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Why Leadership Matters for Rural Community Vitality in Iowa

What are the characteristics of good leadership in small towns? Does leadership enhance quality of life? Is leadership the difference between successful and struggling communities? These are common questions asked by residents and leaders in our small towns. Previous research clearly shows that leadership plays a key role in successful community and economic development projects.¹ Leadership is critical in identifying local needs, getting citizens and stakeholders involved, and developing an action plan to address those needs.¹

The role of leaders is to motivate and engage residents in all phases of a community improvement project, from planning to execution to evaluation. Good leaders energize local organizations and residents to take action. It is not enough to just have leaders, since nearly all communities have them. What is important is to have a certain style of leadership that combines the stability of tradition with new ways of thinking and doing things.²

Decades of research shows that a **shared leadership** style works best in most organizational and community settings.^{3,4} It is defined as a *process* where leaders *influence* people in the community to achieve *shared goals*. By contrast, a **closed leadership** style is based on the *individual traits* of the leader who exerts formal *authority* to achieve the *leader's goals* for the town.

If rural communities are to survive and thrive in the 21st century, it will require innovative and entrepreneurial solutions that involve the entire community. Traditional ways of problem solving using closed leadership is no longer sufficient in an ever-changing economy and society. Resources are scarce, markets are uncertain, and people expect to be involved in decisions. If small towns are to maintain the vitality of their communities, it is essential that local officials begin to adopt a shared leadership style.

In this publication, we explore the linkages between shared leadership and how it impacts provision of local government services, the quality of community amenities, and social interactions in Iowa small towns. We also discuss common leadership styles and provide a self-assessment that can be used by local leaders.

Our data comes from a survey of nearly 10,000 residents in 91 small towns across Iowa in 2014. These data are as part of the Iowa Small Towns Project, a decennial data collection effort that began in 1994. Data from the US Census Bureau is also used to compare communities in terms of demographics and economics. Small towns are defined as municipalities between 500 and 5,000 people that are not next to large metropolitan cities.

What are the characteristics of shared leadership in Iowa small towns?

A leadership style index was created by statistically combining resident ratings of local leaders along seven competencies. Positive values indicate greater shared leadership ratings, while negative values indicate more closed leadership styles. Natural breaks in the index indicate 11 shared leadership towns and 10 closed leadership ones, with the remaining 70 communities falling into the average category. Shared and closed leadership towns showed no geographic pattern across the state. In fact, towns with different leadership styles were sometimes located very near to one another. Details about the leadership index are discussed in the appendix.

There are considerable differences in how residents rated shared leaders (having positive scores) and closed ones (having negative scores), as shown in Figure 1.

- Shared leaders were more open to new ideas and ways of doing things instead of being closed-minded (1.07 vs. -0.23).

- Shared leaders were viewed as more trustworthy by residents (1.39 vs. 0.23).
- Shared leaders were able to build teams in the community rather than divide people (1.03 vs. -0.13).
- Shared leaders were more effective at being a leader (1.35 vs. 0.19).
- Shared leaders dispersed decision-making across groups, instead of concentrating it among a few (1.03 vs. -0.10).
- Shared leaders were more informed about the issues (1.29 vs. 0.17), and were inclusive of all residents rather than exclusive (0.97 vs. -0.05).

Shared leadership towns also outperformed average communities by having more favorable ratings along these competencies. In short, good leaders in small towns were seen as more effective, inclusive, informed, open-minded, trustworthy, power-sharing, and team-building.

