phone: (517) 485-9888. Available at <http://mrpaonline.org>.
- **Walk the Four Seasons**, available from Creative Walking, Inc.
Phone: (314) 721-3600.
- **Mega-Mileage Club**, available from Fitness Finders. Phone: (517) 750-1500. Available at <http://www.fitnessfinders.net>.

Promoting Physical Activity—A Guide for Community Action, U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Nutrition and Physical Activity, Human Kinetics. Ordering information is available at the Human Kinetics website, <http://www.human-kinetics.com>. The guide explains the benefits of physical activity and how to achieve an active lifestyle. Ideas for promoting physical activity in communities and strategies for reaching out to physically inactive people are featured. Useful hints show community leaders how to help create a positive community environment

Costs and Economic Benefits of Active Living

Economic Impacts of Protecting Rivers, Trails and Greenway Corridors: A Resource Book, Rivers, Trails and Conservation Assistance, National Park Service. Available at http://www.nps.gov/pwro/rtca/econ_all.pdf. This toolkit helps communities put an economic value to amenities such as rivers, trails, and greenway corridors.

Benefit Cost Analysis of Bicycle Facilities. Available at <http://www.bicyclinginfo.org/bikecost/index.cfm>. How much do bicycle facilities cost? Can you quantify their benefits? In what cases do estimates of benefits outweigh costs? If your community is considering building a new bicycle facility, you can use this tool to estimate costs, the demand in terms of new bicyclists, and measured economic benefits (e.g., time savings, increased liveability, decreased health costs, a more enjoyable ride).

“The Economic Benefits of Parks and Open Space,” The Trust for Public Land, 1999. Available at <http://www.tpl.org>. This report for communities demonstrates how land conservation helps protect the

bottom line and serves as an educational tool for communities. Data and examples are presented that can help community leaders and citizens make the case for parks and open space conservation.

Investing in a Better Future: A Review of the Fiscal and Competitive Advantages of Smarter Growth Development Patterns, Brookings Institute, 2004. Available at http://www.brookings.edu/metro/speeches/20040816_puentes.htm. This presentation by Robert Puentes, Fellow, Metropolitan Policy Program, focuses on compact development patterns and investments that strengthen and improve economic metropolitan regions. Also featured is the pursuit of smart growth in times of tight budgets.

Neighborhoods

Neighborhood Associations of Michigan (NAM). Information available at: <http://www.cj.msu.edu/~outreach/namich/>. NAM is a statewide organization of neighborhood associations and community based organizations. Its purposes are to educate, empower, and advocate for community members to upgrade their quality of life; and to improve their communities through neighborhood organizations throughout the state of Michigan. NAM provides a forum for the exchange of information and ideas, and to promote cooperation among neighborhood organizations.

Street Design Guidelines for Healthy Neighborhoods, by Dan Burden, Center for Livable Communities, 2002. Available at <http://www.walkable.org/>. Dan Burden, director of Walkable Communities, wrote this guidebook with assistance from a team that included two traffic engineers, an urban designer, and a citizen planner. It discusses how to build low-volume, slow-speed, traditional residential streets.

Parks and Recreation

"What Role Can Design Play in Creating Safer Parks?" Project for Public Spaces. Available at http://www.pps.org/topics/design/toronto_safety_3. This article identifies key things to consider when designing a park that is both functional and safe.

Safe playground standards. Public Act 16 of 1997 is the Michigan law that requires all new public playground equipment to meet the following safety standards:

- ***U.S. Consumer Product Safety Commission: Handbook for Public Playground Safety, Publication No. 325***, Office of Information and Public Affairs, U.S. Consumer Product Safety Commission. Available free at <http://www.cpsc.gov>.
- ***American Society for Testing and Materials: Standard Consumer Safety Performance Specification for Playground Equipment for Public Use***, ASTM F1487-98. Available for \$45 at <http://www.astm.org>. For a list of people in Michigan certified to perform playground safety inspections, call the Michigan Recreation and Park Association at (517) 482-9888.

"Public Playground Safety Checklist," U.S. Consumer Product Safety Commission. Available at <http://www.cpsc.gov/cpscpub/pubs/playpubs.html>. Use this checklist to inspect local school and community playgrounds and notify school or park officials about any hazards found.

Bicycle safety and education workshops. Information available at <http://www.bikeleague.org>. The League of American Bicyclists offers bicycle education classes for communities taught by certified instructors. These workshops educate adults, children, motorists, and bicyclists of all types on how to share the road and bike safely.

Policies and Planning

Exemplary Pedestrian Plans, 2005, Pedestrian and Bicycle Information Center. Available at: <http://www.walkinginfo.org/pp/exem2005.htm>. This list of exemplary pedestrian plans was compiled to provide easy access to a number of good examples of pedestrian planning. If you are embarking on the development of a bicycle and/or pedestrian plan, these examples will provide you with inspiration and information that we hope you'll find useful.

Exemplary Bicycle and Pedestrian Plans, Pedestrian and Bicycle Information Center. Available at: <http://www.bicyclinginfo.org/pp/exemplary.htm#2>. Bicycle and pedestrian plans compiled to provide easy access to a number of good examples of bicycle and pedestrian planning.

Getting to Smart Growth: 100 Policies for Implementation, Smart Growth Network, 2002. Available at <http://www.smartgrowth.org>. The guide provides 100 suggestions on how to implement smart community growth. Chapter topics include mixing land uses, designing compact buildings, choosing a range of housing opportunities, creating walkable communities, preserving open space, and providing transportation options.

Nonmotorized Plans and Guidelines. Many communities are developing nonmotorized plans and guidelines. Example for St. Clair County, Kalamazoo, Ann Arbor and others are available <http://www.greenwaycollab.com>.

Smart Growth America, a national coalition dedicated to improving the way we plan and build communities. Available at <http://www.smartgrowthamerica.com>. Check the resources and links section for ideas on implementing smart growth in your community.

