Community Visioning
2007 Program Impact Assessment:

a focus on project implementation

IOWA'S LIVING ROADWAYS

Acknowledgements

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Introduction

The Iowa's Living Roadways Community Visioning Program is a participatory design process that seeks to integrate technical landscape planning and design techniques with community action to assist communities in making sound and meaningful decisions about local transportation enhancement projects. The community visioning process includes the following steps:

- Identification of transportation-related issues
- Investigation of physical and cultural dimensions of these issues
- Establishment of goals
- Creation of transportation enhancement strategies to address issues and meet goals
- Development of an implementation plan for community action and project building

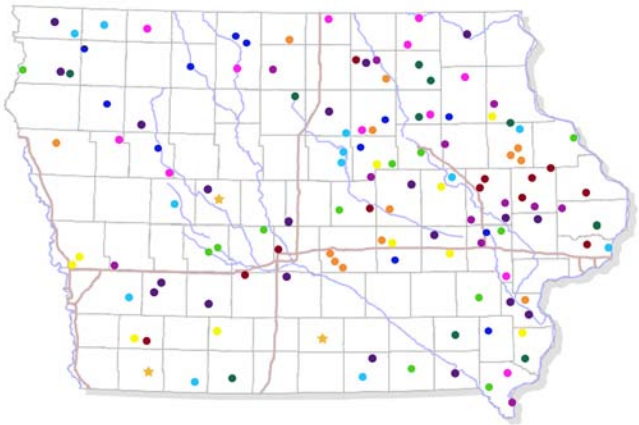
Successful completion of the program results is a conceptual community landscape plan and the development of implementation strategies that empower communities to build transportation enhancement projects, step by step, as resources become available.

The purpose of this evaluation research is to understand the impact of the ILR Community Visioning Program by seeking direct evidence of project activity in the participating communities. This evidence has been analyzed to discover what the actual rate of project completion has been, what kinds of projects have been completed and what kinds have not been completed, and whether or not meaningful relationships exist between community factors, such as population size, and projects completed. Because past evaluation of project impact has been based on self-reporting by community volunteers, this study provides valuable evidence about the ultimate effects of the visioning process on community transportation enhancement projects.

Volunteers from Aububon County plant native vegetation along the U.S. Highway 71 corridor as part of a corridor enhancement project.

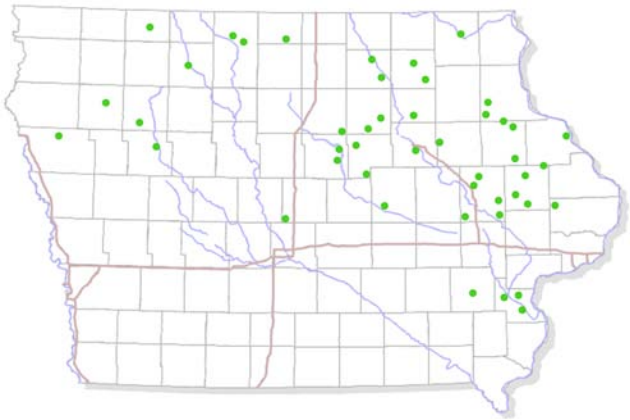
Sampling Methodology

Of the 125 communities that have participated in the community visioning process to date, 46 that had completed the process at least a full calendar year before the study took place were selected for evaluation. Selection was not random, as field visits were combined with other field travel necessary for the program for cost effectiveness. As a consequence, the southwest region of the state had slightly less sampling than the northern and eastern portions of the state. The distribution of communities according to year of participation in the program is as follows:



Community Visioning Program Communities, 1996–2006.