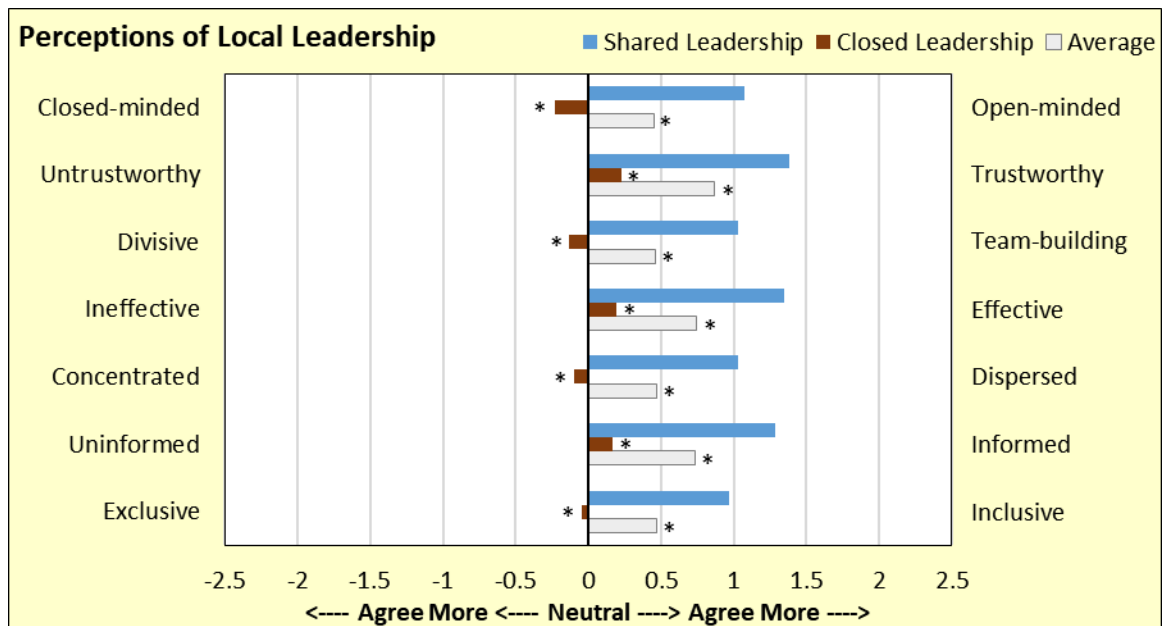


Figure 1. Resident perceptions of local leaders by leadership style.

* Statistical difference ($p < .05$) or † marginal difference ($p < .10$) from shared leadership towns.

Shared leadership makes for high quality local services, except for senior care and health care.

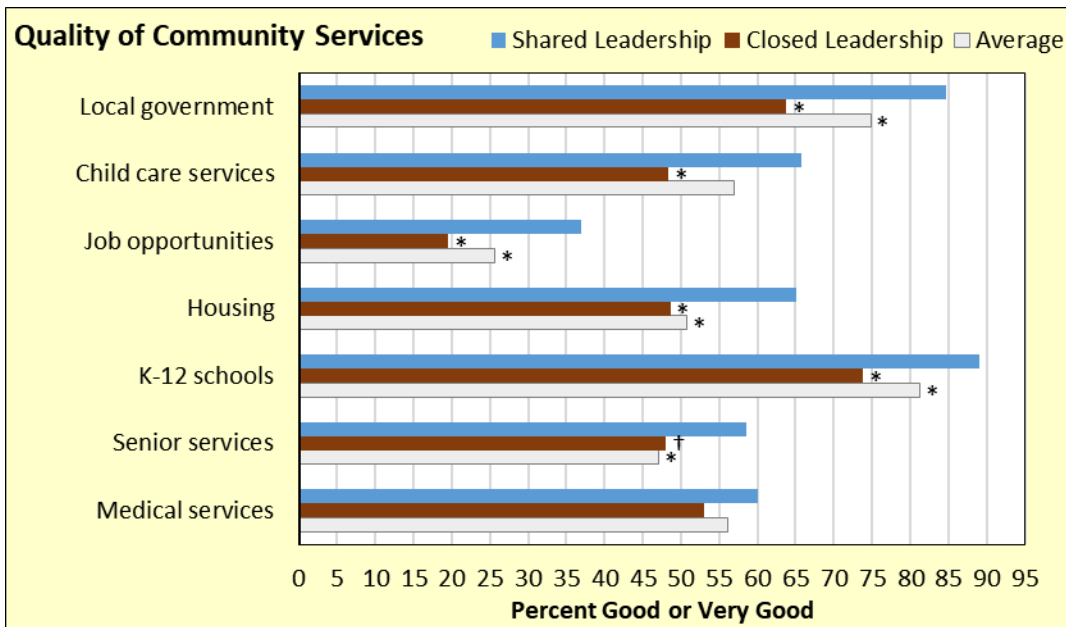


Figure 2. Resident quality ratings of community services by leadership style.
 * Statistical difference ($p < .05$) or † marginal difference ($p < .10$) from shared leadership towns.

Overall, the majority of small town residents thought highly of their local schools and governments (85% or more agreeing they were of good or very good quality), while just over half said the same of their senior and medical services. On the other hand, residents were generally unhappy with the quality of job opportunities in the community, with favorability ratings of only 20-35% across all towns. However, there are differences between shared and closed towns, as presented in Figure 2.

Residents in communities with strong shared leadership tended to view the quality of services in their community higher, with more people rating them good or very good. For example, shared leadership towns had more favorable ratings of local government services (84.8 vs. 63.8%), child care services in the community (65.8 vs. 48.3%), available job opportunities in town (37.0 vs. 19.6%), quality of housing and housing options (65.1 vs. 48.7%)

and thought local public schools did a good job of educating their children (89.1 vs. 73.8%). Nearly all of these services are provided and managed locally, suggesting local leaders exert some influence in how they operate.