Public Spaces

“Eleven Principles for Transforming Public Spaces into Great Community Places,” Project for Public Spaces. Available at <http://www.pps.org/info/placemakingtools/casesforplaces/11steps>. This article identifies eleven steps you can take to transform public spaces into vibrant community places.

Public Transportation

American Public Transportation Association. Available at <http://www.apta.com>. This national organization serves as a leading force in improving and advancing public transportation. Find information on current events, legislative updates, services, programs, conferences, research statistics, committee reports, and more.

Best Practices in Smart Growth and Transportation 2004 Competition, American Association of State Highway and Transportation Officials. Available at http://environment.transportation.org/documents/2004_smart_growth_competition.pdf. This report is sponsored by the American Association of State Highway and Transportation Officials (AASHTO) Center for Environmental Excellence. The Center was developed with the Federal Highway Administration to promote environmental stewardship and to encourage ways to streamline the transportation delivery process. It also serves as a resource for transportation professionals.

Community Transportation Association. Learn how you can help improve public and community transportation options at <http://www.ctaa.org>.

Pedestrian- and Transit-Friendly Design: A Primer for Smart Growth, Smart Growth Network, 1999. Available at <http://www.epa.gov/smartgrowth>. This primer illustrates both essential and desirable features to encourage pedestrian- and transit-friendly design.

Guide to Park-and-Ride Facilities, American Association of State Highway and Transportation Officials, 148 pp., \$48. To order, download the AASHTO Publications catalog at https://bookstore.transportation.org/item_details.aspx?id=293. This guide provides a general knowledge of the park-and-ride planning and design process. Applicable local ordinances, design requirements, and building codes must be consulted for their effects on the planning and design process. Local data resources, development patterns, and transit networks may present unique opportunities for park-and-ride implementation and should be explored. To find convenient locations and general information, visit www.michigan.gov/parkandride.

Passenger Transportation Division, Michigan Department of Transportation. Find information on public transit opportunities in Michigan by contacting (517) 373-6625 or <http://www.michigan.gov/mdotptd>.

Schools

Walk-to-School Programs

Determining the safety of local routes. For information on checking how safe it is for children to walk to school (and then working to make it safer), contact the Governor’s Council on Physical Fitness at (517) 347-7891 or <http://www.michiganfitness.org>.

Walk to School Day. The Governor’s Council on Physical Fitness is the state organizer for Michigan’s observance of Walk to School Day, a national program started by Partnership for a Walkable America. Michigan schools that plan to participate in Walk to School Day should register with the Governor’s Council at <http://www.michiganfitness.org> to receive stickers for every child, educational materials, and more.

Safe Routes to School programs. This movement is growing across the state as local teams of school personnel, parents, students, and various community leaders work together to improve the walking and biking routes around their schools, giving children the opportunity to be physically active at least twice daily.

- **Michigan’s Safe Routes to School website** at <http://www.saferoutesmichigan.org/> provides up-to-date information on programs in Michigan. You may also call 1-800-434-8642 for more information.
- **“Why Johnny Can’t Walk,”** National Trust for Historic Preservation. Available at <http://www.nationaltrust.org>. This document offers a look at how public policies and regulations are forcing communities to abandon older schools centered in neighborhoods.

- **The Federal Highway Administration website** at <http://safety.fhwa.dot.gov/saferoutes/> provides an overview of the program and links to resources and information about funding opportunities.

Physical Education Programs and Physical Activity in Schools

Michigan Exemplary Physical Education Curriculum (EPEC). To find out about EPEC, a new, state-of-the-art physical education curriculum, contact the Governor's Council on Physical Fitness at (517) 347-7891 or (800) 434-8642, <http://www.michiganfitness.org/epec/default.htm>, or e-mail bdejong@michiganfitness.org.

Recognition of a school district's physical education program. To learn which schools or teachers have been honored by the Governor's Council on Physical Fitness for the quality of their physical education programs, contact the Governor's Council at (800) 434-8642. School districts that have received recognition in the past year are listed on the website at <http://www.michiganfitness.org>. Schools or school districts wishing to apply for recognition can request application materials from the same place.

All Children Exercising Simultaneously (ACES) Day. On the first Wednesday in May of each year, millions of children all over the world will be exercising together. The purpose of ACES Day is to reinforce the importance of physical activity for health. In Michigan, schools can register for ACES with the Governor's Council on Physical Fitness at <http://www.michiganfitness.org>. Registered schools receive a free packet that includes ACES stickers for all participants, an educational newsletter for every student to take home, an ACES poster and more. Registration is recommended about a month before the event (in April), but all registrations are accepted through ACES Day. For information on this year's ACES Day (and associated dates), visit <http://www.michiganfitness.org>.

School-based walking programs. To learn about low-cost, easy-to-implement school walking programs, contact Fitness Finders at (517) 750-1500 or <http://www.fitnessfinders.net>.

Other school physical activity and health resources. Schools that wish to improve opportunities for physical activity may find the following resources helpful.

- **Healthy Schools Action Tool (HSAT).** This new online assessment at <http://www.mihealthtools.org/schools> helps your school determine ways to create a healthier school environment. HSAT

takes an in-depth look at the policies and environment within the school atmosphere that support physical activity, healthy eating, and a tobacco-free environment.

- **Healthy Kids Healthy Weight.** The Michigan Department of Community Health and the Michigan Department of Education collaborated on this publication to help families understand the importance of healthy weight in children. The document is published in printed format, but you can also download fact sheets from the booklet on a variety of topics, such as "The Family's Role" and "Plan for Healthy Snacks." For the complete list and more information, visit <http://www.emc.cmich.edu/healthy-weight>.
- **The Role of Michigan Schools in Promoting Healthy Weight, 2002.** The Michigan Department of Education in cooperation with the Michigan Department of Community Health and the Governor's Council on Physical Fitness released the results of a consensus process to outline how schools can address weight issues among schoolchildren. Download the free paper at <http://www.emc.cmich.edu>. For a printed version, call the Michigan Department of Education at (517) 335-4998.

