

**CONSOLIDATION OF LOCAL
HIGHWAY DEPARTMENTS:
THE CASE OF ADAMS COUNTY AND
THE CITY OF HETTINGER**

By

Daniel L. Zink

**UGPTI Staff Paper No. 72
April 1986**

**CONSOLIDATION OF LOCAL HIGHWAY
DEPARTMENTS: THE CASE OF ADAMS
COUNTY AND THE CITY OF HETTINGER**

BY

**DANIEL L. ZINK
RESEARCH ASSISTANT**

**UPPER GREAT PLAINS TRANSPORTATION INSTITUTE
NORTH DAKOTA STATE UNIVERSITY
P. O. BOX 5074
FARGO, NORTH DAKOTA 58105**

APRIL 1986

FOREWORD

This report on the consolidated Adams County and City of Hettinger road department was prepared with the assistance of Mr. Forrest Jennings, Adams County Highway Superintendent. The report is intended to describe operational and managerial functions of the consolidated department in order to serve as an example for other local jurisdictions that may be considering a similar merger. The Adams/Hettinger consolidation may serve only as a primer in the search for proper variables to consider in another application. Local considerations eventually will determine the ultimate success of similar attempts elsewhere.

For further information regarding this report, please contact:

Daniel L. Zink
Transportation Economist
Upper Great Plains
Transportation Institute
North Dakota State University
P.O. Box 5074
Fargo, ND 58105

Funding for this project was provided by the North Dakota State Highway Department, Walter R. Hjelle, Commissioner, in cooperation with the Federal Highway Administration, U.S. Department of Transportation.

INTRODUCTION

Pressures to economize are affecting all levels of government. Public scrutiny and reductions in available funds from federal programs require every consideration for moves toward cost effective local programs. For local road programs, these pressures are heightened due to rapidly escalating road construction and maintenance costs, as well as by the growth in size and weight of vehicles, economic growth or decline, and shifting demographic patterns.

Cooperation among jurisdictions and consolidation of programs is one method by which economies may be gained, thereby either reducing costs or upgrading quality of programs. One such consolidation which may be considered is the merger of road programs at the local level. Such a consolidation has been achieved by Adams County and the City of Hettinger, North Dakota. This consolidation, which took effect on November 1, 1984, is the focus of this report.

GENERAL CHARACTERISTICS: ADAMS COUNTY/CITY OF HETTINGER

Adams County is located in southwestern North Dakota on the South Dakota border. The City of Hettinger is situated in the south-central portion of the county four miles from the state border (Figure 1). The county is rural in nature and has a population of 3,584 people. The City of Hettinger, the county seat, has a population of 1,739. Four other cities are located in the county: Reeder, Bucyrus, Haynes and North Lemmon have populations of 355, 32, 58, and 35 respectively.¹ The economy of Adams County is based entirely in agriculture. The county contains 371 farms and about 380,000 acres of total cropland.²

Prior to November 1, 1984, the City of Hettinger and Adams County operated separate road departments. The two departments have since been consolidated; the new agency is responsible for both the county road and city street systems. The combined road and city street system consists of the following:

County Road System

Paved	30 miles
Gravel	265 miles
Other	30 miles

Township Road System

Organized	250 miles
Unorganized	150 miles

City Streets (paved) 10 miles

TOTAL COUNTY RESPONSIBILITY 735 miles

¹1980 Census data.

²1982 Census of Agriculture data.

