What is the problem?

The problem is the lay of the land on small farms close to cities. Land suitable for farming is increasingly found in noncontiguous pieces surrounding urban centers that are experiencing sprawl. While this patterns works for some agricultural applications, such as CSA's, it is a barrier to livestock farming that requires a relatively expensive infrastructure.

What does Lubbers Family Farm have to do with this?

Lubbers Family Farm has been farming 119 acres sustainably since 1995. They have a diverse operation including a dairy, pigs, chickens and a bakery owned by their son and now a creamery making raw milk aged cheese. The farm lies approximately eight miles west of downtown Grand Rapids. The home place includes ten acres of pasture and the milking parlor. An additional thirty acres of pasture are available two miles down the road. Lubbers sought to establish a creamery on the home place, but needed to be able to access additional grazing acres.

What's the solution?

Lubbers applied for a grant from SARE that allowed them to purchase a trailer to be utilized as a Cow Taxi and to collect data that would determine the success of the approach. The taxi is of southern origin with an open-air, nonstressful design. Small docks were built at both locations. Cows have been switched to once-a-day milking (from eighteen hours) and are now being taxied to the parlor for milking and transported back to the pastures for grazing.

Did it work?

The answer to that question depends on how you look at it. Following are the measurements Lubbers used and how the project measured up. The data was collected from May 1 through August 20 in 2010 before the project began, and again during the same time frame in 2011 after the project was implemented.

MILK PRODUCTION

	Gallons Per Cow
2010	2.15
2011	3.09

Milk production actually increased by 30%. Other impacting variables include access to better feed in 2011 and an older herd with a larger number now in their second lactation.

MILK COMPONENTS

	Fat	Protein
2010	4.32	3.44
2011	4.08	3.92

The data shows that the fat decreased slightly and the protein increased.

HERD HEALTH

	2010	2011
SPC	17,300	3,800
SCC	253,000	426,000
Mastitis	<1%	1.8%
Mortality	1 cow	none

Generally speaking the overall health of the herd improved. There was an increase in the incidence of mastitis and the SCC count. Once-a-day milking may be a major factor.

FINANCIAL IMPACT

	2010	2011
Fuel	none	$1920
Labor	$2560 (add. milking)	$2240 (transport)
Capital Cost*	none	$384
Sawdust	none	$160
Hay/Green Chop	$4800	$600
	$5360	$5304

*Capital costs included a truck at $2500, a trailer at $9000 and docks and gates at $850 for a total of $12350 spread over ten years. The financial cost of transporting the cows during this project was actually less than the cost of feeding hay in a quasi-confinement situation. The cost per gallon of milk for 2010 was $1.12 and in 2011 it was $.69 per gallon. (The number of gallons generated in 2011 was substantially more than in 2010.)