Visioning year	No. of communities	Percent
1996–1997	5	10.87
1997–1998	6	13.04
1998–1999	7	15.22
1999–2000	1	2.17
2000–2001	7	15.22
2001–2002	5	10.87
2002–2003	4	8.70
2003–2004	8	17.39
2004–2005	3	6.52
Total:	46	100.00



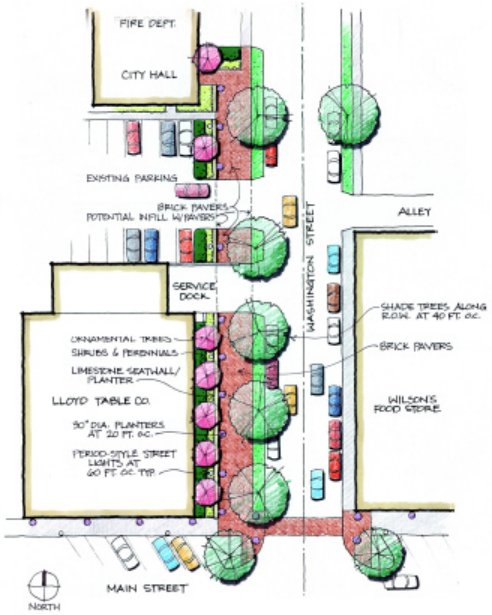
Communities included in the 2006 Program Impact Assessment.

The project documentation process involved comparison of projects as proposed in the concept plan with projects as built in communities. This process was broken down into several logical steps. First, projects from the original concept plans for each community were identified. The recorder visited each community and located the actual project sites. The recorder photographed partially completed or completed projects. Sites of projects that were not implemented were not photographed.

The content of photographs of the transportation enhancement projects was compared to the content of projects as proposed in the conceptual plan. Projects that accurately reflect the concept plan with little deviation from the original design have been categorized as "completed projects." Projects that were not completed as designed were categorized as "in progress." Two types of projects were classified as "in progress":

1. Projects that were implemented but the completed project does not incorporate all components of the original proposal. An example of this type of partially completed project is entry signage that consists of the proposed sign but does not include the planting design elements.

2. Projects that have been started and were still in progress at the time of documentation. Recreation trails typically fall into this category.



Top: Downtown Lisbon prior to participation in the visioning program. Bottom: Image edit depicting proposed enhancements to the downtown streetscape proposed by the visioning committee. Top right: Downtown Lisbon after implementation of the downtown streetscape project. Bottom right: Aerial view of the proposed streetscape.

Research Questions and Data Analysis

Of all the projects proposed through visioning, how many have been implemented?

Previous surveys of community leaders suggest that approximately 85 percent of first phase projects were completed. In this study, we documented how many first phase projects were completed based on physical evidence in the field. From previous surveys we have little data about how many projects were completed several years after visioning or how many of the total proposed projects were completed. In order to assess the percentage of all projects proposed for the sampled communities, we compared the total number of projects proposed in the concept plans to the number of projects completed to date.

Are certain types of places/projects more likely to be implemented than others?

Towns and communities are places that are improved not only by necessity but also out of pride. Some places may be more significant within a small town than others, leading to more emphasis on completion of transportation enhancement projects in these areas. For example, is restoration of the town square more likely than neighborhood street enhancements? Are entryways more important than recreational trails? In order to test this idea, all existing projects documented in this evaluation have been sorted into project types, using same categories as were used in the 2002 and 2004 program evaluation reports. These include the following categories:

Roadside Planting
- Trees, shrubs, perennials
- Highway median, roadside plantings
- Industrial node, intersection plantings

Signage/Signage Improvement
- Welcome signs, planting at entryway, planting in entry corridors
- Gateway projects

Trails
- Walking, bike, nature trail systems
- Trail improvements, safe crossing trails
- Pedestrian/bicycle bridges

Downtown Designs/Parking

- Downtown lighting, banners, planters
- Business area improvements
- Parking development, enhancement of off-street parking
- Town square and depot renovations

Streets

- Intersection site development
- Street paving, pedestrian crosswalks, and planting
- Pedestrian walkway developments, street extension

Parks

- Park enhancements, renovations, improvements
- Pocket parks
- Railway corridor parks, railroad corridor plantings

Riverbanks/Lakes

- Riverfront enhancement, including lighting, planting, seating
- Riverbank cleanup, stabilization
- Creek restoration, enhancement and protection of shoreline open space.

