

**Community Asset Building in Rural Development:
An Analysis of Military-Base Redevelopment in Rural Host Communities**

by

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**Submitted to the Department of Urban Studies and Planning
in partial fulfillment of the requirements for the degree of**

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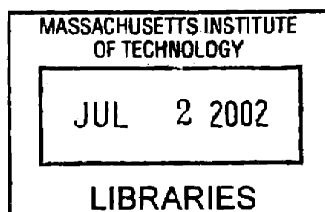
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ABSTRACT

This dissertation is about opportunities in rural development. Often we think of development as a function of location. In the pursuit of economic development, analysts and practitioners tend to consider the advantages--economic, geographic, and institutional--of one location over another. Rural areas often weigh in toward the bottom of such analyses because they enjoy few of the traditional, i.e., location-dependent, resources for development.

The general question underlying this dissertation is:
How do rural communities find opportunities for economic development without the traditional resources to serve as stimuli?

Local responses to air force bases closures during the 1990s are examined, first, through a comparative analysis between the groups of six rural and 26 metropolitan host communities of closed bases and, second, through case studies of four host communities--three rural and one metropolitan.

Principle findings included:

- Surprisingly, the rural host communities achieved success in base redevelopment comparable to metropolitan host communities despite significant economic, geographic, and institutional gaps between the two groups in the study.
- Residents mobilized in response to base-closure crises in every community. Through participation in base reuse planning activities, residents grew knowledgeable in base-related issues that, ultimately, aided redevelopment and compensated for the lack of more formal local development expertise.
- Host communities capitalized upon much-needed development assets they derived from federal resources--grants, technical assistance, and base property.
- By the end of the study period, the rural host communities, in particular, had improved their capacity to plan and manage future development through the accumulation and capitalization of assets derived from local and federal resources in base redevelopment.

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Karl Seidman, MIT Senior Lecturer

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I dedicate this dissertation to my husband, Mark Bildman, my parents, Jack and Freda Stanley, and my children, Heather and Eli. Heather's enthusiasm for my "book about vacations" (because two of our summer vacations were spent in rural host communities) made it seem important.

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Chapter One

Introduction: Looking for Opportunities in Rural Development

This dissertation is about opportunities in rural development. Often we think of development as a function of location. In the pursuit of economic development, analysts and practitioners tend to consider the advantages--economic, geographic, and institutional--of one location over another. Rural areas often weigh in toward the bottom of such analyses because they enjoy few of the traditional, i.e., location-dependent, resources for development. The challenges inherent to rural development are well known: long distances, even isolation, from concentrations of population and economic activity; dependency on agriculture, manufacturing, and natural resources, all stagnating industries; work forces that are relatively uneducated and unskilled; and the general lack of institutions and individuals with expertise in development. Ironically, this dearth of formal local resources is the very reason economic development in rural communities is so necessary. Hence, the rural dilemma.

The general question underlying this dissertation is the following: Without the traditional resources to draw upon, how do rural communities find opportunities for economic development?

Three components to this question warrant some explanation: the terms "traditional resources," "opportunities," and "economic development." First, by traditional resources, I am referring to the local and regional attributes that we typically think of as development stimuli. Resources may be economic, geographic, or institutional in nature. Traditional economic resources might include, for example, a diversified industry mix, a supply of skilled labor, or agglomeration economies. Geographic resources are related to a community's location and might include proximity to urban centers and access to interstate highways. Finally, institutional resources are area organizations that can foster or even stimulate development activities; for example, research universities, development authorities, and inter- and intra-regional industrial networks.

The second component in the research question worth clarifying is the term "opportunities." By this, I am referring to the types of strategies or plans of action that communities undertake in their attempts to bring about economic development. I am interested in strategic processes, i.e., where they begin and where they end up, so to

speak. In this dissertation, I will examine the resources, traditional or otherwise, that communities identify and seek to access in their strategies for economic development. Then, I will further examine what communities do with resources--the opportunities they create--by tracing the path between starting resources and development outcomes.

The research question ends with the term "economic development." More often than not, studies about this subject fail to offer a definition for what economic development is. For this purpose of this dissertation, I rely the definition provided in the well-known works of an economist and a planner. Schumpeter (1934) defines economic development as "changes in economic life" that are initiated from inside the economy. He then contrasts this phenomenon, as he calls it, to changes stemming from influences outside the economy that happen all the time but are not economic development, merely economic life. Sixty years later, Blakely (1994) suggested how Schumpeter's "changes" come about. He defines economic development as the public sector's responsibility to "create an economic and social climate conducive to private investment ... to enable job growth and tax base expansion." Applying these definitions, there is economic development when new jobs result when a downtown redevelopment project is implemented through a public-private partnership to stimulate additional investment in the area. However, there is no economic development, per se, when new jobs result from ongoing suburban development.

In this chapter, I set the context for the remaining chapters in this dissertation. The first two sections examine rural development in more detail beginning with a brief economic history of rural America followed by a discussion of the inherent problems in the field. Then, I introduce the subject of my research--the redevelopment of closed air force bases in rural host communities during the 1990s--and outline the questions, methodologies, and principle findings from the study. The chapter closes with information on the background of military base redevelopment in the United States.

Rural communities will be the focus of this dissertation because their opportunities for economic development are so obviously limited by location. The principle findings, however, should apply to any communities that lack capacity to plan and implement economic development and/or communities faced with economic crises on the scale of military base closures in which redevelopment can be a daunting task regardless of urbanization.

