

# 1. Introduction

The Iowa Park and Ride System Plan (PRSP) will be used by the Iowa Department of Transportation (Iowa DOT) to plan, evaluate, and develop a formal statewide system of park and ride facilities. For the purposes of this plan, park and ride facilities are places to park a vehicle when carpooling, vanpooling, or taking public transit. The PRSP will provide the framework for determining the current need for commuter park and ride services, evaluating the existing system, identifying gaps in service, and guiding potential system expansion. The primary objective of the plan is to develop a location-specific, priority-based park and ride system that allows for coordinated planning and implementation of park and ride facilities that maintain highway safety, encourage ridesharing, support commuter transportation, and promote energy conservation.

Park and ride facilities are often a primary component of an effective commuter transportation system.

They can serve as meeting locations for commuters when they participate in ridesharing activities such as carpooling or

vanpooling, and they can also serve as connection points for public transportation services such as fixed-route transit, demand-response transit, or commuter shuttles. In these ways, park and ride facilities provide commuters with more transportation options by offering a convenient and safe place to park.

The structure of park and ride facilities may vary depending on the nature of the commuting activity they are intended to serve. Facilities can range from a simple surface parking lot, which is most typical in Iowa, to a more complex parking structure with amenities such as bike racks, storage lockers, and bus bays that are typically found in larger urban settings. When they are strategically placed and well-advertised, park and ride facilities of all types can serve as a valuable resource for commuters and employers alike.

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## 1.1 Need for a plan

The need for a more formalized park and ride system was initially identified through input from citizens who contacted various offices within the Iowa DOT. Typically, members of the public have contacted

the department seeking information related to the location of existing park and ride facilities. The need for a formal park and ride system plan was the outcome of periodic planning-level reviews of the existing system by the Iowa DOT's Office of Systems Planning and Office of Public Transit.

The need to support commuter services such as park and ride facilities was also identified through the public input process conducted during the development of the State Transportation Plan: "*Iowa in Motion – Planning Ahead 2040*". During this input process, the public was asked to identify their highest priority investment actions in various categories. In the category of public transit efficiency, "support commuter services" was one of two investment actions that received the most support. Additionally, in the highway quality of life category, "reduce transportation-related congestion and emissions" was the second-highest rated investment action, and "accommodate other modes as appropriate" was rated third (see Table 5.2 in Section 5.4 of "[Iowa in Motion – Planning Ahead 2040](#)").

Additional support for this effort was derived from the [Rideshare Needs Survey](#) conducted by the Office of Public Transit in July 2012, which can be found in Appendix 3. The purpose of this survey was to assess the need for establishing a statewide rideshare program to match car pool and van pool participants. Typically, park and ride facilities are considered an integral part of a rideshare program that supports the needs of those who carpool and vanpool. This survey polled planning staff from Iowa's metropolitan planning organizations (MPOs) and regional planning affiliations (RPAs) to determine the usefulness of various components of a potential statewide rideshare program.

Overall, the survey data supports investment in rideshare services as 80 percent of the respondents reported there is a need for such services in their planning area. The most compelling support for park and ride facilities came in response to a question asking how valuable it would be to commuters if the Iowa DOT developed new strategically placed park and ride facilities. Of the respondents, 70 percent stated that such facilities would have medium or high value in their area.

Currently, the Office of Public Transit is in the process of developing a statewide rideshare program, bolstering the need for a statewide park and ride system plan. As these efforts are interrelated, the Office of Systems Planning and Office of Public Transit will coordinate all associated planning and implementation activities.

Other sources of support have involved metropolitan and regional planning efforts such as the Passenger Transportation Plan development process conducted at least every five years by each of the state's MPOs and RPAs. A recent review of these plans reveals that more than half of the state's planning agencies have identified projects or strategies related to ridesharing.

## 1.2 Relationship to the State Transportation Plan



The three goals of “*Iowa in Motion – Planning Ahead 2040*”, adopted on May 8, 2012, are safety, efficiency, and quality of life. These goals are the basis for decision-making and will guide investments covering all modal areas. The following explains how the Iowa Park and Ride System Plan is consistent with these goals. As the **bold text below**

**indicates**, there are clear benefits of an effective park and ride system to both the State of Iowa as a whole and the individual user.

### Safety

Safety is the foremost concern in any transportation system. Both real and perceived safety will be factored into the evaluation and site selection of all park and ride facilities. Also, while the impact may be minimal, facilitating additional ridesharing will help **reduce individual exposure to crashes** through a reduction in vehicle volume.

### Efficiency

An efficient transportation system makes the best use of available resources. An efficient park and ride system will help reduce vehicle-miles traveled (VMT) and, as a result, could **reduce congestion**, as well as **fuel consumption and vehicle emissions**.

### Quality of life

Our state’s quality of life is directly supported by our transportation system. Iowans value the ability to travel with ease, and an effective park and ride system will **provide more commuting options** for Iowans and **reduce individual costs**.