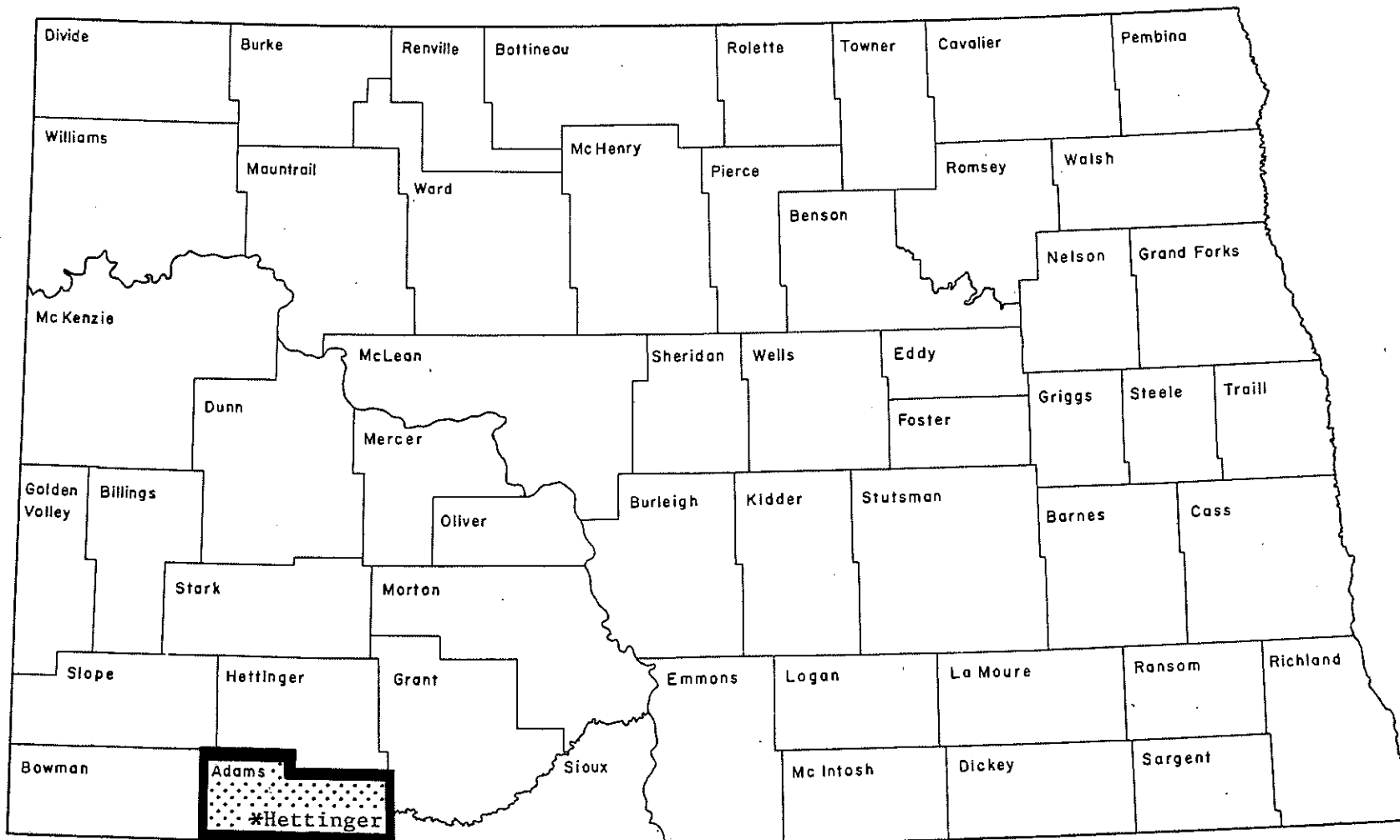


Figure 1. Location of Adams County and the City of Hettinger, North Dakota.

Adams County also is served by one U.S. highway and two state highways. U.S. Highway 12 enters the county on its western border and exits on the south. State Highway 22 parallels the western county border while State Highway 8 approximately bisects the county, running in a north-south direction. Those three highways have a combined in-county length of approximately 70 miles.

Traffic patterns in Adams County are generally characterized by light local traffic, consisting of passenger vehicles, farm trucks and other commercial truck traffic. Farm trucks and other trucks carrying agricultural products are predominantly local vehicles, while other commercial truck traffic consists of through traffic and general commodity carriers serving local businesses. Passenger vehicles are both local residents and travelers moving through the county. Maximum traffic volumes in the county are 200 vehicles per roadway per day. Most roads have volumes less than 50 vehicles per day.

Prior to 1970, the county had only three machines and three operators and hired all other work done. County commissioners oversaw all road operations. The county hired a full-time road superintendent in 1970 who has supervised operations since. The City of Hettinger historically has had only one full-time city street employee. Street maintenance was under the jurisdiction of the City Council.