A Brief History on Rural America

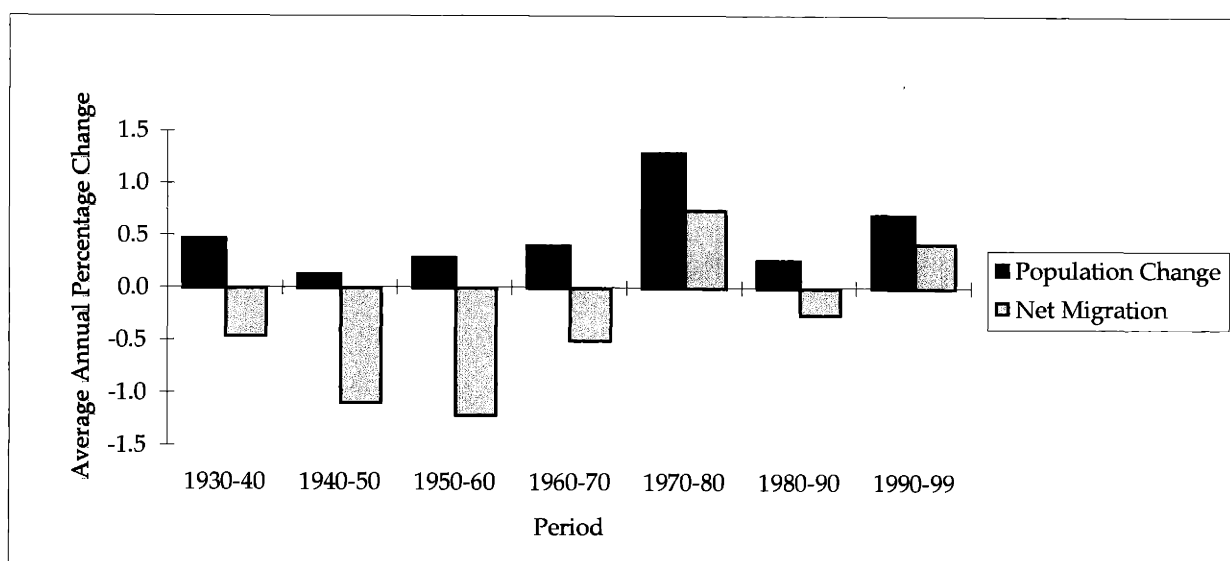
My inquiry into opportunities for rural development is well timed. Rural America¹ is undeniably rich in open space, landscapes, and quality of life but the charm of Mayberry R.F.D., the archetypal small town in *The Andy Griffith Show*, has not always been enough to sustain populations. Net migration for nonmetropolitan regions in the United States was negative for much of the last century (Figure 1.1) due to a succession of economic losses. An analysis of nonmetropolitan economic indicators between 1950 and 1990 reveals the character of those losses and the fact that most rural communities are still struggling to recover. During the 1950s and into the 1960s, one-half of all farm workers lost their jobs to increased mechanization in farming processes. Since then, family farms have all but disappeared unable to compete with the production efficiencies of large agri-businesses. In the 1970s, mergers in the railroad transportation sector led to the capping of rail lines that had long connected rural and metropolitan industries. Thus, the importance of proximity to the nation's relatively new interstate system became increasingly important to rural producers. During that same decade, there was phenomenal growth in rural manufacturing when many American industries moved their facilities out of urban areas in search of the lower production costs. But high-wage manufacturing jobs essentially made a pit stop in rural regions until manufacturers moved again in the 1980s, this time off shore to locations where the costs of land and labor were lower still. The 1980s also saw decline in natural resources industries, such as mining and lumber, typically produced in rural areas.

The occasional rise, but mostly ebb, in rural fortunes impacted population growth, which has been minimal for most of the last half century. Rural in-migration exceeded out-migration in only two decades: the 1970s and the 1990s (Figure 1.1). The first growth spurt has been researched at great length. Analysts have shown that the relatively well-known rural turn-around of the 1970s was an outcome of the deindustrialization in domestic manufacturing described in the last paragraph (Bluestone and Harrison, 1982). Population trends also reveal the brevity of rural gains in manufacturing. During the 1980s, rural net migration resumed its negative course

¹ Throughout this paper, the terms "rural" and "nonmetropolitan" are synonymous and refer to areas not located within metropolitan regions. The U.S. Census Bureau defines a metropolitan region as a core area with a large population nucleus, plus adjacent communities having a high degree of economic and social integration with the core.

along with minimal population growth. Once again, analysts have shown what ended the sudden growth in rural manufacturing: globalization (Glasmeier and Conroy, 1994, and Long, 1987). The cost of production in the rural south, while low for the United States, was still high relative to most other countries. Increased global competition was also responsible for reduced demand for natural resources. Canadian lumber, for example, often sells for less than lumber produced on this side of the border in northern Maine (Loring Readjustment Committee, 1980).

Figure 1.1
Rural America: Population Change and Net Migration,* 1930-1999



Source: Johnson (1999)

* Despite negative net migration, rural population grew because natural population growth (the number of births less the number of deaths) consistently exceeded net migration (the number of people moving in less the number moving out).

Rural migration in the 1990s is still under investigation. Those who support the concept of a rural rebound suggest that it may be evidence of an emerging trend of deconcentration in the population due to technological advances in communications and transportation (Johnson, 1999). Another possibility is that it may be a renewal of the 1950s "white flight" phenomenon. Frey and Liaw (1998) found a correlation between large-scale immigration in major metropolitan areas and the out-migration of white residents. Whatever its causes, the rural rebound, it seems, was even shorter than its popular predecessor. According to the U.S. Department of Agriculture (USDA)

Economic Research Service (2000), positive net migration in rural areas had peaked by the mid-1990s. Thereafter, rural population increases lessened.²

Table 1.1
Economic Indicators for Metropolitan and Nonmetropolitan Counties, 1970-1990

Economic Indicators	1970	1980	1990
Metropolitan Counties:			
10-Year Population Growth	17.2%	10.6%	11.9%
Per Capita Income*	\$4,191	\$10,111	\$15,542
Unemployment Rate	4.3	6.9	6.1
Persons-in-Poverty Rate	8.7	11.4	12.1
College Graduates (% of age 25+ pop)	11.8%	17.9%	22.5%
Nonmetropolitan Counties:			
10-Year Population Growth	2.5%	14.3%	3.2%
Per Capita Income*	\$2,882	\$7,535	\$10,904
Unemployment Rate	4.7	8.1	6.9
Persons-in-Poverty Rate	16.6	15.7	16.8
College Graduates (% of age 25+ pop)	7.3%	10.9%	12.9%
Nonmetropolitan/Metropolitan Gap			
Difference in Population Growth**	-14.7	+3.7	-8.7
Ratio of Per Capita Incomes	0.69	0.75	0.70
Difference in Unemployment Rates**	+0.4	+1.2	+0.8
Difference in Poverty Rates**	7.9	+4.3	+4.7
Difference in College Graduates**	-4.5	-7.0	-9.6

Source: U.S. Bureau of the Census (1979, 1982, & 1986)

* Current dollars.

** Percentage point differences.

Claims of a turn-around and rebound are optimistic characterizations of rural America based largely on population trends alone. More likely, rural America is poor and getting poorer. Economic indicators for nonmetropolitan areas in the United States

² In the 1990s, the number of births or fertility rate was comparable between rural and metropolitan areas for the first time.

have typically lagged those for metropolitan areas (Table 1.1). Nonmetropolitan residents earn substantially less and have less education than metropolitan residents, and they are more likely to live in poverty. Unemployment has been consistently higher in nonmetropolitan areas. In fact, the only incident in which a nonmetropolitan economic indicator exceeds that for metropolitan areas was 1970-80 population growth when rural manufacturing enjoyed a brief employment boom. In a more detailed analysis, Henry (1993) showed a steady increase in the ratio of nonmetropolitan to metropolitan unemployment rates between the mid-1970s and the late 1980s as well as a rapid decrease in the same ratio for earnings per capita. Glasmeier and Howland (1995) found that rural dependency upon traditional industries (agriculture, natural resources, and manufacturing) persisted into the 1990s, despite the consequent stagnation in social and economic progress, while the rest of the country shifted toward advanced business services to support the new economy. By the end of the twentieth century, many rural communities were faced with the dilemma of needing economic development but seemingly lacking the resources to make it happen.

