

Choosing Our Path

Bicycling and walking are important elements of lowa's transportation system and are also recreational activities enjoyed by millions each year. They are healthy activities that require relatively low levels of investment per mile of accommodation, yet are major contributors to economic development and tourism across the state.

This chapter describes the vision for the future of walking and bicycling in Iowa, outlines seven goals designed to help achieve this vision, and summarizes the stakeholder input that shaped the development of this plan.

2.1 Vision for the Future

Where we are today

Iowa excels as a state for walking and bicycling. Its scenic landscapes, vibrant communities, and engaged citizens support expanding mobility for non-motorized users. However, most bicyclists and pedestrians regularly experience inadequate accommodations, lack of bikeway or trail connectivity, and are stressed when using many of lowa's streets and roads.

Where we want to be

The vision for this Plan is that the state, including all citizens and all governmental agencies, will adopt walking and bicycling as valid forms of transportation—a position that is supported by current state code and federal policy. This requires changing the mindset that bicycling and walking are only recreational activities and encouraging more people (all genders, ages, cultures, and abilities) to engage in these activities.

lowa's streets and roads must be made safer, less stressful, and more civil to encourage more people to walk and bicycle. This includes educating bicyclists on how to safely share the road and increasing motorists' awareness of the rights of bicyclists to use most roads in Iowa. It also means ensuring streets and roads effectively serve all transportation users, including motorists, freight, transit, bicyclists, and pedestrians. The end goal is to make more of the state of lowa accessible by bicycle and by foot while eliminating bicycle and pedestrian-related injuries and fatalities, in keeping with the Iowa DOT's zero-fatality goal.

How we can get there

Historically, the provision of accommodations for bicycling and walking has not been mainstreamed into the planning and design processes of the Iowa DOT and most MPOs, RPAs, counties, and municipalities. Accommodations were only provided if specifically requested and, in most cases, funded by a local jurisdiction or if space for bicycling was provided by default (e.g., an unused parking lane or a paved shoulder wide enough to accommodate bicycling). When such requests were made, there was a great level of uncertainty regarding whether accommodations were warranted or compatible and, if so, how they should be designed. The results were inconsistency in planning and designing accommodations from one part of the state to another and a common perception that accommodating bicycling and walking was not central to the lowa DOT's mission.

Achieving the vision for this Plan is dependent on the Iowa DOT, county engineering departments, MPOs and RPAs, and cities making the provision of safe and comfortable accommodations for walking and biking a regular part of roadway design—a concept also known as mainstreaming. Improved coordination and shared procedures between these agencies is crucial, as is reframing the approach to funding infrastructure projects. Furthermore, new funding sources and approaches—such as funding bikeways and sidewalks as small yet meaningful parts of larger projects—will be used in order to bridge the gap between current infrastructure and future needs. Changes to Iowa DOT's project development process are outlined in Chapter 3: Program Review and Recommendations and a funding strategy is described in Chapter 7: Funding Strategy.

Finally, bicycle and pedestrian accommodations need to be provided and designed in a context-sensitive manner relative to site-specific factors. In other words, with few exceptions (such as interstate highways and highly-constrained environments) all streets and roads in lowa will accommodate all expected users. The manner in which the accommodation is provided (paved shoulders, shared roadways, bike lanes, sidepaths, sidewalks, etc.) will depend on traffic volume, motor vehicle speed, pavement width, and other relative factors. Guidance for appropriate accommodations is provided in Chapter 4: Infrastructure Analysis and Recommendations.

Taking Action

With this Plan and the accompanying Complete Streets Policy, Iowa DOT is adopting a new perspective on walking and bicycling as essential modes of transportation, receiving due consideration of needs. This means embracing a Complete Streets approach to considering bicycling and walking needs as part of every road or street project in which Iowa DOT is involved (and encouraging counties and cities to do the same) while providing appropriate, context-sensitive accommodations where needed. This approach is supported by the Federal Highway Administration (FHWA), which—through multiple iterative policy statements—in fact mandates that bicycle and pedestrian mobility needs be considered and included in every project, with few exceptions.

Mainstreaming bicycling and walking requires several shifts in the practices and approaches of all agencies engaging in street and road projects in Iowa, including:

- Measuring current conditions and identifying the factors that determine ease of use for bicyclists and pedestrians (see Chapter 4);
- Establishing a toolbox of facility types, including guidance as to which is appropriate for various situations (see Chapter 4);
- Adopting policies and practices that codify and explain the mainstreaming of bicycling and walking (see Chapters 3, 6, and 7);
- Rewriting manuals to incorporate current best practices and educating planners and engineers accordingly;
- Reconsidering funding streams to fund accommodations from the same source as the larger roadway project (see Chapter 7); and
- Increasing coordination between Iowa DOT's Central Office and District Offices, as well as between Iowa DOT and MPOs, RPAs, counties, and municipalities (see Chapter 3).