However, shared leadership had a minimal impact on how residents viewed the quality of their senior services (58.6 vs. 48.0%) and medical services (60.0 vs. 53.0%), being no different statistically from closed leadership towns. This suggests there are limits to local leadership. For example, senior and medical services are expensive to build and maintain, and often are not highly profitable given a smaller customer base. Many small towns do not have the tax base to publically support these services fully, instead relying on the private sector. This means local leaders have little input or control over these private services, as decisions are made in corporate offices far from the community.

Shared leadership has a mixed impact on the quality of local government services.

Examining the quality of *specific types of local government services*, we find shared leadership has a mixed impact (see Figure 3). For public works, residents in shared leadership towns rated the conditions of streets 24.3 percentage points higher (58.6 vs. 34.3%) than in closed leadership towns. However, residents in all towns were not overly positive about their local road infrastructure, regardless of leadership. The quality of water and sewer services provided by the city was also more favorably rated (15.5 percentage points higher), but this difference was not statistically significant between shared and closed leadership towns. There was also a small yet significant difference in the quality of city parks, being viewed slightly better in shared leadership towns (82.9 vs. 76.4%).

In terms of public safety, the vast majority of small town residents said that local fire and emergency crews provided excellent service for their communities. In shared leadership towns fire protection was rated a bit higher than in closed towns (97.5 vs. 86.2%), as was emergency medical services (94.5 vs. 85.7%). Police protection was viewed less positively overall. Although the police had higher ratings in shared leadership towns (71.3 vs. 62.1%), this difference was not statistically significant. Some reasons for the smaller and non-significant differences is that public safety is a required function of local government. It is politically important and tends to get budget priority over other functions, where expenses can be delayed. Also, the quality of public safety does not vary much across communities due to mandatory state and national standards.

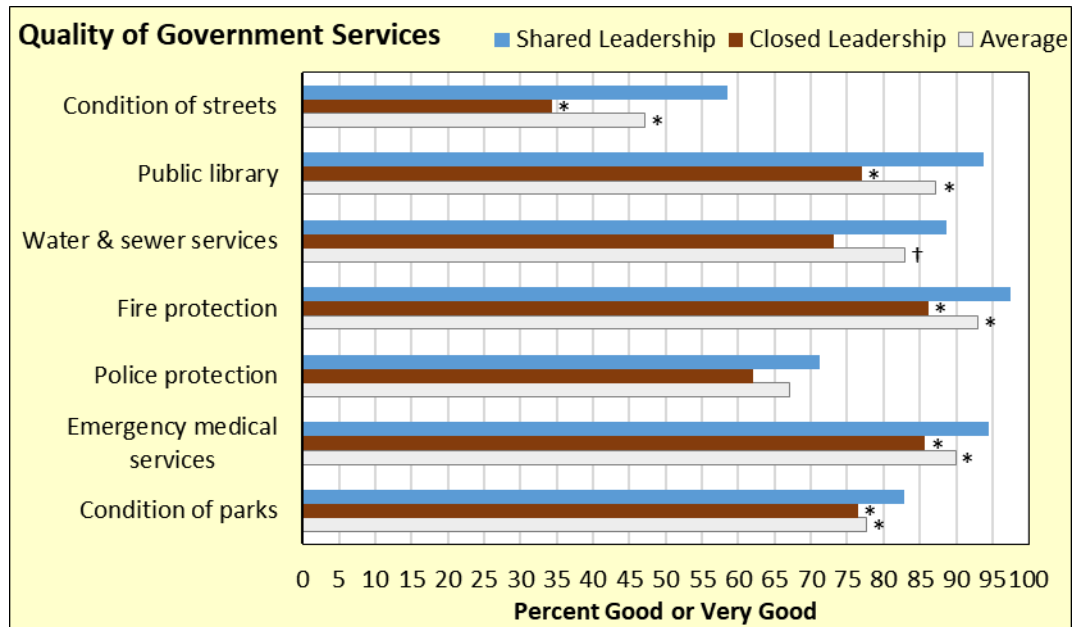


Figure 3. Resident quality ratings of government services by leadership style.

* Statistical difference ($p < .05$) or † marginal difference ($p < .10$) from shared leadership towns.

Shared leadership is linked to more open local organizations and local government.