The Problem of Rural Development

The problem of rural development or lack thereof is not so much about the multiple causes of economic instability, however, but about the shortage of remedies. We know what has happened: long-term dependence upon the traditional, but stagnating, industries; economic losses brought on by global competition; and a largely unskilled, uneducated work force. The real problem is we do not know what to do about the lack of rural development because regional theories tend to focus on attributes of location for economic development, such as agglomeration economies or comparative advantage in production, industry networks or specialized work-force skills. Accordingly, the more place-based magnets there are in a region, the better its chances for development. Because rural economies are small, usually isolated, and too dependent upon a single industry, we expect that they have fewer opportunities for development. And, because rural communities often lack institutional or individual development expertise, we expect that that they also lack the capacity to pursue development.

Rural development is certainly difficult but, by no means, an oxymoron. The

purpose of this dissertation is to examine how rural communities approach economic development despite the many challenges they face in doing so. I argue that, although rural locations may be disadvantaged in terms of development, there are strategies that communities can and do pursue that enhances their development capacity. Enhanced development capacity not only aids communities in overcoming the negative impact of economic crises like military base closures, for example, but also improves their ability to withstand future economic downturns--seemingly inevitable given the economic history of rural America.

A Study of Military-base Redevelopment in Rural Communities

Military-base closures during the 1990s provided me the ideal opportunity to study the problem of rural development. Among the 28 air force bases to close, the focus of this study,³ six were located in nonmetropolitan counties. The rural host communities were faced with the same challenge as their metropolitan counterparts: to convert what was once military property for civilian reuse. But, the rural host communities had fewer alternatives for redevelopment given their locations. Nonetheless, they needed to redevelop bases in order to ameliorate the negative impact of closures and, in some cases, to attempt to stem decades of economic decline.

Part I: Comparing Nonmetropolitan and Metropolitan Host Communities

The study entailed two distinct parts. In the first part, I conducted a comparative analysis of development capacity and progress in base redevelopment between the rural and metropolitan groups. I gathered four types of data for all 26 host communities⁴ of air force base closures: (1) the incidence and type of area organizations that aided base redevelopment activities (source: Stanley, 1997); (2) county-level economic indicators, the last decennial census prior to base closures (source: U.S. Bureau of the Census); (3) urbanization codes (source: Butler, 1990); and (4) milestone data on the progress of host communities in base redevelopment (source: Air Force

³ I chose to focus on air force base closures for three reasons: (1) so that redevelopment opportunities were comparable between communities in terms of base property; (2) so that the military bureaucracy was comparable; and (3) because there were more rural host communities impacted by air force base closures than any other branch of the service (there were two rural closures in the Navy and seven rural closures in the Army but most of these were depots where employment was often minimal).

⁴ There were two less host communities than air force bases to closes because two metropolitan communities (both of which were located in California) were host to two closing bases each.

Base Conversion Agency). The goal of this first part of the study was to find out how, if at all, base redevelopment differed between the rural and metropolitan host communities. The following two questions guided my analyses:

- How did development resources in the rural group of host communities compare to that in the metropolitan group?
- Did rural locations impede base redevelopment?

Given the many disadvantages to rural development discussed earlier, I expected the rural group to have fewer resources and, therefore, to have made less progress in base redevelopment. As will be shown in Chapter Three, I found this to be only half true. The rural group did have fewer of the more traditional resources for development. Based on my analyses of economic indicators and urbanization codes for all host communities, I found significant economic and geographic gaps between the two groups. Based on the responses to a survey I conducted of redevelopment authorities (Stanley, 1998), I also found that there were fewer development institutions among the rural host communities as compared to the metropolitan host communities. The rural group appeared to be at a disadvantage going into the base redevelopment process, but, they were, nevertheless, relatively successful at it. Based on my analysis of DoD data on redevelopment progress at closure sites through the year 2000, I found that the rural group had been slightly faster at reuse planning and facility leasing than the metropolitan group. Furthermore, they had replaced virtually all the jobs they had lost due to base closures through their redevelopment projects while the metropolitan group was still short of that milestone.

Part II: Explaining the Relative Success of Rural Base Redevelopment

This last finding may be the most significant of the first part of the study for two reasons. First, it corroborates the findings of an earlier study comparing metropolitan and nonmetropolitan redevelopment of bases closed in the 1960s to 1970s (Rowley and Stenberg, 1993). Second, rural success at job replacement is surprising. Location did not appear to impede the progress of rural host communities in reuse planning and base redevelopment. Somehow, the six rural host communities were able to overcome the limitations of their locations (four bordered Canada), which led to my inquiry in the second part of the study:

- How did the rural host communities do it...how did they approach reuse

planning and generally succeed at base redevelopment?

For the second part of the study, I narrowed the field of host communities to just four--one metropolitan and three rural. I conducted case studies in: (1) Blytheville, Arkansas, home of the former Eaker Air Force Base; (2) Limestone, Maine, home of the former Loring Air Force Base; (3) Oscoda, Michigan, home of the former Wurtsmith Air Force Base; and (4) Rantoul, Illinois, home of the former Chanute Air Force Base and located within the Urbana-Champaign metropolitan region. The three rural host communities were selected out of the pool of six because they were among the earliest to close and, therefore, had had more time for base redevelopment to occur prior to case study.⁵ The one metropolitan host community was not selected, per se. I conducted a case study of Chanute redevelopment, while working on the MIT Military Base Redevelopment Research Project. However, Chanute was also among the earliest bases to close.⁶ In every community, I interviewed the leaders and participants in reuse planning and base redevelopment, Air Force personnel, media representatives, merchants, and tenants of former Air Force facilities. I also examined their strategies at every step in base redevelopment: organizing, planning, facility leasing, property acquisition, and, for some, property sales. My goal in this part of the study was twofold: to identify any and all resources that factored into base redevelopment and to identify common development strategies for the access and use of those resources.

Importance of Federal Resources in Base Redevelopment:

I expected that the relative success of the rural host communities in base redevelopment had to do with the federal resources available to them as a result of base closure. Unlike plant closures among manufacturing firms in which employees were laid off and private facilities left vacant all within a very short period of time, air force

⁵ Eaker, Limestone, and Wurtsmith Air Force Bases were all targeted for closure in the 1991 round and subsequently closed between late 1992 and mid-1994. Grissom AFB was part of the same round and closed in mid-1994. I did not include it as a case study because I wanted to keep the group to just three rural host communities and because the Air Force retained use of the Grissom runway so that only part of the base transferred to the community for redevelopment.