Mainstreaming bicycling and walking infrastructure development will not only increase mobility for these modes but is the most economical way to provide accommodations.



2.2 Goals

A small set of clear, easy-to-remember goals were developed based on input from a Policy Advisory Committee and a Technical Advisory Committee (described later in this chapter) to simplify the vision and the steps needed to achieve it. These goals shaped the development of the Plan and should continue to influence programs, investments, and other actions related to bicycling and walking into the future.

- Valid—Ensure that policy makers, roadway designers and planners, law enforcement officials, motorists, bicyclists, and pedestrians recognize that bicycling and walking are valid modes of transportation.
- Safe—Improve the safety and friendliness of Iowa's roads and trails to accommodate on-road bikeways and sidewalks, reduce crashes, and eliminate fatalities.
- **Coordinated**—Improve coordination between the Iowa DOT Central Office, each Iowa DOT District, regional agencies, and local partners to streamline maintenance and the implementation of programs, policies, and infrastructure projects, and to increase consistency.
- **Connected**—Enact policies and develop infrastructure to create an interconnected network of on-road bikeways, sidewalks, multiuse trails, and end-of-trip facilities that uses the appropriate facility type to connect people to their destinations.
- **Funded**—Increase the overall level of funding for bicycle and pedestrian infrastructure and programs, explore the flexibility of funding sources, and maximize the efficiency of funding to bridge the gap between what is needed and what is available.
- Well-Designed Establish quidelines for the design of on-road bikeways, sidewalks, and multi-use trails to ensure they are comfortable, sustainable, convenient, and consistent.
- **Healthy**—Promote opportunities for active and sustainable lifestyles that include walking and bicycling on a daily basis.



2.3 Plan Development

The major elements of the Bicycle and Pedestrian Plan development process included:

- Assessing existing conditions, including bicycle compatibility for rural roads and analyzing crash data;
- Analyzing current policies and practices, including project scoping and funding;
- Recommending new policies and modifications to existing policies;
- Recommending processes and guidelines for planning and designing infrastructure;

- Establishing a new planning framework for the Statewide Trails Vision;
- Assessing a path for the establishment or completion of national trails (American Discovery Trail, Mississippi River Trail, and Lewis and Clark Trail) and US Bicycle Routes that pass through Iowa;
- Recommending an implementation and funding approach; and
- Developing performance measures.





2.4 Stakeholder Involvement

The development of this Plan was directly guided by the involvement of various stakeholders, both internal and external to the lowa DOT. The most significant period of stakeholder involvement occurred early in the project, during which fifteen meetings were held to gather input. The outreach was organized such that meetings were held in each of the six Iowa DOT Districts and were coordinated through their District Planners. There were generally three types of meetings held in each District: District Staff meetings, Metropolitan Planning Organization (MPO) and Regional Planning Affiliation (RPA) staff meetings, and public input meetings. In a few cases, the District and MPO/RPA meetings were combined to accommodate travel and schedule conflicts. Over the course of the development of this Plan, more than 40 stakeholder meetings were held.

Advisory Committees

Two advisory committees were active throughout the development of this Plan and helped determine and shape the goals and policy direction. Each committee met eight times to review analysis findings, policy recommendations, and priorities. The committees were composed as such:

Policy Advisory Committee (PAC)

- American Public Works Association, Iowa Chapter
- City engineer/disabled community representative
- County engineer representative
- Iowa Bicycle Coalition
- Iowa Department of Health and Human Services
- Iowa Department of Public Health
- Iowa Natural Heritage Foundation
- MPO representative
- RPA representative

Technical Advisory Committee (TAC)

- Iowa DOT Bridges & Structures Bureau
- Iowa DOT Design Bureau
- Iowa DOT Location & Environment Bureau
- Iowa DOT Systems Planning Bureau
- Iowa DOT Traffic & Safety Bureau
- Planners and Engineers from the Iowa DOT Districts

District Outreach

In addition to involving representatives from District Offices on the TAC, meetings were held with each of the six District Offices early in the project. At about half of these meetings, the majority of the District Office attended and provided input; for the other meetings, a smaller group consisting of the District Engineer, District Planner, and two or three other staff members provided input. Receiving input from District Office staff was critically important toward the development of the Plan because of the critical role they play in project development, design, and planning. Each District Office provides guidance for project development to municipalities, counties, MPOs, and RPAs. They also often oversee the funding requirements of local projects utilizing Federal Aid.

At these meetings, staff were asked a number of questions, such as "What type of guidance would be most helpful regarding bicycle and pedestrian accommodations" and "What is the process for and challenges associated with securing project funding?" The input from each District was slightly unique, but several themes were universal.