Other Infrastructure

- Industrial park enhancement
- Educational interpretive centers or areas

Entryway signage and landscaping is one of several proposed visioning projects implemented in Charles City.

Does the time elapsed since completing the program affect project completion rates?

Some projects may take longer to organize, fund, and execute than others. For example, roadside planting with native plant material is well funded through small grants, while historic lighting, building restoration, and similar projects are more difficult to fund through grants and require more specialized knowledge to execute. In order to address this question, projects completed were sorted by visioning year and type so that completion rates could be understood across time.

Does the size of the community affect project completion rates? Are some project types more likely to be completed in smaller or larger communities?

Transportation enhancement projects that involve significant investment of money and expertise may be more difficult for smaller communities to execute; larger communities may have more transaction costs within the community to implement simpler projects. There may also be no significant differences between communities.

Visioning committee members in Belmond map their community's visual, cultural and natural resources as part of the visioning process.

Washington residents provide feedback to the visioning design team during the charrette meeting.

Olin residents discuss the proposed transportation enhancement concepts during the public presentation meeting.

Results

Of all the projects proposed through visioning, how many have been implemented?

A total of 371 transportation enhancement projects were proposed for the 46 communities sampled. Of all sampled communities, 94 percent completed at least one transportation enhancement project, with only one community that completed no projects. This figure is consistent with self-reported project implementation data gathered in satisfaction surveys conducted nine months or more after visioning is complete.

Table 1 and figure 1 summarize the total number and type of projects proposed, completed, and partially completed. Figure 2 shows the percentages by type of project completed.

Figure 1. Projects proposed, partially completed, and completed (n=371)