⁶ The metropolitan host community may not have been formally selected for this study but it proved to be a useful point of comparison. Rantoul, Illinois, is a small city (1990 population: 17,212) located in a smaller metropolitan region than many of the other host communities of air force base closures. The community did enjoy greater development capacity at the onset of base redevelopment but, having depended on the Air Force employment for 75 years, local leaders still worried about becoming a ghost town after base closure.

base closures during the 1990s took time and involved substantial federal assistance in the form of funding, technical assistance, and property on base. The four case-study communities had 17 to 57 months to plan base reuse before the Air Force moved out leaving behind a minimum of 2,125 acres of land to be redeveloped with the aid of millions of dollars in grants from just two federal agencies that assisted base-closure communities (Table 1.2).

**Table 1.2
Federal Resources for Case-Study Communities (n=4)**

Federal Resources	Blytheville, AR (Eaker)	Limestone, ME (Loring)	Oscoda, MI (Wurtsmith)	Rantoul, IL (Chanute)
Reuse Planning Time-- Months between base closure announcement and operational shut down.	17	39	24	57
Surplus & Reverted Property-- Base acreage transferred to host communities.	3,286	5,770	4,626	2,125*
Funding ⁷ -- Federal grants awarded to host communities in support of base reuse planning and redevelopment.**	\$2.7 OEA 8.5 EDA <u>0.0 FAA</u> \$11.2 total	\$2.9 OEA 4.6 EDA <u>0.0 FAA</u> \$7.5 total	\$2.0 OEA 9.7 EDA <u>0.1 FAA</u> \$11.8 total	\$1.6 OEA 7.6 EDA <u>0.9 FAA</u> \$10.1 total

Sources: Air Force Base Conversion Agency (2001)
U.S. General Accounting Office (1998)

* Includes 762 acres that the Air Force sold directly to private developers via the U.S. General Services Administration.

** Office of Economic Adjustment (OEA) grants applied to reuse planning; Economic Development Administration (EDA) grants applied to infrastructure upgrades, marketing, etc.; Federal Aviation Administration (FAA) grants applied to runway upgrades.

The availability of federal resources explains part, though not all, of the success

⁷ The Departments of Labor (DoL) and Housing and Urban Development (HUD) also provided funding to host communities but are not listed in the table because they were not applied to reuse planning and base redevelopment, per se. DoL training grants of (\$1-3 million) funded retraining programs for federal civilians who lost jobs due to base closure. HUD also came to the aid of federal civilians and military personnel who, upon moving out of host communities, could sell their homes to HUD--a welcome alternative to waiting for their homes to sell in markets flooded by oversupply of units due to base closure.

of rural base redevelopment. This finding corroborates those of past studies on the importance of federal funding in stimulating rural development (e.g., Honadle, 1987, Howland and Miller, 1988, and Isserman, 1997). Furthermore, Honadle (1987) showed that, while federal funding made a difference, some communities in her study on the investment of Urban Development Action Grants in rural areas failed to derive as much benefit as others due to their lack of capacity, i.e., they had problems managing development activities. Given Honadle's conclusion, perhaps, the single most important federal resource in rural base redevelopment was the early technical assistance provided by the Office of Economic Adjustment (OEA) that, in effect, helped the host communities build local capacity to plan and implement large-scale public development. Table 1.2 shows that OEA also subsidized the cost of reuse planning, somewhat more so for the rural host communities in the case studies than the one metropolitan host community. Unlike Rantoul, Illinois, where the mayor was a strong project leader from the time of the base closure announcement and where there was already an economic developer on the municipal staff, organizing for reuse planning in the three rural host communities meant finding a leader, hiring an economic developer, and creating legal entities to manage base redevelopment. Surprisingly, the communities' efforts at establishing development capacity did not take much time (see Table 4.2) but it did require additional assistance from OEA. Table 1.2 also shows, however, that, while the rural host communities did benefit more from OEA, total federal funding for base redevelopment was fairly comparable across all four host communities subject to case study.

Federal grants and technical assistance were not the only types of resources available to the host communities. The most obvious resource and, potentially the most valuable, was the property left behind by the Air Force--e.g., housing, runways, administrative buildings, furniture, and equipment--that host communities attempted to acquire and capitalize upon during base redevelopment. Two past studies of rural base redevelopment (Isserman and Stenberg, 1994, and Rowley and Stenberg, 1993) cite the potential in the property on base in fostering opportunities for redevelopment. This study takes that notion several steps further by showing how host communities managed to turn federal property into local assets for economic development. Federal resources for base redevelopment may have been somewhat simple to identify but they were not always so easy for host communities to acquire.

Role of Residents as Informal Local Resources:

The availability of federal resources in base redevelopment was critical, but it explained only part of the success of rural communities. I found that rural host communities relied on local resources, mostly informal (i.e., residents), as much as they did federal resources in base redevelopment. Residents were stakeholders in the outcome of base redevelopment. This was especially the case in rural host communities where fears of becoming a ghost town after base closure were not at all uncommon among residents. Given the opportunity, dozens of residents in each of the host communities studied agreed to participate in base reuse planning. In the rural host communities, however, one resident--never an elected or public official--also emerged to lead the project of base redevelopment. These local leaders committed their time, literally years, to guiding their communities through an unknown process during which air force bases closed after several decades in operation and plans were implemented to replace the jobs lost as a result. Resident participants and local leaders often had little or no relevant experience when reuse planning began but they contributed to their communities' growing development capacity. By the end of the study period, there was substantial development expertise among the host communities studied, much of it held by local residents who "learned on the job" by participating in reuse planning and, for a few, in base redevelopment as well.

Preview on the Implications of the Study:

The findings of this study should be useful to the field of rural development for practitioners and academics alike. In Chapter Six, I suggest three major implications of my research. First, the study shows how asset-building strategies have been successfully applied in helping rural communities overcome the long-standing problem of economic development in the absence of place-based stimuli. The literature on asset building is relatively recent and, thus far, there have been few analyses of application. Furthermore, there are lessons to be learned from the study on when strategies are most effective and when they are not. A second implication of my research is the confirmation of the importance of federal aid for local economic development planning. Federal resources, such as technical assistance and planning subsidies, made up for the lack of development capacity in rural host communities at the onset of base

redevelopment projects and, equally important, helped communities accumulate long-term development assets to ensure project continuity after federal assistance ended. Finally, the third implication is relevant specifically to military-base redevelopment. The communities in the study were not only rural but also host to military base closures. Therefore, the asset-based development strategies analyzed in the study may guide host communities impacted by future rounds of base closures scheduled to begin in the year 2005. And, unlike the vast majority of base redevelopment studies, this one focuses on, rather than marginalizes, the experiences of rural host communities.