Shared-Use Paths and Trails

"Bicycle Facility Selection Guide," The Pedestrian and Bicycle Information Center. Available at <http://www.bicyclinginfo.org>. This guide offers detailed information about designing shared-use paths and trails. It covers design details such as width and clearance, lighting, surface, and signs and markings.

"Bicycle Facilities Reference Guide," National Center for Bicycling and Walking. Available at <http://www.bikewalk.org>. See the section on trail networks. This document outlines objectives, implementation strategies, subtasks, and specifications for implementing this valuable bicycle improvement at the local level.

Michigan Trails and Greenways Alliance. Contact (517) 485-6022 or <http://www.michigantrails.org>. This organization can advise you about how to convert abandoned railroad beds and other linear corridors to trails and how to develop multi-use trails in your community.

Greenways: A Guide to Planning, Design and Development, The Conservation Fund. Available at <http://www.conservationfund.org/?article=2325>. This book is a practical guide for planning and designing greenways and trails.

Funding for walking and biking trails. Michigan communities can apply to several Michigan agencies for grants to build trails:

- **The Michigan Department of Transportation's Intermodal Services Unit.** Phone: (517) 335-2923. This office has resources available to provide non-motorized training and guidance on state and national best practice. www.michigan.gov/mdot.
- **MDOT Transportation Enhancement Program,** Michigan Department of Transportation. Available at <http://www.michigan.gov/tea>. This program provides funding for transportation projects to improve the transportation network and quality of life in Michigan. This includes projects involving non-motorized transportation such as bicycle and pedestrian facilities.
- **The Grants Administration Division of the Department of Natural Resources (DNR).** Phone: (517) 373-9125. This office administers grants funded through the Michigan Natural Resources Trust Fund and the Land and Water Conservation Fund.
- **The Forest Management Division of the Department of Natural Resources.** Phone: (517) 373-9483. This office administers grants funded through the Recreation Improvement Fund. Applications must be related to DNR-owned land, and the application must be submitted by a DNR division.

Help for planning trails and preparing grant requests to the Department of Transportation. To request resources to help communities plan non-motorized facilities and networks, contact Bryan Armstrong by phone at (517) 335-2636 or by e-mail at ArmstrongB@michigan.gov.

Rails-to-Trails Conservancy. Contact (202) 331-9696 or <http://www.railtrails.org>. Here you can learn about programs, publications, the benefits of trails, and more.

The Trails and Greenways Clearinghouse. Information available at <http://trailsandgreenways.org>. The clearinghouse provides free assistance to trail and greenway advocates including individuals, communities, government agencies, and grassroots organizations. Information includes technical assistance, references, referrals to local resources, and more.

Trails for the 21st Century, 2nd edition, Rails-to-Trails Conservancy, 2001. Available at <http://www.railtrails.org>. This guide offers assistance in planning, designing, and maintaining multi-use trails. It includes information about regulations and federal programs, current research in the field, and revised design guidelines.

Shopping Areas

"Big-Box Sprawl (And How to Control It)," The National Trust for Historic Preservation. Available at <http://www.nationaltrust.org>.

The impact of big-box sprawl reaches far beyond the price tags on the store shelves. This document highlights the need for individual communities to take an active role when considering big-box shopping centers in their area. Highlighted are the importance of conducting impact assessments before construction and of upholding design standards that preserve the community's character.

Traffic Calming and Safety

Michigan Traffic Crash Facts, Michigan Office of Highway Safety Planning. Available at <http://www.michigantrafficcrashfacts.org>. To find out the numbers of motor vehicle crashes in your community involving pedestrians and bicyclists over the past two or three years, contact the State Police, Criminal Justice Information Center. Phone: (517) 322-6025.

Traffic Calming: State of the Practice, by Reid Ewing, U.S. Department of Transportation, Federal Highway Administration, 1999. Available at <http://www.ite.org/traffic/tcstate.htm#tcsop>. This report written for transportation professionals can help community planners understand the basics of traffic calming. It includes information on traffic calming programs implemented in communities throughout the United States and Canada. These programs focus not only on residential areas but also on transitions from high-speed rural highways into rural communities.

Streets and Sidewalks, People and Cars: The Citizen's Guide to Traffic Calming, by Dan Burden, Local Government Commission, Center for Livable Communities, 2000. Available at <http://www.lgc.org>. This guide provides detailed information for local government officials and residents on how to retrofit streets to slow the traffic.

"Traffic Calming—American Planning Advisory Service Report," by Cynthia Hoyle, 1995. Available at http://www.walkable.org/library_htm. This guide offers a short (26-page) summary of the reasons for traffic calming as well as key techniques and how to implement them.

Emergency Response: Traffic Calming and Traditional Neighborhood Streets, by Dan Burden with Paul Zykofsky, Local Government Commission Center for Livable Communities, 2001. Available at <http://www.cacities.org/store/itemdetail.asp?id=3687&parentid=20&category=0>. This book addresses concerns raised by fire departments and other emergency responders about innovative street retrofit and design efforts. The manual discusses the impact of different treatments on emergency response times and explains what works and what does not.

Michigan Traffic Crash Facts, Michigan Office of Highway Safety Planning. Available at <http://www.michigantrafficcrashfacts.org>. To find out the numbers of motor vehicle crashes in your community involving pedestrians and bicyclists over the past two or three years, contact the State Police, Criminal Justice Information Center. Phone: (517) 322-6025

Worksites

Designing Healthy Environments at Work. An assessment available at <http://www.mihealthtools.org> helps employers identify ways to create a healthier work environment. The website also provides information and resources for worksites that want to take steps to create healthy work environments.