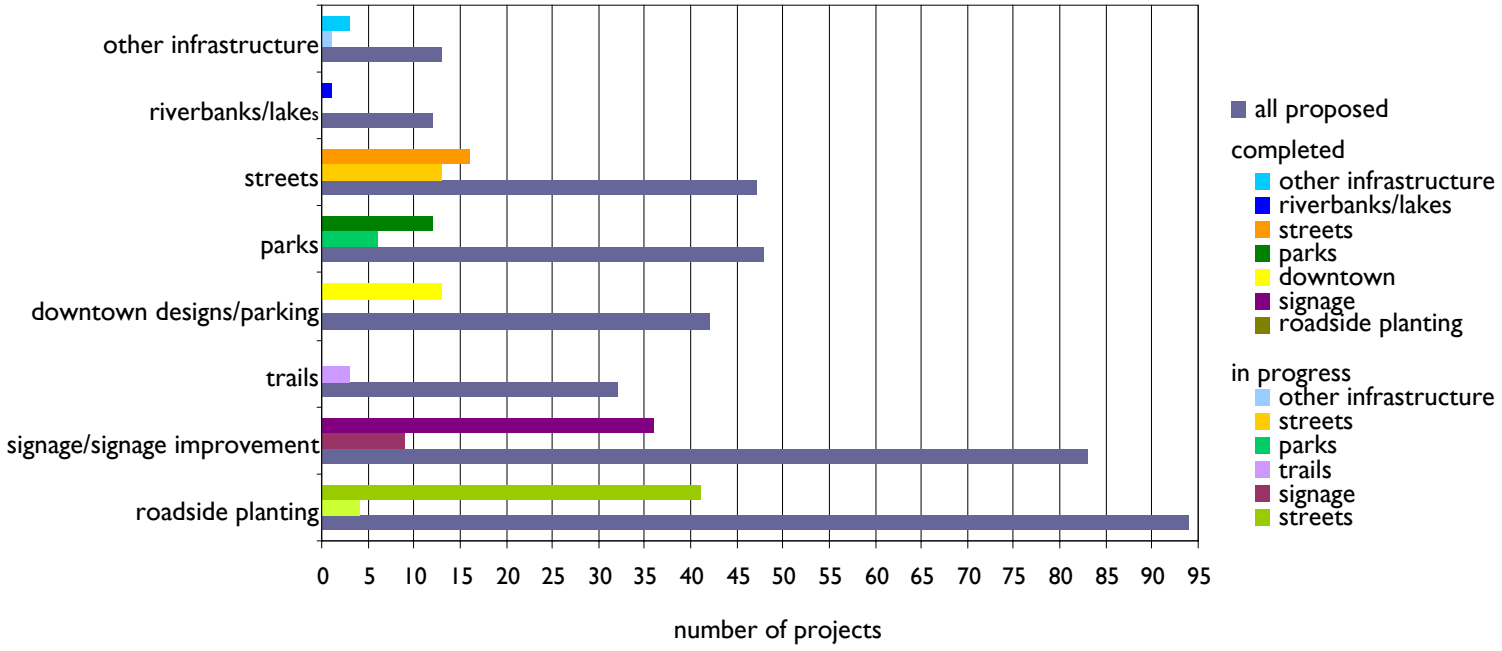
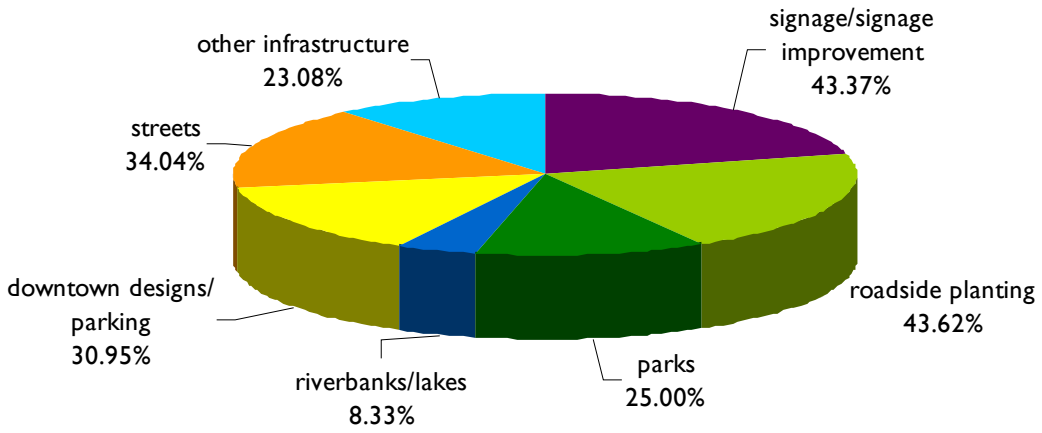


Table 1. Projects proposed, partially completed, and completed (n=371)

	proposed		partially completed*		completed	
project type	n	percent	n	percent	n	percent
roadside planting	94	25.41%	4	4.26%	41	43.62%
signage/signage improvement	83	22.43%	9	10.84%	36	43.37%
trails	32	8.65%	3	9.38%	0	0.00%
downtown designs/parking	42	11.35%	0	0.00%	13	30.95%
parks	48	12.97%	6	12.50%	12	25.00%
streets	47	12.70%	13	27.66%	16	34.04%
riverbanks/lakes	12	3.24%	0	0.00%	1	8.33%
other infrastructure	13	3.51%	1	7.69%	3	23.08%

* Partially completed projects are those that were either in progress at the time of documentation or were implemented but the completed project does not incorporate all components the original proposal.

Figure 2. Projects completed (n=122)



Are some places/project types more likely to be implemented than others?

Some transportation enhancements are more likely to be completed than others. Approximately 43 percent of roadside planting and entryway signage were complete. If partially completed projects are added into this total, more than 54 percent of roadside signage projects proposed were substantially complete, while nearly 48 percent of roadside plantings were substantially complete. These findings reflect the concerns many communities express in their applications to the program about making a favorable impression of the community through the entry experience on visitors and business clients who have economic ties to the community.