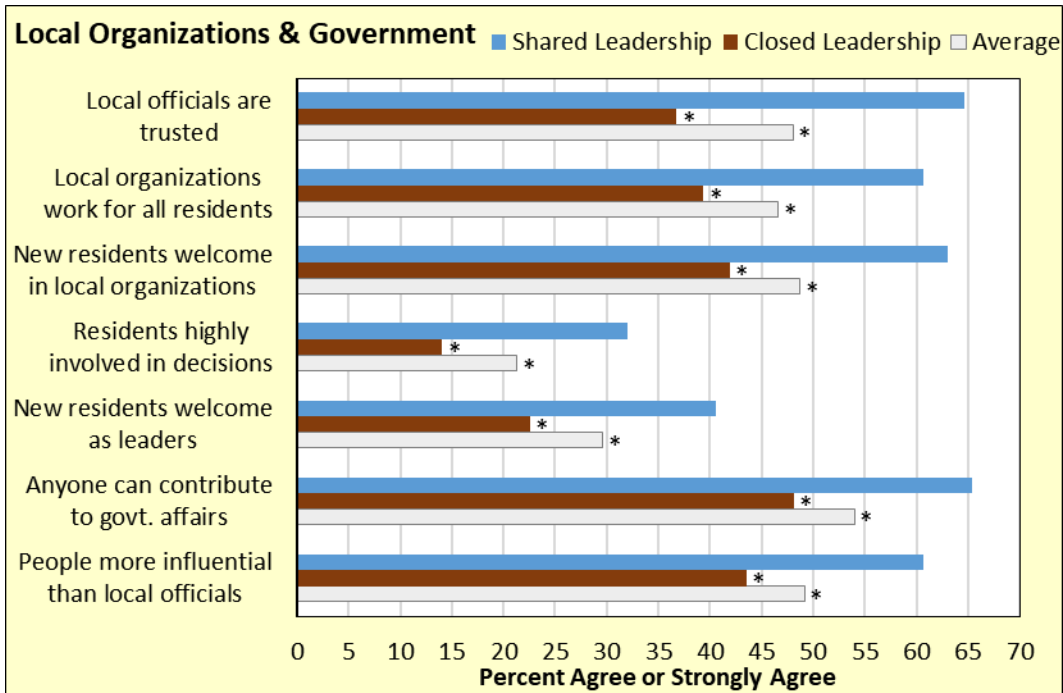


Figure 4. Resident perceptions of local organizations and government by leadership style.
 * Statistical difference ($p < .05$) or † marginal difference ($p < .10$) from shared leadership towns.

When communities are led by people who follow a shared leadership style, this also makes for more welcoming local organizations and for more open local government. Openness ensures that all segments of the community have their say in local affairs and local projects. This helps leaders and organizations identify true community needs, gets people to volunteer their time and money for local projects, minimizes conflicts that might arise from the decision-making process, and generates a long-term commitment from residents to see projects through to completion.

Shared leadership towns are very different from closed leadership ones on several important measures of openness (see Figure 4). Local officials were more trusted in shared leadership places by a margin of 27.9 percentage points (64.6 vs. 36.7%). More residents (gap of 21.4 percentage points) thought that local organizations worked on behalf of all residents, instead of working for

local elites. The margin in those saying new residents were welcomed in local organizations was 21.2 points higher in shared leader towns; and the margin in new residents that were welcomed as leaders in local organizations was 17.9 points higher. More people in shared leadership towns agreed that residents were highly involved in local decision-making (15.7 point gap); that any resident could contribute their time or viewpoints to local government (17.3 points higher); and that everyday people were more influential in government decisions than were local officials (17.1 points higher).

Further, over 60% of residents in shared leadership towns agreed with most of these openness statements. The exceptions were that only 32% agreed that residents were highly involved in decisions; and only 41% thought new residents could be leaders. However, ratings were much lower in closed leadership towns, where the agreement rates were 14 and 23%, respectively.

Small towns with shared leadership are nicer places to live; and residents feel more attached to and supported by the community.

Apart from having better services and more open organizations and governments, shared leadership also seems to make residents feel more positive about their community as a good place to live. Figure 5 shows that people living in shared leadership towns thought their community was much more kept-up instead of run-down (1.91 vs. 0.69). They rated their town as much more accepting of new ideas instead of rejecting them as in closed towns (1.09 vs. 0.02). Residents were far more trusting of others in the community (1.64 vs. 0.84), felt people were supportive of themselves and others instead of indifferent (1.60 vs. 0.87), and that the community was more tolerant of new people and new ideas than it was prejudiced against them (1.37 vs. 0.63).

By a smaller margin, shared leadership towns were seen as more safe than dangerous (2.18 vs. 1.58), and more friendly (1.92 vs. 1.37) than closed leader places. However, all residents surveyed felt their small towns were safe and friendly, regardless of leadership style in the community.

Shared leadership communities had more confidence in the future of their town, as evidenced in Figure 6, with 73.7% agreeing their town has more going for it than other similar sized towns (versus only 37.0% in closed leadership places). There were strong norms of community involvement in local improvement projects in shared leadership towns, with 52.9% saying the whole town gets behind local projects (compared to 27.5% agreeing in closed towns). Residents also said their community was more accepting of people of different races and ethnicities, like Hispanics and Latinos (52.4 vs. 36.8% agreeing).

People were more attached to their community where shared versus closed leadership was practiced. More said they would be sorry to leave the community (17.9 percentage point gap) and that the community was like a close group of friends (15.4 point gap). Residents in all small towns felt at home in their community, but the gap was slightly higher in shared leadership places (7.3 points).