Funds for road maintenance and construction of county roads have come from three sources: state user fee taxes (such as fuel taxes, vehicle registration fees, etc.); local property taxes; and federal revenue sharing. Funds for maintenance of city streets have come from state user fee taxes and federal revenue sharing. Approximate revenue from each of these sources in 1985 were:

	<u>County</u>	<u>City</u>
Motor Fuel Tax	\$150,000	\$44,000
Farm-to-Market Levy	60,000	-
Revenue Sharing	<u>71,000</u>	<u>6,000</u>
Total	\$281,000	\$50,000

CONSOLIDATION OF COUNTY/CITY ROAD DEPARTMENTS

The initiative for consolidating county and city road departments came from a need to reorganize the City's method of operations. City operations were in need of change in at least two areas. First, the City of Hettinger's shop facilities were quite old and becoming burdensome to heat. The building was utilized primarily for minor equipment repair and storage. Heating costs exceeded \$4,000 per year.

Second, the City Council felt a greater degree of supervision and management expertise was needed. No long range planning efforts were conducted by the city; it was felt that consolidation of the two departments may improve general service levels by having a larger staff and better management. Prior to consolidation the county employed six full-time persons, while the city employed only one street maintenance person.

In addition, the Board of County Commissioners felt somewhat of an obligation to provide some services for the city. Residents of Hettinger pay taxes to support county farm-to-market roads, therefore county officials felt that any additional contribution of services by the county to the city would be justified.

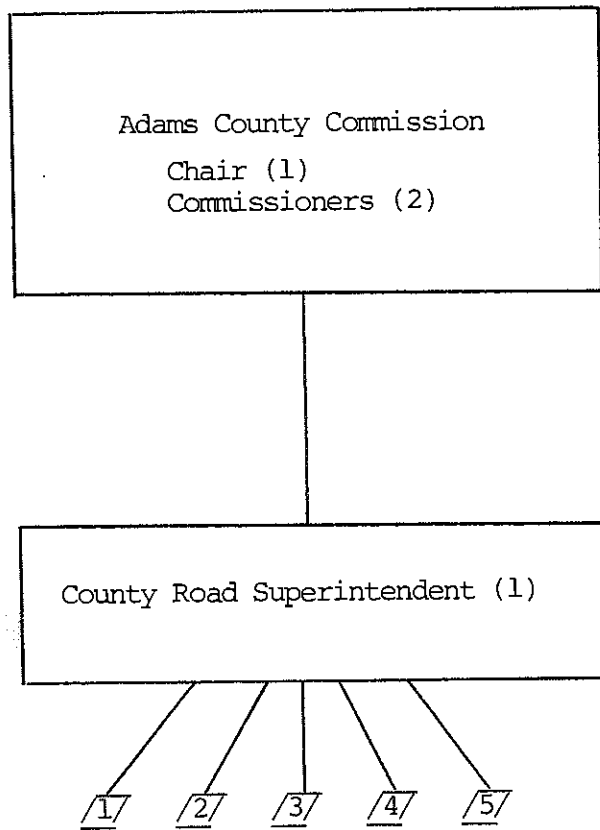
City Council members therefore contacted the county road superintendent regarding the potential for some kind of joint operations agreement and the advantages such an arrangement may possess. The first contact between the two parties came in the summer of 1984. Very few negotiations or preliminary arrangements were undertaken, primarily due to the number

of people involved and the experience of the parties. In this case, one person performed the duties of both county and city auditors. Also, the county and city boards relied on the experience and expertise of the county road superintendent to complete the specifics of the agreement. These two factors, plus the fact that the county and city boards were in general agreement as to the need for a consolidation, led to a quick and unconstrained agreement between the two parties. The initial tentative agreement was reached by September of 1984. The final agreement was signed in early October. The effective date of the agreement was November 1, 1984. A copy of the agreement is presented in Appendix "A".

MANAGEMENT STRUCTURE AND PERSONNEL

County and city road department functions were separated prior to consolidation. The county and city road superintendents had line authority to their respective governing boards, namely the Board of County Commissioners and the City Council. All employees were responsible only to their governing board and were responsible only for work within their respective jurisdiction. Organizational structures of the two separate road departments prior to consolidation are presented in Figure 2.

Consolidation of the two departments resulted in reorganized responsibilities and authorities. Number of personnel were not affected. Two basic organizational changes regarding personnel did occur. First, the sole city street employee became an employee of the county. Second, the county road superintendent became general supervisor of both county and city road activities, although he remained an employee of Adams County. The organizational structure of the new consolidated road department is presented in Figure 3.