Thirty-four percent of street enhancements were completed, although 61.7 percent were initiated. Approximately 30 percent of downtown improvements were completed, with none in progress. These figures may reflect high interest in community appearance. The 61.7 percent of streetscapes initiated suggests that 27.66 percent of proposed projects are incomplete, which may reflect technical complexity, cost, or both.

Of the projects in transportation-related parks and open spaces, 37.5 percent were initiated, but only 25 percent were completed. Of the 32 trail related enhancements proposed, only three, or 9.38 percent, had been initiated and none have yet been completed. Since trails and community open space are often cited in visioning applications, this finding is surprising and should be investigated further. Some factors that may influence project implementation may include "overlap" with other interest groups in the community and the region and the need to coordinate with individuals and organizations not included in the original steering committee. This finding may also be based on lower priority or value given to the project as compared to other projects, such as entryways.

Other infrastructure and shoreline/banks related to transportation systems represent a small percentage of total projects proposed by type—together, 6.74 percent of transportation enhancements proposed. Roughly 8 percent of the bank projects were completed and 23.08 percent of related infrastructure projects.

The top right photo shows roadside planting and entryway signage in Fairfax and the middle right photo shows roadside planting in Arnolds Park. Approximately 43 percent of roadside planting and entryway signage projects were completed by the communities evaluated.

Although 61.7 percent of proposed street enhancements were initiated, only 34 percent have been completed. The bottom left photo shows a downtown streetscape project in process in Parkersburg, while the bottom right photo shows the completed streetscape in Lisbon.

Does the amount of time elapsed since completing the program affect project completion rates?

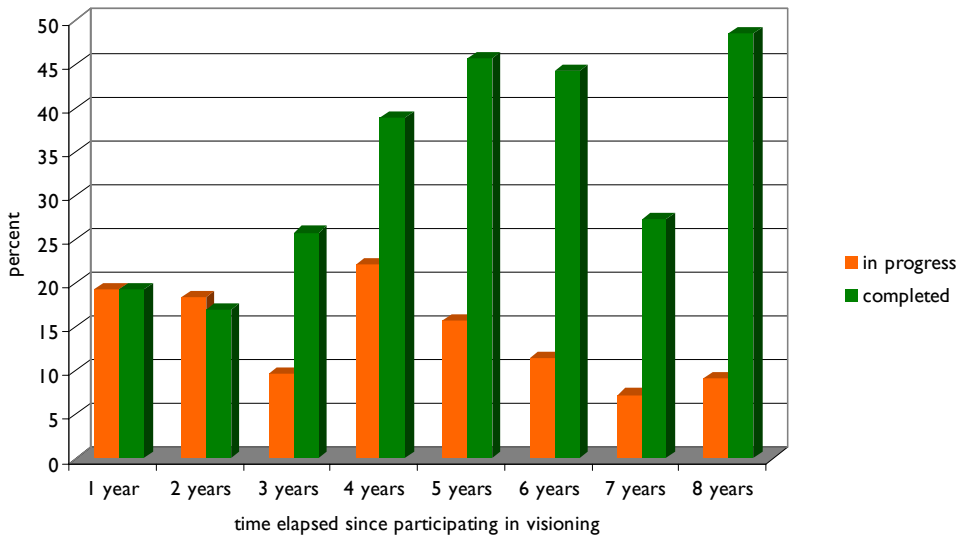
If elapsed time were an important factor in completing projects, we should see a trend in the number of projects completed over time. Table 2 shows the total number of projects completed and the number of projects in progress by visioning program year. At three years and at four years the percentage of projects completed increases; in later years the percentage levels off. The trend is similar for projects that are in progress (see figure 3). This information suggests that three to four years time is necessary to work through the implementation phases of transportation enhancements, and that after five years efforts to implement additional projects decline.