In the remainder of this introductory chapter, I offer the reader a brief background on military base closures during the 1990s in order to provide some context for the following chapters. I concentrated my research on air force base closures during that time, but there were closures among all three branches of the U.S. Armed Forces: the Navy, the Army, as well as the Air Force. The legislation mandating the defense draw down treated all facilities as potential targets for closure. Virtually no communities welcomed the prospect of base closures. Many fought the decisions but reversals were unusual. By the end of the decade, approximately 100 communities had undertaken the formidable tasks of converting military bases for civilian reuse.

Background on Military-Base Closures in the United States

The fact that operations at just over one-hundred military installations shut down or were realigned between 1991 and 2001 is significant. It was the largest closure effort in the history of the United States. It was also long in coming. There were no base closures during the 1980s, and although many bases had been targeted for closure during the 1970s, many decisions were reportedly overturned following community opposition. The Department of Defense (DoD) wanted to discontinue ineffective and/or inefficient operations, but the host communities of military installations did not want to lose the jobs and demand for goods and services generated through base operations. For a while, host communities were able to influence when or where base closures occurred because legislation enacted in the 1970s required the DoD to notify Congress of any proposed base closures ahead of time. The new regulations also required the DoD to prepare its analyses of the environmental and economic impacts of identified base closures on host communities. According to the U.S. General Accounting Office (1997), the inevitable political battles it faced discouraged the DoD

from attempting to close any of its facilities.

Congress' objection to military base closures abated as the federal budget deficit grew to astronomical levels by the end of the 1980s. The end of the Cold War reinforced the need for military downsizing. In 1988 and again in 1990, Congress enacted the Defense Base Closure and Realignment Acts (BRAC) enabling four rounds of base closures through 1995.⁸ Air force bases were among the first military installations to close. Almost one-half of the bases announced for closure in late 1988 belonged to the Air Force. By 1995, a total of 28 air force bases had been targeted for closure, six of which were located in rural areas.⁹

The initial response of host communities to base-closure announcements was no different in the 1990s than it had been two decades earlier. Residents and local officials objected and argued against closure decisions by lobbying their representatives in Washington, D.C., and by filing lawsuits against the DoD claiming erroneous application of the BRAC criteria for closure.¹⁰ Decision reversals were as uncommon in the 1990s as they were commonplace two decades earlier. Only one closure decision regarding an air force base was later reversed.¹¹ Consequently, the vast majority of host communities stopped trying to save their bases from closing within the first year after the closure announcement.

Even as they were arguing against closure, host communities typically started to organize for base-reuse planning. Economic development was a common component, if not the driving force, behind redevelopment strategies of host communities. The most obvious impact of base closures was job losses. Hundreds, and sometime thousands, of people were employed at the bases slated for operational shut downs during the 1990s. Consequently, approximately 275,000 military and federal civilians lost their jobs and/or transferred out of host communities; nearly 100,000 of those jobs were on

⁸ Specifically, Congress announced closures in 1988, 1991, 1993, and 1995.

⁹ Rural areas are defined as those in which the former base was located in a nonmetropolitan county.

¹⁰ The three BRAC criteria for base closure, listed in order of priority, were: (1) relative usefulness with military mission; (2) potential return on investment in closure (savings in operations costs and profit from real estate); and (3) the forecasted regional impact of closure. It was not until the last closure round in 1995, however, that the BRAC Commission, a bipartisan group appointed by Congress in 1988 to make final recommendations on the closure/realignment of military installations, devised a consistent method for evaluating economic impact for use by the different branches of the military.

¹¹ MacDill AFB in Tampa, Florida, was targeted for realignment in 1991. In 1993, BRAC reversed that decision but shifted control of the facility from the DoD to the Department of Commerce, previously a tenant at the site.

former air force bases. Rural host communities especially felt the brunt of the job losses because federal jobs comprised significant shares of regional employment; for example, military jobs comprised 8 to 22 percent county-wide employment in 1990 (Table 1.3).

But base closures impacted far more than employment; local schools, businesses, and housing markets all endured setbacks. Military dependents often comprised the majority of local student populations in rural communities. School closings and teacher layoffs were common immediately following base closures. Local businesses that depended upon the military's demand for local goods and services often shut down along with the bases. As federal civilians transferred to new jobs in other parts of the country, local housing markets were flooded with over supply of vacant units, and prices fell.

Table 1.3
Military and Federal Civilian Jobs in Rural Host Communities, 1990

Rural Host Community	County Employment				
	Total	Military	% of Total	Federal Civilian	% of Total
Blytheville, Arkansas* / Mississippi County	28,010	3,320	12%	801	3%
Gwynn, Michigan / Marquette County	34,686	3,637	10%	1,198	3%
Limestone, Maine* / Aroostook County	44,309	3,676	8%	1,715	4%
Oscoda, Michigan* / Iosco County	15,245	3,290	22%	1,230	8%
Peru, Indiana / Miami County	16,689	2,553	15%	1,313	8%
Plattsburgh, New York / Clinton County	42,854	3,827	9%	1,466	3%

Source: U.S. Bureau of Economic Analysis (2001a)

* Rural host communities subject to case study.

Converting air force bases for civilian reuse was a formidable undertaking for host communities regardless of location. They were enormous spaces with diverse uses. In many ways, they were like small towns with plenty of housing, abundant indoor and outdoor recreation, commercial and office buildings, schools for the children

of military families, grocery stores, entertainment, and chapels. Then there were the runways (as long and wide as those found at any international commercial airport) and hangars and air-control centers. And, because it was sometimes important for the air space to be clear at all times, there were often hundreds of acres of undeveloped land on these air force bases as well.

I found in this study, however, that the physical challenges in base redevelopment were matched by the logistical challenges. Moving through the many steps in the multi-year process of base-reuse planning and redevelopment, the host communities were, at the same time, responding to multiple federal regulations while attempting to market former military facilities for civilian reuse (Table 1.4). When they formed reuse-planning committees during the first year after base-closure announcements, for example, they were responding to the DoD's requirement that one entity per host community be formally designated as the recipient of Office of Economic Adjustment (OEA) funding and technical assistance. Later, when these committees produced reuse plans, they were responding to the Air Force's requirement that host communities identify their preferred reuse alternative for the property after closure. Reuse-planning committees evolved into local redevelopment authorities either within the same organization or as newly created entities capable of receiving land, again to meet a federal requirement regarding the transfer of surplus property.