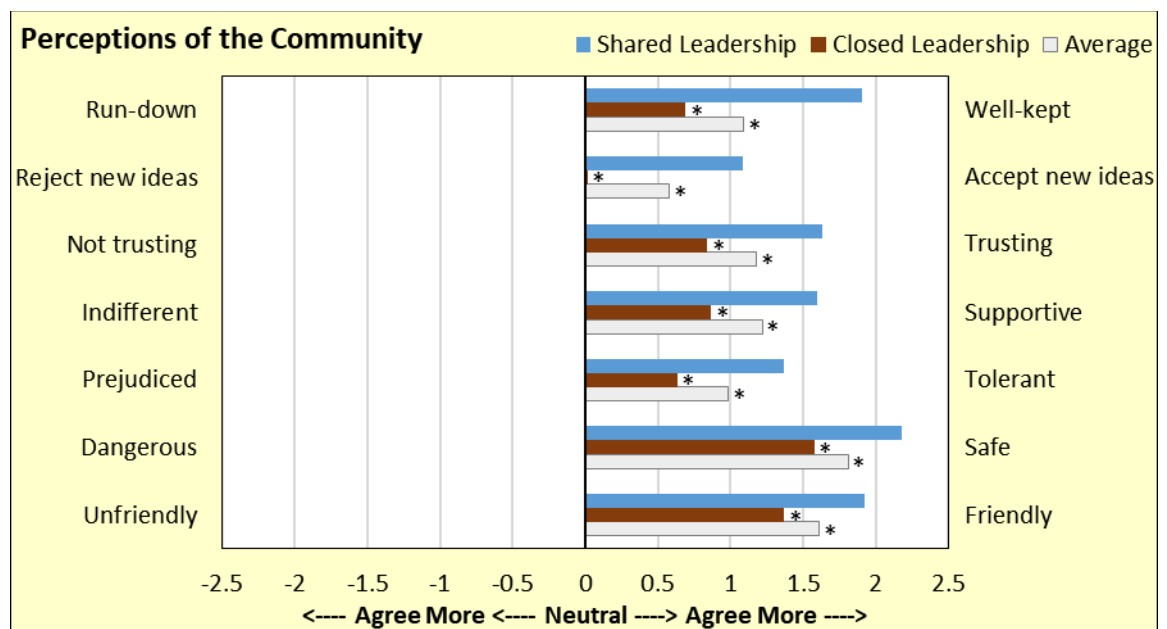


Figure 5. Resident perceptions of their community by leadership style.

* Statistical difference ($p < .05$) or † marginal difference ($p < .10$) from shared leadership towns.

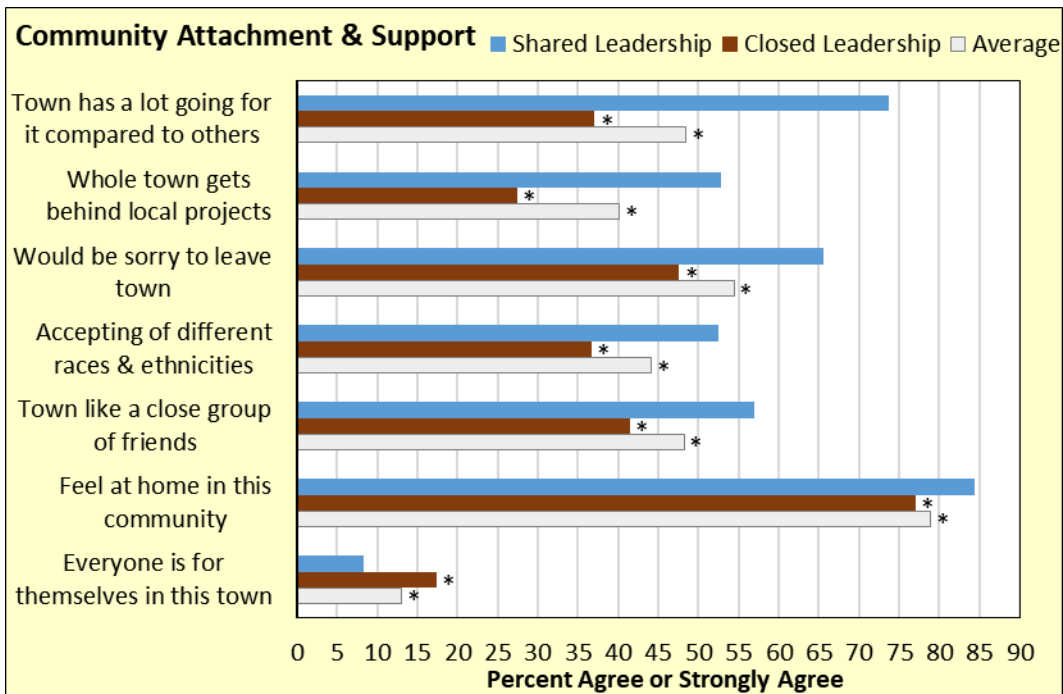


Figure 6. Resident perceptions of attachment and support by leadership style.
 * Statistical difference ($p < .05$) or † marginal difference ($p < .10$) from shared leadership towns.