Non-motorized Commutes to Work. Michigan Department of Transportation's website has information on non-motorized transportation. Available at http://www.michigan.gov/mdot/0,1607,7-151-9621_11050---,00.html

Smart Commute. SmartCommute is a national organization that provides employer-specific information for non-motorized commutes. For more information, visit <http://www.smartcommute.org/ForEmployers.htm>

Employee wellness programs. Businesses interested in creating employee wellness programs can enroll in those offered by the American Cancer Society (Active for Life, 800-ACS-2345) or the American Heart Association (Heart at Work, <http://www.aha-haw.org>).

National Employee Health and Fitness Day. Contact the Michigan Fitness Foundation at <http://www.michiganfitness.org> to find out how to conduct an Employee Health and Fitness Day at your worksite.

Michigan Resources

Michigan Health Tools, <http://www.mihealthtools.org>. This suite of health tools promotes good health for all Michigan residents, including the Promoting Active Communities Award, the Healthy Community Checklist, Promoting Healthy Eating, Healthy Work Environments, Healthy Schools—Healthy Students, Walk by Faith, Public Health Steps Up Challenge, and the Legislative Health Challenge.

Cool Cities, <http://www.coolcities.com>. Building vibrant, energetic cities that attract jobs, people, and opportunity to Michigan is a

key component of Governor Jennifer Granholm's economic vision for the state. This vision led her to kick off the Cool Cities initiative in June 2003 throughout the state, in part as an urban strategy to revitalize communities, build community spirit, and most importantly, retain knowledge workers.

Michigan Steps Up, <http://www.michiganstepsup.org>. Michigan Steps Up is a healthy lifestyle campaign designed to create a social movement among citizens, policy makers, communities, and various sectors throughout the state. The campaign addresses three unhealthy lifestyle behaviors that contribute to Michigan's alarming rates of obesity and chronic disease: physical inactivity, unhealthy eating, and tobacco use. This comprehensive campaign includes an interactive website, a media campaign, conferences, stakeholder meetings, pedometer-based competitions, and more to help Michigan citizens take small steps toward a healthy lifestyle.

Governor's Council on Physical Fitness, Health and Sports/Michigan Fitness Foundation, <http://www.michiganfitness.org>. The Governor's Council on Physical Fitness, Health and Sports works to improve the health of Michigan residents by promoting the health benefits of physical activity and creating behavior-changing programs that equip Michigan citizens to lead a physically active lifestyle. The organization focuses on preventing chronic disease and reversing the trend toward sedentary living. Programs of the Council include Safe Routes to School, Walk to School Day, ACES (All Children Exercising Simultaneously), Active Community Environments, and the Exemplary Physical Education Program (EPEC).

Michigan Association of Planning, <http://www.planningmi.org/>. The Michigan Association of Planning website provides resources for both officials and professionals. The website includes current news, educational opportunities, resources, and advocacy information.

Michigan Department of Community Health. <http://www.michigan.gov/mdch/>. The Michigan Department of Community Health (MDCH) website provides information for citizens and professionals regarding current health issues in Michigan. You can find information regarding health care coverage, physical health and preventative medicine, mental health and other relevant health topics. Check out the various programs offered through MDCH such as Michigan Steps Up.

Michigan Department of Education, <http://www.michigan.gov/mde>. This website provides information regarding current topics in education, as well as education resources.

Michigan Department of Transportation,

<http://www.michigan.gov/mdot>. The Michigan Department of Transportation provides active leadership and support for planning, designing, operating, and maintaining all aspects of a comprehensive integrated transportation system. The department is committed to fostering partnerships to develop an innovative and integrated transportation system that is responsive to Michigan residents, visitors, and businesses.

Michigan Environmental Council, <http://www.mecprotects.org/>. The Michigan Environmental Council works to protect the environment, promote alternatives to sprawl, advocate for a sustainable environment and economy, protect Michigan's water, and to protect children's health from environmental harm.

Michigan Health and Hospital Association, <http://www.mha.org/>. The MHA is composed of a blend of hospitals and health systems, and other organizations involved in health care. MHA represent health care organizations and groups at the national, state and regional levels, and is involved in education, policy development and advocacy.

Michigan Municipal League, <http://www.mml.org/>. This organization provides valuable information to help Michigan cities and villages strengthen their local government. In addition to producing useful publications, the Michigan Municipal League also provides local governments with technical assistance, sponsors conferences, training and education programs, maintains a resource center, and promotes state and federal legislation helpful to local governments.

Michigan Office of Highway Safety Planning,

http://www.michigan.gov/msp/0,1607,7-123-1593_3504---,00.html. This website provides information on current safety issues and highway safety planning updates. Also included are answers to common safety questions, links to traffic crash data and other traffic safety related information.

Michigan Parks and Recreation Association, <http://www.mrpaonline.org/index.html>. MPRA provides resources and information for citizens as well as parks and recreation professionals. MPRA provides publications, as well as opportunities to participate in professional development activities including conferences and workshops. Get involved by joining a committee, participating in parks and recreation legislature, and enjoying networking opportunities.

Prevention Research Center of Michigan,

<http://www.sph.umich.edu/prc/>. The Prevention Research Center (PRC) of Michigan is committed to expanding and sharing knowledge, strengthening the community and public health system. The PRC is a collaboration of University of Michigan's School of Public Health with community-based organizations, local health departments, and the Michigan Department of Community Health. Visit their website to learn about the various projects and partners participating in activities at the PRC.

Regional or Metropolitan Planning Organizations

Arrowhead Regional Development Commission

<http://www.ardc.org/>

Bay County Board of Commissioners

<http://www.co.bay.mi.us>

East Central Michigan Planning and Dev. Reg. Com.