The host communities in the study attempted to understand and abide by federal regulations in order to gain assistance and/or to set up property transfer, but they also needed to accommodate market demand for the former air force facilities. Two goals for reuse were common: to create new jobs and to generate revenues. The first full-time jobs were often created by the local redevelopment authority (LRA) where, typically, a small administrative staff took the lead in finding and setting up tenants to move on site after the Air Force moved out and where a much larger property maintenance staff fulfilled the caretaker agreement.¹² Revenues through rental income streams started with interim leasing typically within a year after base closure. For many host communities, this was one of the most frustrating of tasks in base redevelopment because the LRAs were, in effect, leasing property still owned by the Air

¹² Caretaker agreements usually started at the time of base closure and continued for a few years until the time of negotiated property transfers when host communities assumed financial responsibility for property maintenance.

Force to civilians. The military needed months to review and approve leases, but prospective tenants wanted to move in as soon as possible. As a result, the LRAs were often caught in the middle trying to satisfy Air Force regulations and job-generating tenants at the same time. Interim leases were necessary until the time of property conveyance; afterwards, LRAs negotiated leases directly with tenants without Air Force review.

The burden of base redevelopment fell, in large part, to host communities. However, some parts of the long process were out of their control. During the federal screening process, for example, federal agencies were invited to seek transfer of property declared as excess to the air force before it became surplus and, therefore, available for local reuse.¹³ Host communities, particularly those in rural locations, often wanted federal reuse because it typically generated jobs and reduced the amount of property left vacant by base closure.¹⁴ Another problem was repeated delays in documentation required for property disposal. The military, for example, was responsible for producing the Environmental Impact Statement (EIS) that helped solve problems of hazardous wastes on site and included plans for clean up.¹⁵ The military also produced the Record of Decision (ROD), a document detailing its plans for the transfer of all base property. Host communities were not involved in the production of these plans, but they depended on them for information and as prerequisites for property transfer. Local residents and the LRAs were apprised of environmental hazards on base through the EIS. The negotiation of property conveyances from the military to state or local organizations could not begin until the RODs covering every acre and facility on closing bases were finalized.

Table 1.4 at the end of this chapter summarizes the many stages in base

¹³ The disposal of federal property entails several steps. Within the context of military base closures, the first step was the Congressional announcement of base closure or realignment summarizing the shut down or transfer of the various activities on base. Second, the Air Force, for example, identified acreage that was in excess of its mission. Third, federal agencies could request transfer of excess acreage during the federal screening process. Fourth, the Air Force then identified any property still available at the end of the screening process (limited to six months starting in 1994) as surplus.

¹⁴ Only one rural air force base attracted federal reusers.

¹⁵ The requisite environmental clean up of closed air force bases was a considerable task that is still underway at most sites. It is not unusual for some parcels at closed air force bases to be on the U.S. Environmental Protection Agency National Priority List (i.e., a Superfund site). Host communities were not responsible for the clean-up costs (typically several millions of dollars) but were often inconvenienced by either the clean-up process or the consequent delays to redevelopment. The environmental component to base redevelopment is an important one but I will not address it in this dissertation. For more information, see a report on the subject by the U.S. General Accounting Office (1995).

redevelopment as experienced in the 26 host communities of air force base closures. The first five years, discussed thus far, were the busiest, during which host communities organized their long-term base redevelopment projects. Host communities, particularly those in rural areas, pushed the process forward so that they could generate jobs through reuse as quickly as possible; ideally following base closure and the final exodus of the air force work force. During years five through ten, organizing ended, and redevelopment was well underway. The federal government phased out its support as host communities grew more capable of managing base redevelopment on their own. Jobs generated in base redevelopment replaced the total number of lost federal civilian jobs sometimes within five years of the base closure announcement--an important milestone for host communities as a measure of recovery. But, because environmental clean up at former military bases typically took several years, the Air Force could only transfer title to parcels as they were cleared of contamination. The cleaner the property, the faster ownership transferred. Golf courses, for example, were often among the first parcels to transfer. Residential property deeds transferred earlier than industrial property . The longest transfers related to property once used for decades in a hazardous manner, such as refueling areas, fire-control training, and artillery ranges. In fact, the air force still technically owns property at all the closed bases in this study due to its responsibilities for environmental clean up prior to final deed transfers.

Structure of Dissertation

This dissertation is comprised of six chapters. In this introduction, I pose the general questions underlying my research and describe the study designed to provide answers. Chapter Two is a literature review of the research most relevant to this research including that on regional development, community development, rural development, and military-base redevelopment. I present the findings of my study in Chapters Three, Four, and Five. Chapter Three contains two comparative analyses, first of the development resources available to the groups of rural and metropolitan host communities, and second of their respective progress through base redevelopment. I found that rural location did not impede base redevelopment. Despite significant economic, geographic, and institutional gaps between the groups, their progress through base redevelopment was comparable. Chapter Four is an analysis of the local

resources accessed and capitalized upon by the rural host communities. Likewise, Chapter Five is an analysis of the federal resources accessed and capitalized upon by the rural host communities. I found that as host communities accumulated development assets derived from local and federal resources, they increased their capacity to accomplish base redevelopment in the short term and, ultimately, local economic development in the long term. Unlike past economic crises so common in rural communities, I suggest that base closures could actually improve, rather than impede, development opportunities through effective and creative implementation of asset-building strategies. Finally, I outline the implications of my research in Chapter Six, the conclusion to this dissertation.

Table 1.4
The Process of Base-Reuse Planning and Redevelopment

YEAR 1
<p><u>Reuse-planning committee:</u></p> <p>A committee organized to produce the base reuse plan. In order to receive federal funding to assist reuse planning, the host communities formally identified the committee to the DoD OEA. Among the host communities in the study, reuse-planning committees were affiliated with local governments, local chambers of commerce, and /or existing regional development organization. Over the course of 1-2 years, committee members met to discuss alternatives for base redevelopment, hire a planning consultant, and decide upon a preferred base reuse. Typically, reuse-planning committees disbanded once they submitted the base reuse plan to the Air Force.</p>
<p><u>Federal Screening Process:</u></p> <p>The screening process for the transfer of excess Air Force property to other federal agencies began as soon as Congress announces base closure. The property left unclaimed during the six-month-or-longer screening process then became surplus and was available to state and local governments upon their request for transfer through a variety of conveyance methods. Only one of the rural host communities attracted job-generating federal reuses.</p>
<p><u>Federal Assistance:</u></p> <p>Soon after Congress announced base closures, the Department of Defense (DoD) Office of Economic Adjustment (OEA) assigned program managers to help host communities in base-reuse planning. The OEA provided technical assistance and planning grants for several years into the process.</p>
<p><u>Planning Consultant:</u></p> <p>The reuse-planning committee typically hired a planning consultant to produce the base reuse plan. Consultants helped with all the work that went into reuse planning including doing property inventories, conducting market feasibility studies for alternative reuses under consideration, holding public hearings on reuse plans, and plan production.</p>
YEAR 2
<p><u>Local Redevelopment Authority:</u></p> <p>The reuse-planning committee evolved into or was replaced by the local redevelopment authority (LRA), an organization legally capable of receiving the transfer of federal surplus property. These organizations were responsible for implementing base reuse plans by attracting tenants to reuse former air force facilities and to, ultimately, gain control of the surplus property. The LRA also served as a conduit for federal assistance from the OEA as well as other agencies such as the Economic Development Administration and the Federal Aviation Administration. Among the host communities in the study, the LRAs took the form of quasi-government state authorities or local government agencies.</p>
<p><u>Base Reuse Plan:</u></p> <p>The reuse-planning committee with the help of the planning consultant and the LRA submits the base reuse plan to the Air Force. The purpose of the plan is two-fold: (1) to identify how the host community plans to reuse the available surplus property; and (2) to serve as a prerequisite for property transfer. Base reuse plans were typically 100+-page documents listing preferred and alternative reuses approved by the host community.</p>
<p><u>Base Downsizing:</u></p> <p>The Air Force typically began to downsize well before its assigned closure date. As base operations were reduced at the sites, both military and federal civilian workers began to transfer to new jobs often outside the region. By the formal closure date, there were often only a few personnel working on site.</p>