District Office staff identified the need for Policy considerations related to:

- The need for better local planning efforts and the communication and timing of requests for accommodations from Local Public Agencies;
- When to accommodate and how accommodations are funded;
- The responsibility and level of required maintenance; and
- The need for a more substantial funding mechanism for construction and maintenance.

District Office staff identified the need for Guidance considerations related to:

- The selection of accommodation type; and
- The design of facility elements (e.g., width, signage, markings, etc.)





MPO and RPA Staff

MPOs and RPAs are multi-jurisdictional organizations tasked with regional transportation planning, including transportation for bicyclists and pedestrians. They are involved with—or are at least knowledgeable of—most federal and state-funded transportation projects that occur within their region. They also play a role in allocating federal funds and applying for state grant funds for bicycle and pedestrian projects, most notably funds from the Surface Transportation Block Grant-Transportation Alternatives Program (STBG-TA). The STBG-TA program replaces the Transportation Alternatives Program (TAP), which itself combined the Transportation Enhancements (TE), Safe Routes to School (SRTS), and Recreational Trails Program (RTP). The questions asked at these meetings with MPO and RPA staff were similar to those asked at District Office meetings.

The discussions largely revolved around funding strategies, which vary greatly between the MPOs and RPAs. With flexibility inherent in the previous federal transportation legislation (FAST Act), each MPO and RPA has been able to evaluate needs in the manner they choose and direct funding where deemed appropriate. In some regions, under the previous transportation act before the FAST Act (MAP-21), the flexible Transportation Alternatives Program (TAP) money was used as originally intended for funding bicycle and pedestrian facilities. In other regions, a portion of TAP funds have been "flexed," or added, to Surface Transportation Program (STP) funds for roadway and bridge improvements. Yet in other areas, STP funds have been used in conjunction with TAP money to make significant bicycle and pedestrian facility development possible. In this way, it seems that giving the MPOs and RPAs authority over where funds are directed is valued by those organizations toward meeting their most critical needs.

However, concern was expressed by some RPA representatives, mostly in very rural areas, that the funding they receive is not sufficient for the completion of even very minor projects. Some of these RPAs are trying to overcome this challenge by accumulating money over multiple years, yet this situation remains discouraging for these jurisdictions. This practice also limits buying power due to continued inflation in construction costs.

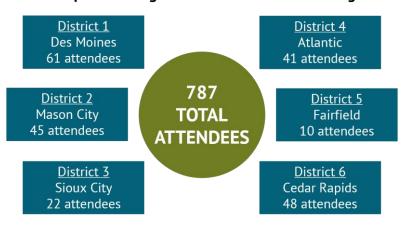
Just as funding strategies vary, so does the level of planning from region to region. In speaking with MPOs/RPAs, it was determined that in some cases local public agencies have no bicycle and pedestrian facility plans. In others, the plans that are available may be decades old or contain only very vague priorities. Other areas have current plans that are updated on a regular basis and prove to be valuable as roadway improvements are implemented. The inconsistency of local (and regional in some cases) planning for bicycling and walking necessitates increased coordination and support between the Iowa DOT, MPOs/RPAs, counties, and municipalities.

2.5 Public Input

Six public meetings—one in each lowa DOT District—were held and very well attended by bicycling advocates, trail supporters, elected and appointed officials from local communities, and interested citizens. Since these meetings occurred early in the planning process, only a brief presentation explaining the timeline and goals of the project was given. The true focus of the meeting was to learn from the public what they think is being done well, what they think can be done better, and how the plans goals should be achieved.

To gain this type of input, topical exhibits focusing on education, encouragement, enforcement, and engineering (four of the "5 Es") were displayed and participants were asked to write comments on one half of each exhibit to indicate what is done well in lowa and on the other half write ideas as to what could be done better. Another set of exhibits presented the draft goals of the Plan and participants were invited to write ideas as to how to achieve each goal.

Public input meeting locations and attendance figures



The "5 Es" of Bicycle and Pedestrian Transportation

The "5 Es" are commonly referred to as a comprehensive way to consider the various factors that impact walking and biking.

Education efforts typically focus on teaching all transportation users (drivers, bicyclists, and pedestrians) how to safely interact and follow the rules of the road.

Encouragement activities focus on increasing biking and walking through fun and interesting activities. Encouragement efforts seek to demonstrate that biking and walking are valid modes of transportation.

Enforcement activities focus on enforcing the rules of the road for all users (motorists, bicyclists, and pedestrians). Enforcement also prioritizes having links between the law enforcement community and the biking community.

Engineering refers to the planning, design, and prioritization of physical infrastructure, such as multi-use trails, paved shoulders, and pedestrian safety improvements.

Evaluation and planning efforts seek to quantify the impact of the other "Es." This category was not used for the open house exercise, because it was assumed that the majority of participants would lack adequate information to comment on the evaluation and planning activities occurring in lowa.