Five county road department employees + 2 summer employees

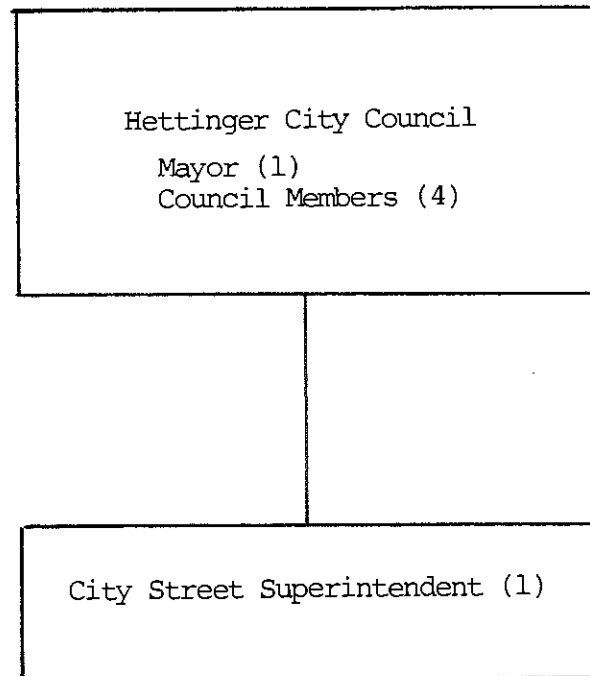


Figure 2. Organizational Structures of Adams County and City of Hettinger Road Departments Prior to Consolidation.