Source: The author.

**Table 1.4 (continued)
The Process of Base-Reuse Planning and Redevelopment**

YEAR 3
<p><u>Environmental Impact Statement:</u></p> <p>For each closure site, the Air Force produced Environmental Impact Statements (EIS) as required by the National Environmental Policy Act. These documents offered analyses on the environmental consequences of and the level of clean up necessary for the preferred and alternative reuse alternatives identified in the host communities' base reuse plans. In the process of producing the final EIS, the Air Force held public hearings to invite comments and questions from host community residents on environmental issues.</p>
<p><u>Caretaker Agreement:</u></p> <p>For each closure site, the Air Force negotiated a multi-year agreement, typically with the LRA, for property maintenance following base closure through the time of property conveyance(s).</p>
<p><u>Operational Closure:</u></p> <p>The Air Force formally shut down base operations on a prescribed date and then opened the gates to the property. The only Air Force personnel that remained at closure sites were assigned to the Air Force Base Conversion Agency (AFBCA) responsible for managing the process of cleaning up and then transferring surplus property to host communities.</p>
YEAR 4
<p><u>Interim Leasing:</u></p> <p>The LRAs started to lease former air force facilities as soon as, and sometimes before, base closures. Because the LRAs had no legal control to surplus property until conveyances were finalized, they first served as liaisons between prospective tenants and the AFBCA in negotiating interim leases.</p>
<p><u>Record of Decision:</u></p> <p>For each closure site, the Air Force produced one or more Record(s) of Decision (RODs) documenting its decisions as to the disposal of surplus acreage. In RODs, property transfers methods were identified.</p>
<p><u>First Major Conveyance:</u></p> <p>The Air Force and the LRA finalized negotiations on the first major conveyance of part or all of the surplus property. Among the host communities in the study, Airport Public Benefit Transfers and Economic Development Conveyances were the most common transfer methods for substantial parcels of property. Airport PBTs were sponsored by the FAA to facilitate the conversion of aviation property to commercial airports. The LRAs gained control of such property at no cost through long-term leases. After EDC negotiations, the LRAs first gained control of the property through leases in further of conveyance until the Air Force could legally hand over the deeds to parcels covered by the transfer.</p>
YEARS 5 - 10
<p>The OEA stopped providing technical assistance or planning grants to host communities as they moved further into base redevelopment.</p> <p>The Air Force slowly phased out its caretaker agreements with LRAs as surplus property was fully conveyed to host communities.</p> <p>Job generation continues and, for many host communities, the federal civilian jobs lost to base closure are fully replaced.</p> <p>Among the closure sites in the study, the last remediation for environmental clean up was projected to be in place, on average, ten years after closure announcements.</p>

Source: The author.

Chapter Two

Explaining What Happened in Rural Base Redevelopment

Military-base closures are always a cause for concern in rural host communities. The resulting job losses could be substantial. Air Force bases that closed during the 1990s, the focus of this study, had employed between 2,050 and 2,900 military personnel and between 350 and 1,300 federal civilian workers in rural host communities that, when totaled, was the equivalent of 6 to 24 percent of county-wide employment at the time of the base closure announcements (Office of Economic Adjustment, 1993-2000).¹⁶ The indirect effects of base closures could be equally daunting, especially in rural areas. Student enrollment in area schools might decline, causing teacher layoffs and school closures. Military retirees who once depended might lose their access to healthcare. Rural housing markets might easily be flooded with excess supply as federal civilians transfer to new jobs outside the region. And local businesses, particularly those located in the immediate vicinity of closed bases, might suffer the loss of clientele.

There is a growing literature on what host communities can expect from military-base closures. Most of it concentrates on the majority of base-closure sites, i.e., those located in metropolitan areas (e.g., Daicoff et al., 1970, Dardia, 1996, Frieden and Baxter, 2000, Lynch, 1970, Vigier et al., 1996), but some of it focuses on the experiences of rural host communities (e.g., Isserman and Stenberg, 1994, and Rowley and Stenberg, 1993). The rural base-redevelopment studies were particularly useful in that they corroborated some of the findings of this study.¹⁷ For instance, one of the principle and early findings of this study is that the nonmetropolitan host communities exceeded the metropolitan host communities at replacing lost federal civilian jobs (due to base closure) through base redevelopment activities. Rowley and Stenberg (1993) reported a similar result in their comparison of military-base closures in nonmetropolitan and

¹⁶ In metropolitan host communities, the Air Force bases that closed during the 1990s had employed between 90 and 5,240 military personnel and between 140 and 10,900 federal civilian workers in rural host communities; when totaled, the equivalent of 0.2 to 8 percent of county-wide employment at the time of the base closure announcements .

¹⁷ While there were similar findings between this study and the two previous studies of rural base redevelopment, the conclusions differ based, in large part, on difference in scope. Isserman and Stenberg (1994) and Rowley and Stenberg (1993) analyzed the outcomes of redevelopment well over a decade beyond the time of base closures while I analyzed the processes of redevelopment during the first decade after base closure. Both studies will be discussed in detail later in the chapter.

metropolitan counties stemming from the 1960s and 1970s.¹⁸ I also found, as did Rowley and Stenberg (1993), that job losses due to base closures in rural host communities comprised a greater share of total employment than they did in metropolitan host communities.