<http://www.ecmpdr.org>

Flint/Genesee County Metropolitan Alliance

<http://www.co.genesee.mi.us/gcmp-plan>

Grand Valley Metropolitan Council

<http://www.gvmc.org>

Kalamazoo Area Transportation Study

<http://www.katsmpo.org>

Macatawa Area Coordinating Council

<http://www.macatawa.org/~macc>

Metropolitan Council of the Twin Cities

<http://www.metrocouncil.org>

Michigan Association of Regions

<http://www.miregions.org/index.htm>

Northeast Michigan Council of Governments

<http://www.nemcog.org>

Northwest Michigan Council of Governments

<http://www.nwm.cog.mi.us>

Region II Planning Commission

<http://www.region2planning.com>

Saginaw County Metropolitan Planning Commission
http://www.saginawcounty.com/planning_dep/
Southeast Michigan Council of Governments
<http://www.semcog.org>

Southwestern Michigan Commission
<http://www.swmicomm.org>

Tri-County Regional Planning Commission
<http://www.tri-co.org>

West Michigan Regional Planning Commission
<http://www.mrpc.org>

West Michigan Shoreline Regional Dev. Com.
<http://www.wmsrdc.org/>

Glossary

access management: Access management involves changing land-use planning and roadway design practices to limit the number of driveways and intersections on arterials and highways, constructing medians to control turning movements, encouraging clustered development, creating more pedestrian-oriented street designs, improving connectivity, and reallocating road space to encourage efficiency. Although access management is primarily intended to improve motor vehicle traffic flow, it can also help convert automobile-oriented strip developments into more accessible land-use patterns that are better suited to walking, cycling, and public transit.

accessory dwelling unit: A secondary living unit added to, created within, or detached from a single-family structure with a separate entrance. It fulfills the basic needs of sleeping, eating, cooking, and sanitation.

active living: A way of life that includes physical activity in daily routines.

active recreation: Activities that require physical effort but are mainly for the purpose of relaxation or enjoyment. They are not based on formal competition and lack official sets of rules.

All Children Exercising Simultaneously (ACES): Labeled as the “world’s largest exercise class,” millions of children from all over the world exercise together on the first Wednesday in May of each year to promote proper health and fitness habits. The purpose of ACES is to emphasize the importance of physical activity for health. See the “Schools” section of “Active Living and Recreation Resources” for more information.

American Association of State Highway and Transportation Officials (AASHTO): AASHTO is a nonprofit, nonpartisan association representing highway and transportation departments in the fifty states, the District of Columbia, and Puerto Rico.

Americans with Disabilities Act (ADA) Standards: This document sets guidelines for accessibility to places of public accommodation and commercial facilities by individuals with disabilities. These guidelines are to be applied during the design, construction, and alteration of such buildings and facilities to the extent required by regulations issued by Federal agencies under the Americans with Disabilities Act of 1990.

arterial/arterial street: A major street designated to carry continuous traffic through an urban area.

bicycle master plan: A document created to establish ways to include biking facilities in a city’s transportation plan. Bicycle master plans usually cover ways to plan and design bicycle route networks, create bicycle parking, provide bicycling amenities such as showers and clothing lockers (usually with landowners’ assistance), maintain the route network, offer bicycle safety programs, promote bicycling in the city, and obtain the funds to implement these items.

bicycle parking: Racks or lockers well-located in secure areas to provide a bicyclist either short-term or long-term parking.

bicycle route map: A map that helps local bicyclists, newcomers, and visitors choose comfortable cycling routes and encourages first-time riders to make some trips by bicycle.

big-box retail: Retail establishments that typically range in size from 90,000 to 200,000 square feet, often located near highway interchanges or exits or along high-volume arterial roadways. They use a windowless box store design with several acres of a single-floor layout surrounded by vast surface parking.

bikeability: A term that describes how easy it is to get around by biking in a community.

bikeability audit: A review of cycling conditions along specified streets conducted by community members to explore issues such as sharing the road with cars, off-road paths, riding surfaces, intersections, behavior of drivers, end of trip facilities, directional signage, and safety.

bike lane: A portion of the roadway designated for preferential use by bicyclists. A pavement stripe separates the bike lane from vehicular traffic lanes; other markings and signs may be used as well.

bike rack, bike storage locker, and bike parking: Facilities that provide short-term (bike rack) or long-term (bike storage locker) parking for a bicycle. Bike racks can be as simple as a stationary object to which the bicyclist can lock the frame and wheels. Bike storage lockers enclose the entire bicycle, protecting against theft of the bicycle and its components and accessories. Lockers are usually located at transit stations or in business districts and can be rented for a reasonable yearly fee.

bike route or bicycle route: A section of road for bicycle use, designated with signs but without striping or pavement markings.

bike route connections: The ability to link bike routes to expand the length of a bike trail.

brownfield: An abandoned, idle, or underused industrial or commercial facility where redevelopment or expansion is complicated by environmental contamination.

buffer zone or planting strip: The area that lies between the street right-of-way line and the edge of the sidewalk, intended to shield pedestrians from automobile traffic. This land is publicly owned and often used for street trees, greenspace, street furniture, public utilities, on-street parking, and street maintenance.

capital improvement plan: A long-range plan, usually four to six years, which identifies capital projects and equipment purchases, provides a planning schedule, and identifies options for financing the plan. The purpose of the plan is to provide a link between a city's comprehensive and strategic plans and the city's annual budget.

chicanes: Fixed objects that project into the travel lane, such as curbing or fencing, and require drivers to weave a tight course between them.

cluster zoning or cluster residences: A type of zoning in which density is determined for an entire area, rather than on a lot-by-lot basis. Within the cluster zone, the developer has greater flexibility in designing and placing structures as long as the overall density requirement is met. Developments in cluster zones often incorporate open, common areas with park-like settings.

codebook: An official book that compiles all local laws in one place. Zoning ordinances, subdivision regulations, and other important laws, such as regulations on signage, are contained in individual chapters.

collector: A street-type that funnels traffic from residential or rural areas to arterials and tends to provide more access to property than do arterials. Examples of collectors are county roads, farm-to-market roads, and various connecting streets in large and small cities.