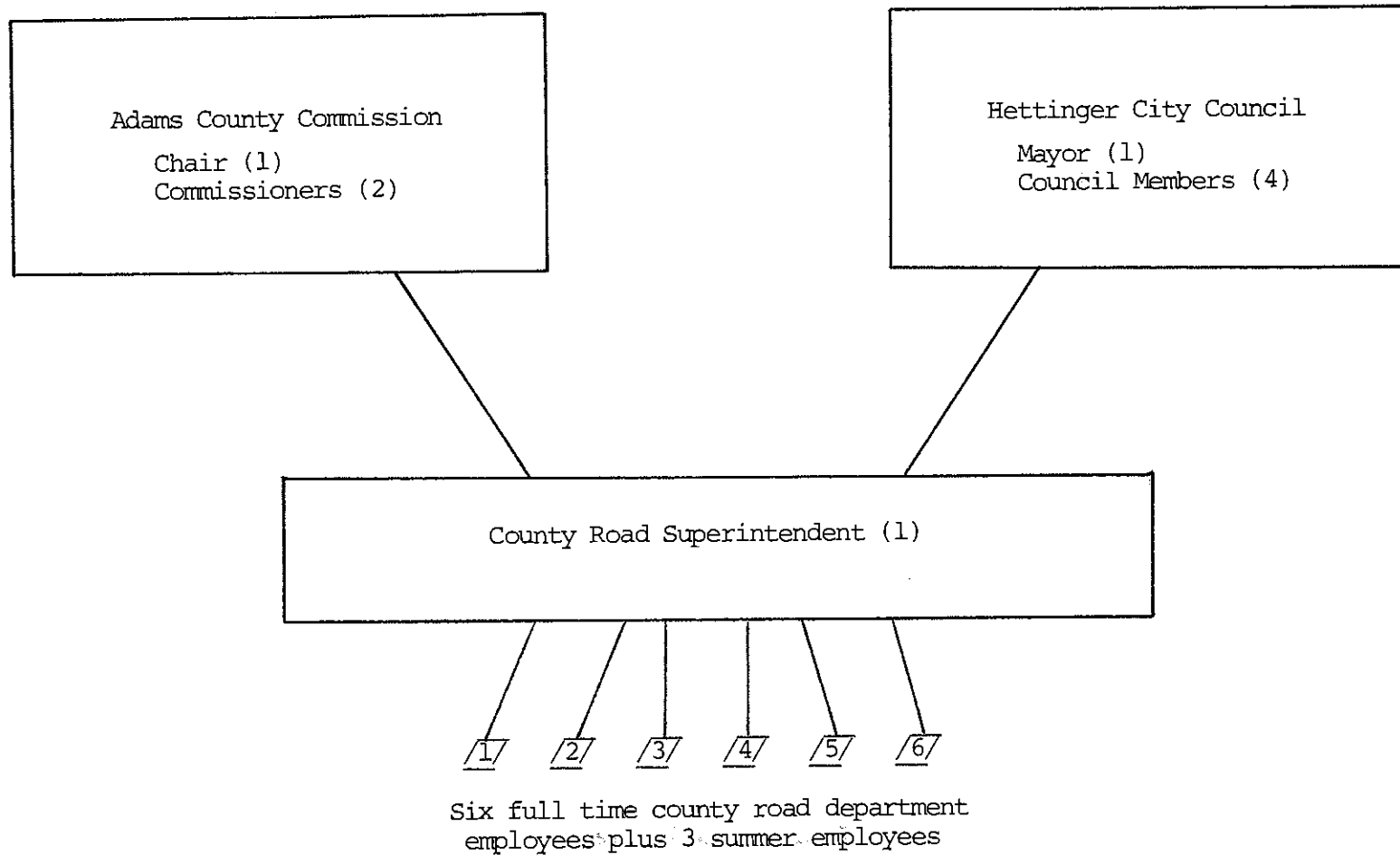


Figure 3. Organizational Structure of Adams County Road Department After Consolidation with City of Hettinger Road Department.

Granting complete authority over all road and street activities to the county road superintendent gave the management structure a narrower line of authority between the superintendent and county (and former city) employees. This led to closer supervision of activities concerning city streets; management of county responsibilities changed only slightly. County employees still perform activities relating to the county road system, although some work is done within the city. The former city employee still concentrates most of his activities within the city. All employees, however, can "float" to any type of job. The county does not have any full-time mechanics, full-time machine operators, etc. Any employee can be called on at any time to perform a variety of tasks.

The second significant change in the county/city management structure is between the county road superintendent and the county/city boards. Prior to the consolidation the superintendent was responsible only to the Adams County Board of Commissioners; he also is now responsible to the Hettinger City Council. This may create a potential conflict as to where absolute authority lies. However, due to the distinctly different county road and city street systems, no problems have been experienced or are foreseen. Also, the relative management freedom granted to the superintendent has contributed to clear lines of authority and a lack of supervisory problems.

Even though the city's street employee has now become a county employee, the city reimburses the county for that person's salary. The city pays a monthly fee of \$2,600 to cover the former city employee's salary and benefits, and to cover general supervision of the city street activities.

SHOP FACILITIES AND EQUIPMENT

The situation regarding physical facilities was one of the primary reasons for considering consolidation. Prior to the consolidation the City of Hettinger utilized an older 60' x 80' shop to store equipment and to perform minor repairs and maintenance work. The building served a purpose for storage, but operating costs were becoming too high to justify. In the year prior to the consolidation the city paid over \$4,000 to heat the building alone. Although the city did have several pieces of equipment, very little repair or maintenance was done by the city. This equipment included a street sweeper, a 65 hp blade, a 2-yard loader, two 5-yard dump trucks, a sander and sewer machine. A lack of tools, expertise and adequate shop space prohibited any work beyond minor maintenance being done. The city therefore relied on local repair shops for most maintenance and repair work. The city was also buying fuel "at the pump" from local service stations due to lack of fuel storage facilities.

Adams County possessed more extensive shop facilities prior to the consolidation. All maintenance and repair of equipment except for automatic transmission and fuel injection pump work, was done in a 60' x 100' county shop located in Hettinger. The county shop contained more extensive repair/maintenance equipment including a metal lathe, welders, oxy-acetylene systems, grinders, presses, fork lift, hoists and portable generating plants. All work performed in the shop was done by county personnel. The county also possessed extensive fuel and material storage facilities, allowing them to purchase larger lots of items such as fuel and take advantage of bulk price discounts.

Adams County owned a much more extensive equipment fleet than did the City of Hettinger. The fleet included five blades, one 6-yard and one 2-yard loader, three tandem dump trucks, asphalt maintenance equipment including oil storage tanks, a dozer, mower, two tractors and two paddle scrapers. The entire equipment fleet was maintained in the county's shop.

General changes resulting from the county/city consolidation regarding facilities and equipment were that all city activities were transferred to the county shop, and an addition was constructed onto the existing county shop. All city equipment was put under county control. The city shop is now used only for miscellaneous storage of off-season equipment.