Shared leadership towns are small in size, but growing due to a “baby boom.”

Shared leadership communities were smaller in population (about 1,200), but experienced a boom in residents over the past decade (8.1% growth), driven by large gains in children 17 years and younger and adults 25-44 years of age. At the same time, the share of seniors age 65 and older fell in these towns. In short, shared leader towns are becoming younger, as shown in Table 1.

Although closed leadership communities had the advantage of being larger (about 2,000 residents), these places saw their populations shrink (-4.0% drop) instead of grow. Closed towns are aging rapidly, losing children and younger adults, but gaining seniors. Perhaps as a result of an aging population on fixed incomes, poverty rates in closed leadership towns was higher than in shared ones. However, closed and shared leadership towns were statistically identical in terms of income and housing.

This suggests shared leadership is correlated with larger numbers of young families. We also know that shared leadership is related to better local services and higher quality of life. It is unclear whether leadership is cause or effect. On the one hand, shared leadership might have created higher quality services in the community, which combined with open and responsive leaders, attracted young families who moved to the area. On the other hand, it is equally plausible that an influx of young families forced local officials to adopt a shared leadership style, resulting in better quality services in the community. Either way, it is clear that younger populations foster shared leadership, either because younger adults are leaders themselves, or they chose older leaders who practice a shared style. Conversely, closed leadership towns seem to repel younger residents and attract older ones, as many in this older generation are more comfortable with this traditional leadership style.

Shared leadership in small towns is linked to agriculture.

In small towns where shared leadership is practiced, the local economy has more full-time and full-year jobs, and an employment base rooted in agriculture. By contrast, closed leader communities had more people working part-time; and the local economy was dominated by both high-skill professional services and low-skill non-professional ones. Jobs in retail trade, leisure (entertainment, food, hotels), and personal services are lower paid and often part-time or seasonal. These types of services often lead to higher poverty rates. Besides those already mentioned, there were minimal economic differences between the two sets of towns (refer to Table 2).

Agriculture, in particular family farms, may facilitate shared leadership for a number of reasons. First, farmers are more available to be leaders since they work locally, have more flexible schedules, and are free to get involved in politics because they are their own boss. Second, many farm and related organizations (like 4-H) have well developed leadership programs, and it is likely many farm family members would have attended some of these trainings. Lastly, farmers may be more willing to engage in shared leadership because they are more strongly attached to the land and community than those in other occupations.

Table 1. Demographic and social indicators by leadership style.

	2010			Change from 2000		
	<i>Leadership Style</i>			<i>Leadership Style</i>		
	<i>Closed</i>	<i>Average</i>	<i>Shared</i>	<i>Closed</i>	<i>Average</i>	<i>Shared</i>
Population (#) ^a	1,969 *	1,360	1,212	-4.03 *	3.40	8.10
Minority population (%)	5.26	5.58 *	3.34	2.60	2.23	0.69
Age 17 and under (%) ^a	22.98	23.69	23.98	-10.25 *	2.83	7.75
Age 65 and older (%) ^a	20.70	20.33	21.48	3.74 †	-0.48 †	-5.97
No high school or GED (%)	11.47	11.61	10.07	-6.55	-5.74	-4.15
Median household income (\$) ^a	42,728	44,742	45,599	1.28	2.49	0.57
Poverty rate (%)	13.18 *	13.01 *	9.78	4.13	4.13	3.36
Occupied housing units (%)	89.17	90.45	90.41	-4.12	-1.91	-2.39
Median home value (\$) ^a	82,680	83,459	94,027	2.37	9.96	8.35

* statistical difference ($p < .05$) or † marginal difference ($p < .10$) from shared leadership towns.

a = percent change

Table 2. Employment indicators by leadership style.

	2010			Change from 2000		
	<i>Leadership Style</i>			<i>Leadership Style</i>		
	<i>Closed</i>	<i>Average</i>	<i>Shared</i>	<i>Closed</i>	<i>Average</i>	<i>Shared</i>
Labor force participation (%)	46.53	47.87	47.46	-0.87	0.64	1.44
Full-time / full-year jobs (%)	50.89 *	55.36	55.56	-8.44 *	-3.48	-3.78
Average commuting time (minutes)	23.90 †	21.89	20.90	2.08	0.25 †	1.34
Agriculture (%)	2.76	4.12	5.20	-0.47 *	1.08	1.82
Construction (%)	6.43	7.37	8.15	-0.53	0.37	0.64
Manufacturing (%)	13.92	19.16	16.94	-3.44	-3.01	-2.01
Transportation & warehousing (%)	5.02	4.09 †	5.82	-0.63 †	-0.37 †	1.38
Professional services (%)	9.22 *	7.33 *	5.48	-0.24	0.13 †	-1.56
Healthcare & education (%)	22.61	25.13	25.79	0.29	2.85	2.69
Retail, leisure, & other services (%)	31.10 *	23.37	22.52	6.38 *	-0.15 †	-2.38

* statistical difference ($p < .05$) or † marginal difference ($p < .10$) from shared leadership towns.