commercial zone: A land-use designation found in a local government's zoning ordinance and zoning map. A local government ordinance may create several types of commercial zones, varying by the scale of the building or the type of commercial use.

conditional use: In zoning, a land use that is allowed if specified conditions are met. For instance, a retail establishment might obtain a conditional use to do business in a residential district; conditions might include providing appropriate lighting and landscaping to provide a buffer.

connectivity: The ease of travel between two points. In a path or road network, it refers to the degree to which streets or areas are interconnected and easily accessible to one another.

context-sensitive design: A collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources while maintaining safety and mobility. This approach considers the total context and keeps the design in harmony with the natural, social, economic, and cultural environment.

continental or ladder style markings: A crosswalk design that makes it easier for pedestrians to cross the street safely. Ladder-style crosswalk markings are more visible to drivers than are parallel stripes.

crosswalk: The marked or unmarked area of an intersection where pedestrians cross, or a marked roadway crossing midblock. Motor vehicles are required to yield to pedestrians within a marked crosswalk.

curb bulbout or curb extension: An extension of the curb line into the roadway, which shortens the crossing distance at crosswalks and makes it easier to see pedestrians.

curb cut: A depression in the curb to accommodate a driveway; where there is no curb, the point at which the driveway meets the roadway pavement.

curb radius: The curved edge of the roadway at an intersection.

curb ramp: A slope that provides a smooth transition between two pedestrian paths of different heights, for example, between a sidewalk and a pedestrian crosswalk. Curb ramps are required under the Americans with Disabilities Act.

density: The compactness of development. Common measures include the average number of persons, households, or dwellings per acre of land.

design speed: The highest speed at which a roadway's design features still allow safe driving, given such factors as banking on curves and turning radii. Design speeds are usually higher than speed limits to ensure safety through a broader range of speeds.

downtown: A land-use category that encompasses the buildings in the heart of the community. A traditional downtown area is characterized by established businesses fronting the street, sidewalks, slow traffic speeds, on-street parking, and a compact grid street system.

Downtown Development Authority: Created to encourage redevelopment and revitalization in community districts. Members participate in economic development activities, marketing, and encourage public improvements to strengthen and attract new private investments.

Exemplary Physical Education Curriculum (EPEC): an award-winning, state-of-the-art physical education curriculum. See the “Schools” section of “Active Living and Recreation Resources” for more information.

fixed-time pedestrian signal: A type of traffic signal that cycles in a sequential order and does not depend on any type of detections such as pedestrian push-buttons. All roads and movements are served in a constant specific order.

flashing lights: A flashing red light means motor vehicles must come to a complete stop before proceeding. A yellow flashing light indicates the need for caution, but stopping is not required.

form-based code or smart code: A type of zoning code that follows principles associated with active living environments, unlike conventional codes. Although definitions differ, the following principles are the essence of form-based codes:

- Work from a defining spatial pattern, or a system of neighborhoods, districts, and corridors
- Deemphasize land use in favor of building form and typology
- Emphasize mixed uses and a variety of housing types
- Focus on the street design and the public areas
- Conduct a design-focused public participation process

furniture zone: In business districts, benches, trash receptacles and other amenities are placed in a paved area between the street and sidewalk to create a “furniture zone” which discourages pedestrians from walking close to traffic.

greenspace or open space preservation plan: A plan that focuses on preserving and connecting greenspaces for recreation, stormwater management, wildlife habitat, and scenic enhancement.

greenway: A strip of undeveloped land that connects to other natural areas; intended for environmental preservation, wildlife, and recreation.

grid street design: Characterized by a traditional urban block-like grid with a dense matrix of interconnected streets allowing for multiple traffic options.

grid street network: The patterns formed by roadways and the extent to which they are connected to each other. The grid-like patterns form blocks that are usually no more than a quarter mile in perimeter.

high density: In terms of population density, defined as more than 20 residents per acre.

highest-density residential zone: An area that generally includes multi-family housing, apartments, and condominiums. Zoning ordinances define a range of residential zones. These zones are designated according to housing density, that is, the number of dwelling units per acre. In very traditional codes, the lowest-density zone is R1 (1 dwelling unit per acre), and higher zones have designations like R4 (4 dwelling units per acre).

infill development: In land-use and transit planning, the development of vacant parcels in urbanized or suburbanized areas, typically bringing the density of the area closer to that allowed by the existing zoning regulations. In outlying areas this also means filling in undeveloped large lot spaces.

infrastructure: The basic facilities, services, and installations needed for the function of a community such as transportation and communication systems, water and power lines, and public institutions including schools, post offices, and prisons.

inventory: To count and evaluate; a list of community resources. Taking stock of community assets (such as facilities for physical activity) is generally a first step of the planning process for developing an active living community.

leading-time pedestrian signal: A traffic signal programmed to provide pedestrians with a few seconds of lead time (an advanced walk signal) to enter the crosswalk before motorists get a green light. This lead time gives pedestrians more visibility, which helps motorists yield to them and minimizes crashes between pedestrians and motorists.

lowest-density residential zone: An area that has relatively few homes per acre. See the entry for highest-density residential zone for more information.

master plan or comprehensive plan: The primary long-range plan created by a community to guide growth, covering up to 20 years.

maximum parking standard: A development code that sets a ceiling for the number of parking spaces in an area, intended to prevent building large, underused lots. Maximum parking standards are usually used with commercial facilities and are defined in terms of the number of square feet of space (for example, leased space or retail sales floor space).

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median: A strip of land in the center of a boulevard or roadway. Medians often are landscaped or planted with street trees.

median island: A raised island in the center of an intersection or mid-block that provides pedestrians with a safe place to stop when crossing a roadway.