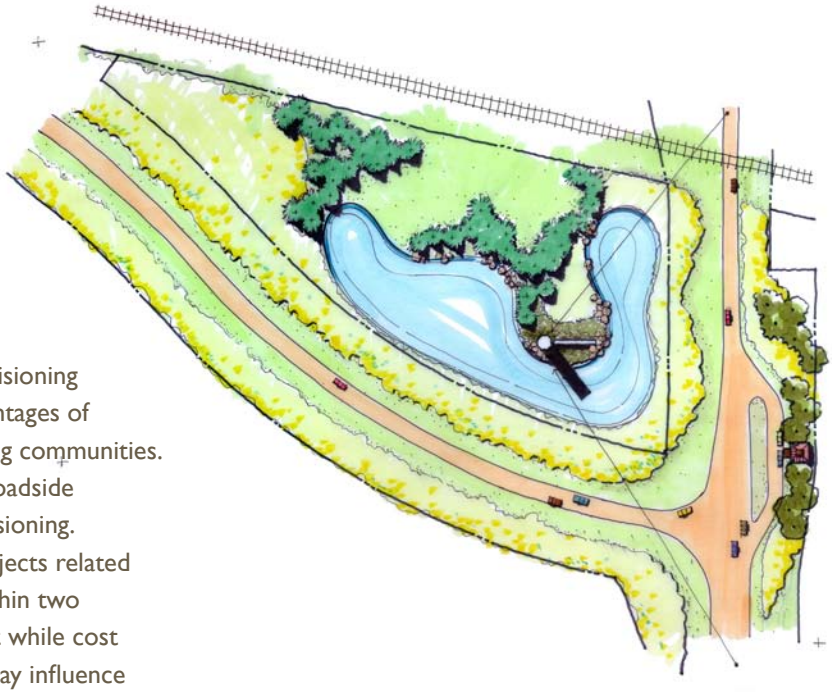
Table 2. Percentage of projects completed by visioning year

	projects proposed	in progress		completed	
		n	percent	n	percent
1996-97	33	3	9.09%	16	48.48%
1997-98	55	4	7.27%	15	27.27%
1998-99	61	7	11.48%	27	44.26%
1999-00*	n/a	n/a	n/a	n/a	n/a
2000-01	57	9	15.79%	26	45.61%
2001-02	36	8	22.22%	14	38.89%
2002-03	31	3	9.68%	8	25.81%
2003-04	65	12	18.46%	11	16.92%
2004-05	26	5	19.23%	5	19.23%

* Insufficient sample

Figure 3. In progress and completed projects per year since completion of visioning





Some project types are implemented sooner after the visioning program is completed than others. Table 3 shows percentages of project types completed by program year of participating communities. Projects related to community entryways, signage and roadside plantings show good progress in early years following visioning. Surprisingly, given the cost and technical complexity, projects related to streets and downtowns also show good progress within two years of completing visioning. These results suggest that while cost and technical complexity are important, other factors may influence the implementation of transportation enhancement projects. These may include access to funding, tangible results, need for external coordination/cooperation, volunteer recognition or conflict, or new community issues that emerge after visioning that shift the development focus from transportation enhancements.

Top: Rendering of the aerial view of the Storm Lake entryway concept. Left: The lighthouse concept became a reality for Storm Lake in 2000.

Table 3. Percentage of projects completed by type and year (n=122)

	Visioning year							
Project type	96–97	97–98	98–99	00–01	01–02	02–03	03–04	04–05
roadside planting	45.45	25.00	52.94	100.00	50.00	11.11	25.00	33.33
signage/signage improvement	75.00	38.46	66.67	46.67	66.67	20.00	25.00	42.86
downtown designs/parking	25.00	60.00	28.57	27.27	25.00	100.00	14.29	0.00
parks	40.00	11.11	50.00	40.00	0.00	25.00	33.33	0.00
streets	60.00	50.00	37.50	42.86	33.33	66.67	0.00	0.00
riverbanks/lakes	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
other infrastructure	100.00	0.00	66.67	0.00	0.00	0.00	0.00	0.00
trails	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Top: Parkersburg streetscape prior to participation in the visioning program. Above: Streetscape enhancements proposed by the visioning committee. Left: Downtown streetscaping project in process in Parkersburg.

Are some types of projects more likely to be "partially completed" than others?