## 1.3 Relationship to MAP-21

The State Transportation Plan discussed in the previous section was developed under the guidance and requirements of the federal transportation legislation known as SAFETEA-LU. Since the adoption of “*Iowa in Motion – Planning Ahead 2040*,” new transportation legislation has been enacted known as the “Moving Ahead for Progress in



the 21<sup>st</sup> Century Act” (MAP-21). This legislation, which governs current funding and program requirements, will impact some rideshare programs as well as their related park and ride components.

One notable provision of MAP-21 allows any nongovernment funding used for the purchase of van pool vehicles to be credited as local match for rideshare capital improvement projects such as the construction of a park and ride lot. Another provision allows private van pool operators to use passenger revenues in excess of operating costs for the purchase of additional van pool vehicles, as long as the company agrees with the affected transit agency to use the vehicles in the agency’s service area. Also specified in the legislation are provisions for using Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds for rideshare capital and operating costs.

MAP-21 also represented a transition to a performance and outcome-based program where states will invest resources in projects that collectively make progress toward national goals. The legislation established seven national performance goals, and Table 1.1 shows how this plan effort is consistent with those goals.

**Table 1.1: Consistency with MAP-21 national performance goals**

<b>Goals</b>	<b>Additional ridesharing facilitated by park and ride facilities can:</b>
Safety	Reduce exposure to crashes, which can help reduce traffic fatalities and serious injuries.
Infrastructure condition	Reduce VMT, which can help maintain a state of good repair.
Congestion reduction	Reduce congestion by providing more alternative transportation options to commuters.
System reliability	Reduce exposure to crashes and congestion, which can help improve system efficiency and reliability.
Freight movement and economic vitality	Help support economic activity and strengthen rural access to economic centers.
Environmental sustainability	Reduce fuel consumption and vehicle emissions.
Reduced project delivery delays	Assist with travel demand management during project construction.

Source: Iowa DOT

As national transportation goals and priorities shift, the State of Iowa intends to proactively address these changes through coordinated and aligned planning efforts, and this intention extends to the PSRP. The specific impacts of MAP-21 on rideshare programs and related park and ride components will continue to be evaluated for application to Iowa initiatives.

## **1.4 Department policy**

The PRSP will be supported and implemented through a department policy related to park and ride facilities. The creation of this policy was driven by a couple of key issues. As was alluded to in section 1.1, prior to the creation of this policy the Iowa DOT had not formally advertised the location of state park and ride facilities. This was due to concerns related to the accuracy of the statewide facilities inventory as well as issues of liability. The policy was also driven by an overall lack of statewide consistency in terms of how facilities were managed. For example, there was no consistency in signage posted to identify these locations, which incidentally relates back to the issues of liability.

In addition, the Iowa DOT will use its existing right of way disposal process as a potential strategy for the development of park and ride facilities. Presently, when state-owned right of way is being considered for disposal, the Iowa DOT initiates an internal recommendation process prior to making a final decision. The Iowa DOT's Office of Systems Planning evaluates the subject property for its potential value as a future park and ride location and factors this evaluation into its office recommendation. A formalized policy that ensures park and ride activity will be considered in this evaluation process should provide opportunities for a more systematic approach to the development of the statewide park and ride system.

While the PRSP will guide park and ride system activities over the long term, there were a number of issues that needed to be addressed in the short term through this policy. Issues addressed in the policy include, but are not limited to, the following.

- Communication between the Iowa DOT's district offices and central office
- Monitoring compliance with established policies and procedures
- Maintaining the park and ride facilities inventory
- Development of park and ride facilities plans
- Identifying and evaluating candidate sites
- Design, construction, and maintenance of park and ride facilities
- Liability and park and ride facilities signage

- Conducting park and ride facilities inspections
- Promoting the state’s park and ride program
- Evaluating the effectiveness of the state’s park and ride program

### 1.5 Some caveats

Prior to introducing the analysis contained in this plan, it should be noted that it is extremely difficult to estimate the number of commuters who currently rideshare. Many rideshare participants commonly use a home residence as their parking and transfer location<sup>1</sup>. Also, observations from Iowa DOT staff indicate that both sanctioned and unsanctioned private and public parking lots serve as a major resource for Iowa’s ridesharing participants. These issues should be considered in the evaluation of current need, the existing system, and service gaps.

Likewise, it is difficult to project the number of commuters who would utilize a mature statewide rideshare system at any point in the future. Rideshare participation can be significantly impacted by demographic changes and economic conditions. For example, if the cost of fuel rises substantially, the number of commuters looking to rideshare can increase dramatically. Therefore, the reader should consider this plan as an effort to accommodate current and future ridesharing needs, while understanding that the plan is based on current data and analysis that will need to be revisited and updated as conditions change.

Finally, the following represents the fundamental planning question that will be answered through the analysis contained in this plan: As the need to expand the existing park and ride system arises, which locations should be considered, and why? The analysis in the following chapters will include evidence of historical trends that provide a basis for ridesharing activities, a thorough analysis of commuting patterns and ideal site locations, an examination of gaps in the existing system, a financial analysis, and a strategy for future implementation of the PRSP.

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<sup>1</sup> This observation is supported by the results of the statewide survey for this planning effort. Please refer to Appendix 2 for more detailed information.