Michigan State Board of Education Policy on Quality Physical Education: The Board recommends that all schools offer quality physical education programs that address three critical issues: curriculum, instruction and assessment, and opportunity to learn. This includes daily physical education (150 minutes per week at the elementary level, 225 minutes per week at the secondary level). In addition, but not as a substitute for physical education, they recommend daily recess for students pre-K through grade 6.

minimum parking standard: The fewest number of parking spaces required for development projects based on land use and size, traditionally regulated through zoning codes. For example, a larger shopping center (over 600,000 square feet) may be required to supply 4.5 spaces per 1,000 square feet of gross leaseable area. To reduce the oversupply of parking, communities should consider reducing the minimum parking requirements.

mixed use: Different but compatible or complementary land uses located within a single structure or in close proximity. This can include mixing of residential and commercial areas, for example, placing apartments above stores and restaurants.

moderate physical activity: Activities such as walking, bicycling, gardening, and housework, done in short spurts of 8–10 minutes that, when accumulated over the course of the day, equal 30 minutes of activity. On a regular basis (three to five times a week), this type of activity can result in substantial health benefits.

neighborhood: A district with distinctive characteristics, a surrounding area or vicinity, and people living near one another.

Neighborhood Watch program: A plan to help people living in an area reduce crime by working together and sharing information. Police train residents to help prevent crime and to recognize and report criminal activities.

New Urbanism: A set of development principles summarized in the Charter of the New Urbanism to create more human-scaled places intended to increase accessibility and decrease reliance on the automobile as the primary mode of travel.

non-motorized transportation advisory group: A group of citizens formed by the local governing unit (city council, township board) that advocates for non-motorized transportation facilities, including the funding for such facilities and promotional or educational programs encouraging non-motorized transportation.

non-motorized transportation plan: A plan for a community's non-motorized transportation, including walking, cycling, and public transportation.

on-street parking: Space provided at the edges of a road where motorists can park their cars. This traffic calming technique slows car speeds and benefits pedestrians because the parked cars provide a buffer between sidewalks and moving traffic.

ordinance: A law, usually of a city or a county, that governs matters not already covered by state or federal laws, such as zoning, safety, and building regulations.

passive recreation: Recreation that includes a less intensive range of outdoor activities compatible with preserving natural resources such as wildlife habitats and floodplains.

paved shoulder: A paved and smooth roadway surface at the edge of a road at least 4 feet wide and suitable for cycling.

pedestrian signal: A signal used to indicate to pedestrians the appropriate time to cross a street or roadway.

permitted use or use by right: In zoning, a use that a landowner has the right to develop within the zone, without having to meet additional conditions. For instance, in an R1 zone, a landowner has the right to develop a single-family residential house. The landowner must comply with all relevant site design regulations, such as front- and side-yard setbacks.

placemaking: Local efforts involving city government, the business community, residents, and other stakeholders to identify and revitalize underused public spaces. The process upgrades existing public spaces through small-scale, short-term projects such as traffic calming, pedestrian improvements, and street furniture.

planned unit development (PUD): A designation intended to encourage and allow more creative and imaginative design of land developments than is possible under traditional zoning regulations. Substantial flexibility in planning and designing a proposal often accrues in the form of relief from compliance with conventional zoning ordinance site and design requirements. In Michigan, clustered residential development projects that protect open space are often developed as PUDs.

pocket park: A small area accessible to the general public that is often of primarily environmental, rather than recreational, importance. They can be urban, suburban or rural and often feature as part of urban regeneration plans in inner-city areas to provide areas where wild life can establish a foothold.

pre-application conference: A meeting between developers and local government representatives about a project proposal, intended to be informational but not an exhaustive review of all potential issues.

public art: Art in which the community has a role in choosing the artist, the site, and the artwork with public money providing the funding. It must be designed to rigorous standards, as it is often expected to last for 20–50 years, if not more, in an outdoor, fairly unprotected environment.

rails-to-trails: Walking/biking paths along abandoned railroad corridors that often run through town.

recreation plan: A plan for a community's recreational facilities, often completed by the parks and recreation department.
reduced minimum parking standards: Jurisdictions can establish maximum or reduced minimum parking standards for developments, which reduces the number of parking spaces required. Usually developers must agree to pay a mitigation fee to the jurisdiction and/or establish a parking management program.

regional transportation plan: A plan for transportation (automobile, transit, and non-motorized options). These plans are completed by metropolitan planning organizations, such as councils of government or regional planning commissions.

right-of-way: A strip of land platted, dedicated, condemned, established by prescription, or otherwise legally established for the use of pedestrians, vehicles, or utilities.

road diet: Narrowing of a street by reducing the motorized vehicle lane width, reducing the number of lanes, or using other means. This traffic calming measure helps discourage automobiles from speeding and allows bicycles to share the road more safely with motorized traffic.

roundabout: A type of traffic calming device at which traffic streams circularly around a central island after first yielding to the circulating traffic. Roundabouts are statistically safer than both traffic circles and traditional intersections.

rural: Of the country or country life.

Safe Routes to School (SR2S): An international movement dedicated to making it safe, convenient, and fun for children to bicycle and walk to school. The SR2S process is a systematic approach to assessing and creating active and safe school environments. Funding for Michigan schools to develop safe routes to schools is available through the National Transportation Bill (SAFETEA-LU). The SR2S process includes:

- Building community support for safe walking and biking to school
- Assessing the number of students currently walking and biking to school
- Assessing the safety of routes to school
- Assessing parent and student attitudes and beliefs toward walking to school
- Creating an action plan that includes education, encouragement, enforcement, engineering, and evaluation activities
- See www.saferoutesmichigan.org for more information

SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act—A Legacy for Users): The transportation vision established by Congress in 1991 with the Intermodal Surface Transportation Efficiency Act (ISTEA) and renewed in 1998 through the Transportation Equity Act for the 21st Century (TEA-21). This legislation governs federal transportation spending.

sedentary: Physically inactive.