Many proposed projects are partially completed and for the purposes of this study fall into two categories:

1. Projects that were implemented but the completed project does not incorporate all components of the original proposal. An example of this type of partially completed project is entry signage that includes the proposed sign but not proposed planting or lighting.
2. Projects that have been started and were still in progress at the time of documentation.

Some project types are more likely to be partially completed than others. Referring to Table 1, we can see that 27.66 percent of streets were partially completed, which may reflect cost and technical complexity. More than 12 percent of parks and roughly 9 percent of trails are also partially completed, which may also reflect cost and complexity but also social factors and coordination with others to implement ideas. Almost 11 percent of signage proposals were incomplete, or lacking some element of the original proposal.

Top: Proposed location of urban trailhead in Wellsburg. Middle: Proposed location digitally enhanced to illustrate the trail concept. Bottom: Partial implementation of the urban trail plan.

Does community population size affect what and how many projects are implemented?

The site findings were analyzed using the Pearson Correlation to determine whether implementation rates are affected by community size. The communities were categorized into three population groups: 1,000 people and fewer, 1,001 to 2,000 people, and 2,001 to 8,800 people. For each project type, the number of projects proposed was compared to the number of projects implemented in each of the population groups.

Two statistically significant relationships emerged from the analyses. There is a negative relationship between population size and park projects completed; that is, the smaller the community, the more park projects are completed. In the population group of 1,000 and fewer people, 50 percent of the proposed park projects were implemented, while in the group of 2,001 to 8,800 people, only 8.33 percent were implemented.

A positive relationship exists between population size and other infrastructure projects completed. Larger communities completed more of this type of project than smaller communities.

Top: Downtown park in Colesburg prior to participation in the visioning program. Bottom: Image edit showing the proposed gazebo park.

The photos on this page show the resulting gazebo park in Colesburg.

Summary

Communities are building transportation enhancement projects. More communities are implementing their first transportation enhancement project than was initially thought. Ninety-four percent of participating communities complete a transportation enhancement project.

Some types of projects are more commonly completed than others

Signage (43 percent) and roadside plantings (44 percent) are most often completed as designed; streetscapes are more frequently initiated (61percent) but less often completed as designed (34 percent).

Downtowns are often initiated and completed as designed (31 percent completed as proposed)

No trail enhancement projects have been completed to date, and only three have been initiated. This pattern suggests that projects linked to community aesthetics and economic activities are high priorities for communities.