Table 2.1: Summarized public input meeting comments—Four of the "5 Es"

	What is done well in Iowa?	What could be done better?
EDUCATION	RIDE Right education materials	Better driver education—bike passing
	(Des Moines Register)	Youth education—school programs
	Walking school bus program	Share the Road
	Bike rodeos	Engineer training
	Bike map	Public service announcements
	This meeting	Education of legislators
ENCOURAGEMENT	Bike map	Need a "World Capital of Trails" annual event
	Organized rides	Promote strategies to businesses to encourage bicycling by employees
	Iowa Bicycle Coalition efforts	Transportation centers with lockers, showers, and vending (tubes)
	Increase in accommodations	Promote safe bicycling loops
	(trails and bike lanes)	Tax credits for bicycling to work
		Bike share programs in more cities
ENFORCEMENT	Passing rule	Tough enforcement/fines for motorists that hit bikers/walkers
	Law enforcement support	Enforced stops
	during RAGBRAI	Adopting Utah/Idaho stops (bicyclists treat red lights as stop signs and
	Cops on bikes	stop signs as yield signs)
		Cyclists obeying traffic laws
LINFORCEMENT		Headlights and taillights required
	 Specific trail projects and networks 	More communication on upcoming projects so accommodations can be proposed
	New bike lanes	Consider accommodations as integral parts of projects
	Road diets	Connect towns—more connectivity
	City implemented bike plans	Design for people, not for cars
	City implemented blke plans	
ENGINEERING		Many specific improvements/connections noted
		More specific design standards recommended

Table 2.2: Summarized public input meeting comments—Plan goals

Goals	Comments
Valid	Study the economic impact of trails
Ensure that policy makers, roadway designers	Add bicycling to driver's education
and planners, law enforcement officials, motorists, bicyclists, and pedestrians recognize	Allow use of eminent domain to complete routes
that bicycling and walking are valid modes of	Add trails to the DOT 5-year plan
transportation.	Study health benefits of increased bicycle and pedestrian accommodations
	Get policy makers on bikes
	Adopt complete streets policies statewide
Safe	Wider paved shoulders on rural roads
Improve the safety and friendliness of lowa's	Increased signage toward shared use or full lane use
roads and trails to accommodate on-road bikeways and sidewalks, reduce crashes, and	Adjust rumble strips to have gaps and provide buffer between bicyclists and vehicles
eliminate fatalities.	 Revise the hierarchy from fastest to smallest—pedestrian and bicyclists first
	Higher maintenance for bike facilities, lighting
Coordinated	Consistent design standards
Improve coordination between Iowa DOT	 Cooperation between DOT, Conservation Boards, and trail groups
Central Office, each DOT District, regional	DOT take a larger role in coordinating town to town connections
agencies, and local partners to streamline maintenance and the implementation of	Improvement in regional trail plans
programs, policies, and infrastructure projects	State Bicycle Advisory Commission
and increase consistency.	Include non-cyclists on committees
	Webpage/map to show connection status



Table 2.2 (continued): Summarized public input meeting comments—Plan goals

Goals	Comments
Connected Enact policies and develop infrastructure to create an interconnected network of on-road bikeways, sidewalks, multi-use trails, and end-of-trip facilities that uses appropriate facility type (bike lane, shared road, paved shoulder, etc.) to connect people to where they want to go. Funded Increase the overall level of funding for bicycle and pedestrian infrastructure and programs, explore the flexibility of funding sources, and maximize the efficiency of funding to bridge the gap between what is needed and what is available.	 Numerous specific improvements More grade separations for bicycles/pedestrians Connect discontinuous sidewalks Continuous bike lanes DOT should help coordinate where trails go between communities Connect cities as a priority Connect employment to retail Funding for maintenance Mandate 3% of all state and federal transportation funding for bicyclists/pedestrians Bike registration Take the Transportation Alternatives Program (TAP) back to the State level State needs to fund priority trails Establish Iowa's Water & Land Legacy funding Include trails in Iowa DOT 5-year plan Increase gas tax with % to bicycles/pedestrians
Well-Designed Establish guidelines for the design of on-road bikeways, sidewalks, and multi-use trails to ensure they are comfortable, sustainable, convenient, and consistent.	 Add connections to existing trails for better mobility Sharrows are not enough Larger buffers between bike and vehicles at higher speeds Wider paved shoulders for 3-wheeled and trailers Appropriate railings on bridges Consider capacity in trail design and amount of pedestrian traffic
Healthy Promote opportunities for active and sustainable lifestyles that include walking and bicycling on a daily basis.	 Encourage businesses to promote wellness programs, with incentives for bicycling to work Tax breaks for bike commuting Combine with Healthiest State Initiative More trails and bike lanes to promote healthy lifestyle