setback: The distance between a building or structure (not including ground-level parking lots or other paved surfaces) from property lines or from other buildings.

shared parking or flexible parking: A technique of parking management in which spaces are shared by more than one user, allowing parking facilities to be used more efficiently. Shared parking recognizes that most parking spaces are used only part time by a particular motorist or group and that many parking facilities have a significant portion of unused spaces, with utilization patterns that follow predictable daily, weekly, and annual cycles. For example, a parking lot used by a retail store during normal working hours (e.g., 10 A.M. to 7 P.M.) can easily be used by a bar/restaurant open in the evenings.

shared public space: Places where people have a right to access without paying entrance or other fees. Examples are most roads (including pavement), town squares, public parks, and cafes. Promotes the connection of people with their community and establishes relationships.

shared roadway: A roadway on which bicyclists and motorists share the travel lanes.

sidepath: A bicycling facility that may consist of a separate road, track, path, or lane designed for use by bicyclists and from which motorized traffic is generally excluded; a bike path located next to a roadway used for motor vehicle travel (like a sidewalk but designated for bike travel).

sidewalk: A concrete or other hard, smooth surface for pedestrians to walk on, usually located in the public right-of-way between the road and the fronting properties.

sidewalk connections: Designed to match adjacent segments of existing sidewalk for easy walking to many community services and activities. Extensions can provide access from neighborhoods to downtown and create opportunities to access transit and other services.

signal actuators: Wire-loop actuators that detect metal overhead and trigger traffic signals. You can often see the rectangular cuts where the actuators are buried under the pavement. These actuators may or may not be adjusted to detect bicycles. Push-button actuators require a pedestrian to activate the signal via the traffic signal push button.

smart growth: Growing a community in a way that protects farmland and open space, revitalizes neighborhoods, maintains housing affordable, and provides more transportation choices.

stop bars: The thick painted strip on a street that indicates where vehicles should stop at traffic signals or stop signs. Stop bars ensure that pedestrian crosswalks are not obstructed.

street buffer: An area with a defined depth that is adjacent to a front property and lies between the street right-of-way line and the front wall line of the building facing a public street. Trees are sometimes used in street buffers.

street furniture: Objects and pieces of equipment installed on streets and roads to make the street more pleasant and comfortable to use, including benches, mailboxes, streetlamps, street lighting, traffic lights, traffic signs, direction signs, bus stops, taxi stands, restrooms, fountains and memorials, and waste receptacles.

street infrastructure enhancements: The improved physical enhancements to a street such as lighting, adequate parking, appropriate retail, food, art, and entertainment establishments. Pedestrian/bicycle trails that connect to a city street can be used as enhancements.

streetscape: Refers to all the elements that constitute the physical makeup of a street or avenue and that, as a group, delineate its character. A streetscape includes building frontage, street paving and furniture, street tree planting, lighting, and signage.

suburban: A residential area in the vicinity of a city.
traditional neighborhood development (TND): A style of urban or suburban development, evolving since the 1970s, that revisits many of the features of urban neighborhoods of 50 to 100 years ago. Various called neotraditional development or urban villages, the most distinguishable feature of TND is the continuous fabric of intimately blended land uses, arranged so that people can travel between them by a variety of methods (walk, bicycle, transit, taxi) in addition to privately operated cars.

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traffic calming: Of or relating to transportation techniques, programs, or facilities intended to slow the movement of motor vehicles.

trail, multi-use recreation trail, or shared-use path: A facility separated from motor vehicle traffic by an open space or barrier, typically used by pedestrians, joggers, skaters, and bicyclists as two-way facilities. This does not include sidepaths.

transit or public transportation: Transportation by a conveyance that provides regular and continuous general or special transportation to the public. It is generally used in contexts that do not include carpools or vanpools, school buses, or charter or sightseeing services.

transit-oriented development (TOD): A mixed-use community or neighborhood surrounding a transit station, stop, or route that is designed to encourage transit use and pedestrian activity. It usually is developed with sufficient density in terms of residents or employees per acre, number of trips serviceable by transit, mix of uses within walking distance of one another, and pedestrian-oriented design characteristics. Also called *transit-friendly* or *transit-supportive development* and sometimes referred to as relating to neotraditional development or New Urbanism.

urban: Typical of the city or city life.

urban center: A large and densely populated area that may include several independent administrative districts and form a city.

vertical mixed use: Permitted activities mixed within the same building, for example, a building that has ground-floor commercial areas with residential and/or office spaces directly above.

Walk to School Day: An energizing event held in October and usually organized at the school or district level, reminding parents and children of the simple joy of walking to school. It also serves as an opportunity to focus on the importance of physical activity, safety, air quality, and walkable communities. Walk to School activities often become a catalyst for ongoing efforts to increase safe walking and bicycling.

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walkability/walkable: A term that describes how easy it is to get around by biking in a community. Generally, a single route, or a system of routes, between points that is relatively short, barrier free, interesting, safe, well-lit, comfortable, and inviting to pedestrian travel.

walkability audit: A review of walking conditions along specified streets conducted by community members. Participants take photos or videos to reveal what they found and then make recommendations on issues such as the following: sidewalk width and condition, street crossings, connectivity to parking, on-street and off-street parking, screening, tree canopy, building placement, restorations, housing type, and mix of uses.

Wide curb lanes: A traffic lane wider than the normal dimension to accommodate bicyclists. The lane is shared with motor vehicles.

wide outside lane: A lane of at least 14 feet that allows an average-size motor vehicle to safely pass a bicyclist without crossing over into the adjacent lane.

zebra stripes: Wide white lines painted across pedestrian crosswalks at intersections with traffic control signals.

zero-lot-line development: A development option where side-yard restrictions are reduced and the building abuts a side-lot line. Overall unit-lot densities are therefore increased, providing more usable open space. Zero-lot-line development can increase protection of natural resources and reduce requirements for roads and sidewalks.

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