Time matters

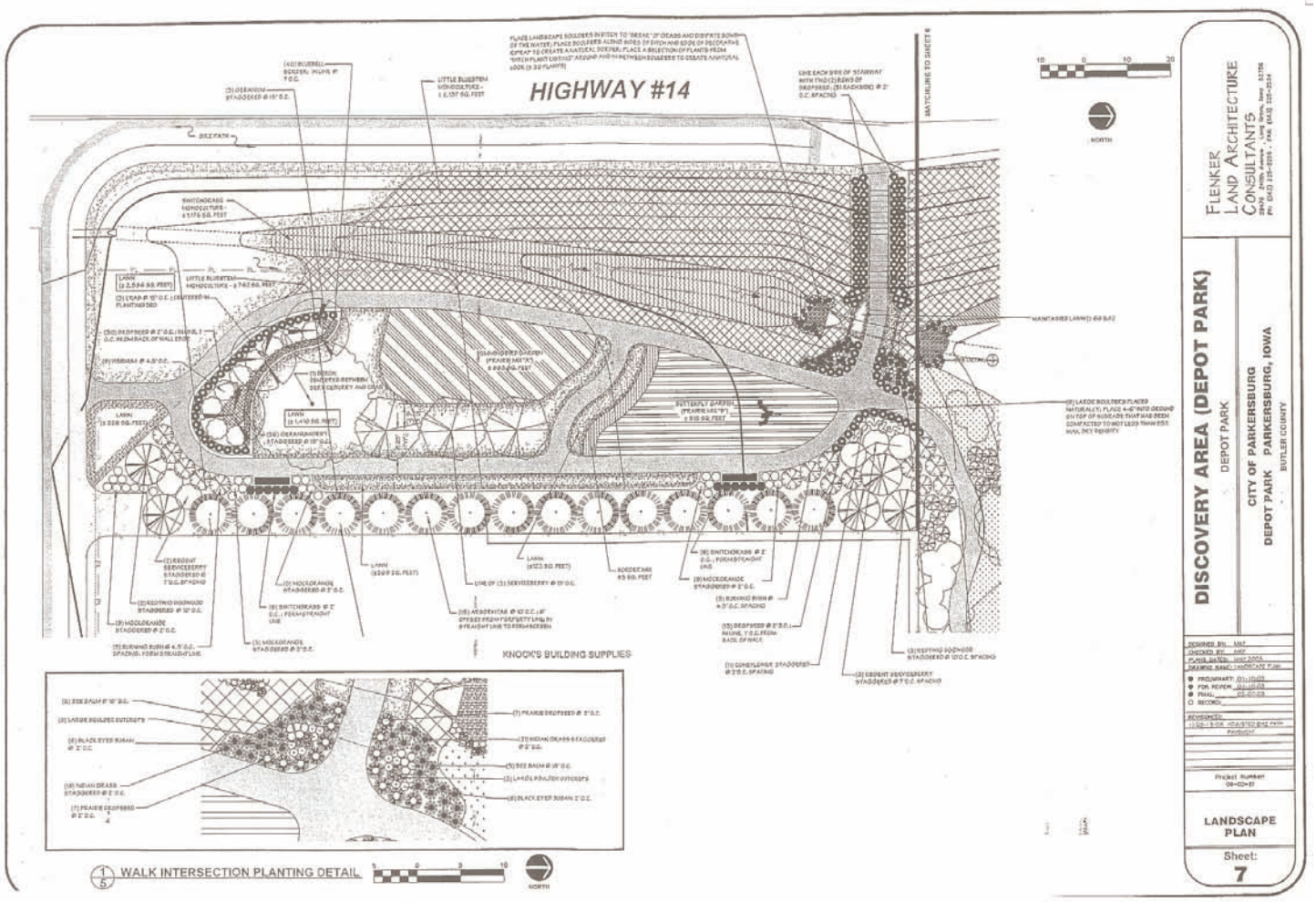
This data suggest that it takes five years, on average, for visioning communities to complete proposed projects that are of highest priority. In fact some communities may not go beyond their initial project while others may continue working into year six or seven, but most will have completed what they want to complete within this time frame. While signage and entryways are prominent projects in the early years, streetscapes and downtowns are completed by years three and four.

Technical complexity may affect transportation enhancement project implementation

We suspected that because the target clients for this transportation enhancement program are residents and other stakeholders rather than professional staff, project complexity may affect ability of residents to implement projects. This may be the case, as the streetscape enhancements completed lag behind streetscape projects initiated, but other factors may be important as well.

Community Size

For certain types of projects, community size seems to affect implementation rates. For instance, larger communities complete fewer roadside park projects than small communities. What additional factors influence these findings are unknown; therefore, it would be useful to explore these findings in a more detailed case study.



This illustration shows the technical plan for the depot park in Parkersburg. (Plan by Meg Flenker, Flenker Land Architecture Consultants.)

Recommendations

Further analysis of this data that employs categories based on techniques rather than places could better reveal if technical complexity is a factor. This suggests that the unit of analysis is not the project site, but the project elements that use a particular technique or medium, such as "planting," "lighting," "paving," etc.

This survey design is very well suited to showing "what" was accomplished, but case study research excels at revealing "why" and "how" events occur. Follow up with targeted case studies will reveal what factors are most important in project implementation. Integrating information from meeting minutes about community goals, concerns, and opportunities may also reveal why some projects are implemented while others are not.

Community volunteers in Volga constructed a new entry sign that was proposed during the visioning process. The landscaping and planting work was done by volunteers and the project was paid for through local fundraising efforts.