The 25' x 60' bay added to the existing county shop was paid for by the City of Hettinger under the consolidation agreement. The \$25,000 addition was justified by the city due to expected savings from reduced heating costs and other gains from the consolidation. The shop addition is to be utilized primarily for city equipment, but may be used for all road department purposes on an as needed basis. The city also purchased a 2,000 gallon above ground fuel storage tank and pump.

Costs of operating the newly expanded and old shops are shared by both the county and city. Utilities and other operating costs are shared in proportion to amount of space utilized. The new addition constitutes approximately 25 percent of the total space shop, therefore the city pays 25 percent of all utility costs. Savings in utility costs have been realized by the consolidation of shops. The City of Hettinger previously paid \$3,000-\$4,000 annually for heating its old shop, while the county paid \$1,600-\$1,800. Current heating costs for the expanded shop are \$2,500-\$3,000 per year.

Actual ownership of equipment by county and city has not changed as a result of the consolidation. Both jurisdictions' equipment fleets remain the property of the original owner. However, the cost of operating each piece of equipment is recorded daily and charged to the appropriate jurisdiction. For example, if blading work is performed for the county roads, a per hour charge (including labor and machine time) is assessed to the county. If snow plowing is done for the city or an organized township, the work done and associated charge is recorded for their account. Sample forms on which work activities are recorded are presented in Appendix "B".

In addition to allocating actual machine hours to each jurisdiction, actual costs of repair and maintenance time are charged to the county or city accounts. In addition, the city pays a flat fee of \$100 per month for incidental shop expenses such as bolts and other supplies.

According to the highway superintendent, equipment utilization is better after consolidation. Each jurisdiction's equipment fleet has effectively been expanded due to the addition of the other's fleet. Although county equipment utilization has not changed considerably, city equipment is now utilized by the county.

Maintenance of city equipment has been one area of significant improvement. While city machines were previously maintained at local service stations, all machine repairs and maintenance are now done in the county shop by county employees. The merger also permitted sale of a small amount of duplicate equipment.

SERVICES PROVIDED TO EACH JURISDICTION

County road department activities prior to the consolidation were similar to most other counties in the state. These activities included

general gravel and paved road maintenance such as blading, graveling, pavement patching and pothole filling, and snow removal. Construction or reconstruction activities included gravel road regrading, culvert installation and paved road grading. The county has attempted to regrade county and farm-to-market roads at the rate of approximately 200,000 to 300,000 yards of dirt moved per year. Other services included signing, weed control and bridge maintenance.

City of Hettinger Street Department activities were limited prior to the consolidation due to the short staff and equipment. Basic activities consisted of street pothole patching, street sweeping, and limited snow removal. The county road department had previously assisted the city in snow removal following severe winter storms. This work was done on a per hour charge basis.

Consolidation of the two departments has changed the activities of both, but the more noticeable change has been in the work performed for the city. County services remain practically unchanged, although utilization of some city equipment has helped county operations. Operations performed on city streets have changed more significantly. A great deal of "catch-up" work has been done now that both equipment and personnel are available in greater numbers. Trees were trimmed on all streets to 11 feet at the curb, some asphalt overlays were done and U.S. Highway 12 (the main thoroughfare through Hettinger) was chip-sealed for a distance of ten blocks at a width of 52 feet. Also, trees were trimmed or removed in alleys to facilitate garbage pick-up. Snow removal has been improved within the city with the expanded equipment fleet after consolidation.

GENERAL ADVANTAGES AND DISADVANTAGES
OF THE CONSOLIDATION

Benefits of the consolidation of Adams County and Hettinger road departments have been experienced by both parties. Initial indications, however, are that the city gained significantly while the county's benefits are less noticeable. This is not to say that the net result has not been positive for both, only that gains have not been equal to both parties.

From a management perspective consolidation of the departments has provided a more centralized system and generally more clear lines of authority. Although the superintendent now answers to two different boards, the experience of the individual and faith in his managerial skills have minimized potential problems. The city has gained from the addition of a superintendent with experience and technical expertise in local road management. The city has also gained from the addition of personnel and shop facilities brought in by the county. And in this case, duplication of both shop facilities and some equipment was eliminated. The purchase of bulk materials by both parties was accomplished, leading to a savings in procurement of fuel and other materials. The city also gained because of the pooling of equipment and availability of all equipment for city use when needed.