What kind of leader are you? A self-assessment tool.

What kind of leader might you be? Do you like to be in control and keep tabs on people? Or do you take a more hands-off approach and let people make decisions on their own? The answer to these questions comes from a branch of research called leadership styles. Drawing upon psychology, sociology, communications, and business studies, this research has identified three major leadership styles: authoritarian, democratic, and laissez-faire.⁵ The descriptions below are adapted from Peter G. Northhouse's (2010) classic book titled *Leadership: Theory and Practice*.⁴

The **authoritarian leadership** style views the leader's role as providing direction to followers and controlling what they do and when. There is a clear hierarchy, where leaders are in charge and exert influence over followers using rewards and punishments. Such leaders do not encourage communication among followers or from follower to leader – all communication is top-down, from leader to followers. This style is very similar to **closed leadership** used in this publication. The advantage of authoritarian leadership is that tasks can be completed quickly and efficiently. It also has the advantage that everyone knows their role and what is expected of them. This style is used extensively in the military, public safety, and in disaster response. However, in community projects where participation is voluntary, this style is less than ideal. Disadvantages are that it fosters submissiveness, dependence, and a loss of innovation. Over time, followers lose interest in the project and become dissatisfied with their work, causing people to leave. Authoritarian leadership often creates discontent and conflict.

By contrast, the **democratic leadership** style views the leader's role as helping followers do the work on their own. Such leaders mentor followers by providing information, guidance, and suggestions but without giving orders. Democratic leaders emphasize communication throughout the organization. There is both

top-down and bottom-up communication between leaders and followers. Peer communication among followers is encouraged. Leaders strive to make sure everyone's concerns and comments are heard. This style is very similar to **shared leadership**. The upside of democratic leaders is that followers are more satisfied with their work, are more strongly committed to the project and to each other, and there is less conflict as group decisions have broad support. It also fosters creativity and innovation, as followers are allowed to be self-directed. This style is very effective in leading government and community organizations, where followers are volunteers and leaders have authority by consent (voting). The downside is that projects take longer to complete, time is not used efficiently, and leaders have to invest a lot of time and effort developing relationships.

The **laissez-faire leadership** style is unlike the first two, and could be better termed non-leadership. Laissez-faire leaders do not try to control followers (like authoritarian) nor do they try to work with and guide them (like democratic). The laissez-faire style is a hands-off approach to leading, allowing followers to do what they want, when they want. There are many disadvantages to this leadership style. As you might expect, very little gets done and followers are directionless. Not knowing what to do, people will often do nothing. Without leadership the group or organization has no sense of purpose, and followers tend to become unmotivated and lose interest. This leads to massive attrition as people drop out, especially when organizations are staffed by volunteers.

The self-assessment on the next page will help you identify your style of leadership, and allow you to examine how your leadership style relates to others. The Leadership Style Questionnaire is taken from Northhouse (2018).⁵

Leadership Style Questionnaire

Directions:

1. For each of the statements below, circle the number that indicates the degree to which you agree or disagree.
2. Give your immediate impressions. There are no right or wrong answers.

STATEMENTS	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Employees need to be supervised closely, or they are not likely to do their work.	1	2	3	4	5
2. Employees want to be part of the decision-making process.	1	2	3	4	5
3. In complex situations, leaders should let followers work problems out on their own.	1	2	3	4	5
4. It is fair to say that most employees in the general population are lazy.	1	2	3	4	5
5. Providing guidance without pressure is the key to being a good leader.	1	2	3	4	5
6. Leadership requires staying out of the way of subordinates as they do their work.	1	2	3	4	5
7. As a rule, employees must be given rewards or punishments in order to motivate them to achieve organizational objectives.	1	2	3	4	5
8. Most workers want frequent and supportive communication from their leaders.	1	2	3	4	5
9. As a rule, leaders should allow subordinates to appraise their own work.	1	2	3	4	5
10. Most employees feel insecure about their work and need direction.	1	2	3	4	5
11. Leaders need to help subordinates accept responsibility for completing their work.	1	2	3	4	5
12. Leaders should give subordinates complete freedom to solve problems on their own.	1	2	3	4	5
13. The leader is the chief judge of the achievements of the members of the group.	1	2	3	4	5
14. It is the leader's job to help subordinates find their "passion."	1	2	3	4	5
15. In most situations, workers prefer little input from the leader.	1	2	3	4	5
16. Effective leaders give orders and clarify procedures.	1	2	3	4	5
17. People are basically competent and if given a task will do a good job.	1	2	3	4	5
18. In general, it is best to leave subordinates alone.	1	2	3	4	5