Adams County also experienced gains from the consolidation. Several pieces of equipment were added to the fleet and are utilized for county activities. The addition of the city employee to the personnel pool also has provided the potential for more available manpower. Finally, the most significant gain for the county was the expansion of shop space.

The major disadvantage to the consolidation is the additional accounting and bookkeeping necessary to allocate specific activities

to the appropriate jurisdiction. According to the road superintendent several judgmental decisions must be made regarding joint costs such as shop expenses. It is difficult to precisely allocate fuel costs, equipment usage and other costs when the county and city jointly benefit from activities.

Administrative responsibilities also increased when city activities were placed under the authority of the county road superintendent. For Adams County and the City of Hettinger, these additional duties may be manageable. In counties or cities with higher populations or more extensive road systems these administrative responsibilities may become much greater and perhaps less easily managed.

CONCLUSIONS

The consolidation of local jurisdictions' road/street activities may be one way of economizing in road-related expenditures or providing better service to the motoring public. The experience of Adams County and the City of Hettinger road department consolidation has generally been positive, although the new agency is still quite young.

Several features appear to have contributed to the apparent success of this merger of activities. First, a compelling need was felt by the city to search for alternatives to its existing system. Facilities were inadequate, equipment maintenance and repair by the city was almost impossible, and more general supervision and long range planning of activities were needed. The scale of operations in the city was simply not sufficient to justify facilities or personnel necessary to carry out effective city street operations. Second, a combination of the expertise of the existing county road superintendent and a willingness of the two governing boards to work together provided an atmosphere

conducive to implementing a consolidation plan. Finally, the size of the county and city and the scope of each operation seems to be appropriate for a workable consolidation.

Each of these characteristics may be somewhat of a prerequisite for similar mergers by other jurisdictions. Without a perceived need for change, incentive for consolidation may not prevail. Lack of managerial expertise or an unwillingness by either party to cooperate may prevent a joint project of any kind. And, as county systems or city populations reach a size or scale necessary to justify individual road departments, consolidation may not be warranted. In fact, even an existing program may fall into disrepair if any one of these characteristics change over time. Also, a program to "sell" the change to the public appears necessary to make people aware of the intentions and potential gains.

Local officials who may be considering a similar type of consolidation to reduce costs or improve services must perform a complete analysis of their unique situation. Many factors must be considered such as current road and street operations, personnel involved, attitudes of governing boards, and others.

Conspicuous by its absence from this report is information concerning budget outlays before and after consolidation of the Adams County and Hettinger road departments. However, due to the relative newness of the operation no specific figures regarding actual cost savings are available. Costs savings have been realized regarding heating and maintenance costs, but county/city personnel numbers and equipment fleets have not changed. A subjective evaluation of service levels made by the road superintendent suggests that county services have remained basically unchanged while city services had improved considerably. Therefore, the major advantage has been in improved service rather than cost savings.

APPENDIX "A"

Adams County/City of Hettinger Road Departments
Consolidation Agreement

AGREEMENT

This agreement made between the City of Hettinger, North Dakota, hereafter referred to as "City", and County of Adams, North Dakota, hereafter referred to as "County".

WHEREAS, Section 40-05-14 Provides, to-wit: The governing body of any municipality of ten thousand population or less and the boards of county commissioners of the several counties may enter into agreements for the construction and maintenance of streets within such municipalities by the boards of county commissioners. Said municipalities shall pay, on a reimbursable basis, such sums as are agreed upon.

WHEREAS, the "city" and "County" desire to share equipment, manpower, tools, maintenance, supplies and supervision, and it appears that both the "City" and "County" should benefit from an agreement to accomplish these objectives

NOW THEREFORE, IT IS AGREED AS FOLLOWS:

1. "City" shall erect a 25' x 60' shop bay building on the east side of the present "county" shop for garbage truck and other city equipment when needed during the winter. The estimated cost is \$25,000.00; said building to be amortized over five years through heat and fuel savings now used for "city" equipment. If the contract between "city" and "county" is terminated the "county" shall purchase said building for fair market value, not to exceed \$25,000.00.
2. Upon the effective date of this agreement, the "city" street department shall be under the jurisdiction of Adams County. The present "city" street foreman Alvin Hendricks, shall have the opportunity to become an employee of Adams County and will be subject to County Personnel policies.
3. That the "city" shop utilities and the "county" shop utilities shall be paid on a prorata basis, "county" to pay 75%, "city" 25%.
4. That the "city" shop will be used for cold storage for "city" and "county" equipment as needed and as space will allow.
5. That "city" will assume costs for actual repair parts on present and future "city" owned equipment.
6. That "city" shall reimburse "county" on a flat monthly fee of \$100.00 for incidentals such as welding rods, grinders, bolts and like supplies, plus actual cost of petroleum products.
7. That "city" shall pay a monthly sum of \$2600 to the "county" for supervision of the "city" street department, and one County Highway Department Employee's salary and related benefits.
8. The effective date of this agreement shall be November 1, 1984.
9. That this agreement may be terminated by either party to this agreement upon ninety (90) days written notice to the other.

Date: 10-2-84

ATTEST: Betty Anderson
City Auditor

CITY OF HETTINGER

BY: Shepherd Rasmussen, President
Mayor/Council President

ATTEST: Betty Anderson
County Auditor

ADAMS COUNTY

BY: George A. L. Miles
Chairman, Board of Commissioners

APPENDIX "B"

Sample Daily Work Records for Adams
County Highway Department

JOB	List Machine Hours & Hand Labor Hours	Machine	Hours on Co. Work	Hours on City Work
	Clean City Streets	777	---	6 hrs
	Plow Snow on County Rd Thomson Rd. - 3 miles West Rd - 9 miles		3 hrs	
	Plow snow in Holt trap 5 miles		1 hr	
	Plow Snow in Argonne trap 2 miles		1 hr	
	MISC. TIME	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
	MACHINE SERVICE			
	TRAVEL TIME			
	REPAIR TIME OUT OF SHOP (Describe)			
	REPAIR WORK IN SHOP (Describe)	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
	ALL OTHER TIME (Describe)	XXXXXXXXXX	County	City
	TOTAL HOURS	XXXXXXXXXX	5	6
	PICKUP MILEAGE			

NAME *Dean Gibson* DATE *1/22/86*

Daily Summary of Charges

Jan 22, 1956
(Date)

Employee	Job or Chg to	Machine	Loads Hours Mi/rds	Rate	Hrs Hand Labor	Rate	Materials Used	Total to Charge
Vete	City	930	9	9 ⁰⁰				✓ 81 ⁰⁰
Albert	Hagnes City	#14-99	2.5	40 ⁰⁰				✓ 100 ⁰⁰
Albert	Co Roads	↓	2.5	40 ⁰⁰				—
Albert	Dakota	↓	2.5	40 ⁰⁰				✓ 100 ⁰⁰
Albert	K. City	↓	2.0	40 ⁰⁰				✓ 80 ⁰⁰
Dean	City	777	6.0	40 ⁰⁰				✓ 240 ⁰⁰
↓	Co Roads	777	3.0	40 ⁰⁰				—
↓	Sacr	777	1.0	40 ⁰⁰				✓ 40 ⁰⁰
↓	Argonne	777	1.0	40 ⁰⁰				✓ 40 ⁰⁰
Gary	City	555	6.0	40 ⁰⁰				✓ 240 ⁰⁰
↓	Highland	#60	.5	25 ⁰⁰				✓ 12 ⁵⁰
↓	Argonne		.5	25 ⁰⁰				✓ 12 ⁵⁰
↓	Co Roads		3.5	25 ⁰⁰				—
Todd	City	#-120	4.5	50 ⁰⁰				✓ 225 ⁰⁰
Todd	IHC Jerdahl		1.5	9 ⁰⁰				✓ 13 ⁵⁰
↓	Taylor Butte		.5	25 ⁰⁰				✓ 12 ⁵⁰
↓	Argonne		.5	25 ⁰⁰				✓ 12 ⁵⁰
↓	Co Roads		3.0	25 ⁰⁰				—
Fred	Construction Maintenance	W-14	2.0	30 ⁰⁰				—
Fred	L. Creek Fair		2.0	40 ⁰⁰				✓ 80 ⁰⁰
Fred	Co Roads		6.	40 ⁰⁰				—
Fred	#14-726		1					
Pete	Shop Maint	930	1					