Scoring:

- | | |
|--|---|
| 1. Add the responses on items 1, 4, 7, 10, 13, and 16. | Authoritarian/Closed Leadership
Score: _____ |
| 2. Add the responses on items 2, 5, 8, 11, 14, and 17. | Democratic/Shared Leadership
Score: _____ |
| 3. Add the responses on items 3, 6, 9, 12, 15, and 18. | Laissez-Faire Leadership
Score: _____ |

Interpretation:

This questionnaire is designed to measure three common styles of leadership: authoritarian/closed, democratic/shared, and laissez-faire. By comparing your scores, you can determine which styles are most dominant and least dominant in your own style of leadership.

- If your score is 26–30, you are in the *very high range*.
- If your score is 21–25, you are in the *high range*.
- If your score is 16–20, you are in the *moderate range*.
- If your score is 11–15, you are in the *low range*.
- If your score is 6–10, you are in the *very low range*.

Summary

In summary, it is critical that local leaders in small towns begin to adopt a shared leadership style if they are to maintain the vitality of their communities. Shared leaders in small towns were seen as more effective, inclusive, informed, open-minded, trustworthy, power-sharing, and team-building. By contrast, leaders in closed towns were viewed as ineffective, exclusive, uninformed, close-minded, not sharing of power, and divisive.

We find that shared leadership makes for high quality local services, especially ones that are provided in and managed by the community. However, this style of leadership has a mixed

impact on the quality of local government services. Shared leaders tend to improve public works and libraries, but have a minimal impact on the quality of public safety. Local organizations and local government are more open to residents and newcomers in shared leadership towns, promoting citizen engagement in local affairs. Residents also feel more attached to and supported by shared leadership communities. Although shared leadership towns are small in size, they are growing due to a sharp rise in younger families, likely driven by the quality of local leaders.

ISU Resources

Civic Engagement and Leadership Program, ISU Extension and Outreach

www.extension.iastate.edu/communities/civic-engagement-and-leadership

Leadership Studies Program, ISU College of Liberal Arts and Sciences

leadership.las.iastate.edu

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Appendix

A. References

1. Lasley, P. and Chase, C. 2017. *A Model for Community Change*. Publication SOC 3080A, Iowa State University Extension and Outreach: Ames, IA.
2. Morton, L.W. 2018. *New Leadership Challenges for Local Government*. Publication LG 0001 (formerly PM 1938), Iowa State University Extension and Outreach: Ames, IA.
3. Allen, B.L, Morton, L.W., and Li, T. 2003. *Shared Leadership*. Publication RDI 125, Department of Sociology, Iowa State University: Ames, IA.
4. Northouse, P. 2010. *Leadership: Theory and Practice*. Sage: Thousand Oaks, CA.
5. Northouse, P. 2018. *Introduction to Leadership: Concepts and Practice*. Sage: Thousand Oaks, CA.

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B. Data and Methods

Leadership and community perceptions are taken from the Sigma Study, now part of the Iowa Small Towns Project. The Sigma Study is a USDA-funded decennial survey of 99 small towns in Iowa that has been done in 1994, 2004, and 2014. The next data collection will occur in 2024. Towns were selected in 1994 based on the following methodology: (i) population of at least 500 but under 10,000 according to the 1990 Census, (ii) not adjacent to a major city of 50,000 or more, and (iii) random selection of one town meeting the first two criteria in each of Iowa's 99 counties. Housing units were randomly sampled in ZIP codes corresponding to selected municipalities. Oversampling for minority populations was done in 2004 and 2014. Each housing unit was given four treatments (postcard pre-notification, first questionnaire, postcard reminder, second questionnaire). The minimum number of completed responses was set at n=250. Response rates were 72.7% in 1994, 68.36% in 2004, and 41.5% in 2014. **Demographic and economic data** are taken from the 2000 Decennial Census and the 2012-2016 American Community Survey (2014 being the midpoint).

The **leadership style index** was created using exploratory factor analysis. The seven leadership perception questions were factored using principal components extraction. One general factor was found that accounted for 92.8 percent of the variance in the original seven items. Factor loadings were all above $\lambda > 0.955$, the data were factorable (KMO=0.930), and all communalities were above $h^2 > 0.912$. Factor scores were computed for this single factor using the regression-based method, whose scale follows a normal z-distribution. **Mean-difference tests** were conducted using an unconditional general linear multivariate model (MANOVA) using the Games-Howell Test, which corrects for unequal group sizes and unequal group variables.