Relatively successful job replacement following military base closures in rural areas merits further examination. Small-scale redevelopment, at least when compared to that in metropolitan host communities was, perhaps, a more realistic expectation of rural host communities. Not only was the economic impact of base closures potentially severe, particularly given the recent economic history of rural America (see Chapter One), but opportunities for redevelopment among rural host communities were also limited. Rurality is defined by the absence of concentrations in either population or economic activity, both of which factor strongly in regional development (Isard, 1975, Krugman, 1990, Porter, 1991). Furthermore, rural analysts have shown that even mobile resources like skilled work forces are unstable as rural residents, once educated, tend to migrate to urban locations where they earn better wages (McGranahan and Gelfi, 1991). Despite such expectations to the contrary, however, the rural host communities recovered from base closures.

The purpose of this chapter is to establish a conceptual framework for explaining what happened in rural base redevelopment. First, I provide a review the literature to date in search of explanations that already exist as to how development occurs in places that lack the capacity to make it happen, i.e., like rural host communities. Second, I show how this study will contribute to the existing body of research. I argue that, while rural areas tend to be marginalized, according to regional analysts, asset-building strategies have been proposed by rural and community development analysts (e.g., Kretzmann and McKnight, 1993) and sociologists (e.g., Sherraden, 1991) that help explain what happened in rural base development. I offer a framework for analyzing the process of community asset building through which resources can evolve into long-term development assets. The optimal outcome of such strategies is that communities

¹⁸ The time frame of the Rowley-Stenberg study (1993), 1961-1988, was significantly longer but the percentage of replaced federal civilian jobs was also quite a bit higher. They reported that 299 percent of the lost federal civilian jobs were regained in 33 nonmetropolitan base-closing counties compared to 168 percent in 50 metropolitan base-closing counties. In absolute terms, the number of jobs regained was significantly higher for metropolitan areas (a finding of both this study and the Rowley-Stenberg study) but because there were fewer jobs lost in nonmetropolitan areas, the percentage of regained jobs is more.

not only survive economic crises, but they also enhance their capacity to manage future economic development activities.

Fragments and Voids in the Literature

The development literature comprises several subfields of research ranging in focus from regions to communities. All have some relevance to this study due as much to what they suggest for rural base redevelopment as to what they do not. The largest, and most established, of the development subfields looks at regions. Rural areas cover far more land space in this country than do urban centers, but the predominantly place-based theories on how regions develop concentrate instead on the latter where economic activity is concentrated and diverse (e.g., Isard, 1975, Krugman, 1991, Porter, 1990, Ricardo, 1817, Tiebout, 1962).

The smaller, but more specific, body of work on rural development clearly recognizes that rural locations impact how development happens. Past research in rural development offers strategies rather than formal theories, per se, on how to stimulate development. Capacity-building strategies that stress investment in potential stimuli, such as work-force skills (e.g., McGranahan and Ghelfi, 1991) or development organizations (e.g., Murray and Dunn, 1995), begin to explain what the rural host communities attempted to do during the long process of base redevelopment.

The community development literature is the most useful of the development subfields in explaining military-base redevelopment in rural host communities. In recent years, analysts have suggested focusing on asset building for local economic development as an alternative to the place-based strategies in regional development or the typically need-based strategies in community development. At the same time, sociologist Michael Sherraden (1991) suggested that national welfare policy would be better served by focusing on developing individual assets rather than temporarily subsidizing family incomes. In both disciplines, assets are seen as a means for enhancing capacity for development whether related to one individual or to an entire community. In effect, development opportunities increase as tangible (e.g., public capital or savings accounts) and intangible assets (e.g., experience with large-scale development projects or job searches) accumulate. Consequently, communities and individuals alike improve their ability to sustain times of crisis--like military base closures or job losses--when they have assets to both cushion the impact and also

facilitate response strategies.

Studies on military-base redevelopment rarely examine the special circumstances of rural host communities. To date, two published studies have analyzed the long-term consequences of 1960s and 1970s base closures on rural host communities (Isserman and Stenberg, 1994, and Rowley and Stenberg, 1993). Both point out the potential asset value in the property left behind by the military in the form of land, structures, and personal property (i.e., furniture, equipment, etc.)--what I refer to in this study as federal resources from which community development assets can be derived. Another study of military-base redevelopment, while not focused on rural host communities, nevertheless helps explain what happened in rural base redevelopment. John Lynch (1970) suggests that "local initiative" such as the mobilization of residents, for example, mattered--what I will refer to in this study as local resources that, like federal resources, can also evolve into community assets to benefit base redevelopment.

Regional Development Theory: The Origins of Spatial Importance

Location matters in development. Reviewing the traditional development theory, an analyst might infer that nothing but geography explains why some regional economies develop while others do not (e.g., Ricardo, 1817, Tiebout, 1962, Isard, 1975, Norton and Rees, 1979). Even the more recent work leans heavily on spatial attributes of one type or another (e.g., Porter, 1990, Krugman, 1991). Because this literature is as large as it is long (going back 200 years), I examine only the traditional theories that may have once explained rural development but no longer do and the contemporary theories that seem to dismiss rural economies altogether.

The importance of location in regional development began with David Ricardo's theory of comparative advantage (1817). The 19th century economist suggested that because industries seek to minimize production costs, they relocate in pursuit of lower wages, land prices, and/or utility costs, i.e., the factors of production. The theory of factor comparative advantage helps explain the basis for the 1970s rural turnaround, referred to in Chapter One, when the domestic manufacturing industry shifted from the metropolitan northeast and upper midwest regions to rural south. During this period of "deindustrialization," as it was called by Bluestone and Harrison (1982), American manufacturers left behind their increasingly obsolete but high-maintenance production facilities in heavily unionized metropolitan regions as they moved down the nation's

new interstate highways to the south where land, labor, and utility costs were relatively inexpensive. The theory of comparative advantage also explains what happened a decade later when rural communities lost many of their coveted manufacturing jobs as American manufacturers moved again, but this time abroad, in order to take advantage of still lower production costs outside the country (Glasmeier and Conroy, 1994).

Norton and Rees (1979) explain the regional shift in manufacturing as inevitable given product cycles in production, a concept credited by the analysts as being first introduced by Alderfer and Michl (1942). "Core" regions, such as the once heavily industrialized metropolitan northeast and midwest were better suited than other regions for the early stages of product development when experimentation and gains in productivity are more likely to take place (Vernon, 1966). As a product matures, production processes become increasingly standardized, thus relying more on unskilled rather than highly skilled labor. This is when "periphery" regions, such as the rural south, entered the competition for manufacturing plants. At the time, rural communities could produce more output using less input than more urbanized areas. In effect, standardized production could take place anywhere. Norton and Rees showed that decentralized production in domestic manufacturing fostered the growth of manufacturing in less-developed nations just as it had in rural America. As a result, the phenomenon of rural manufacturing in the United States was short lived as manufacturers found off-shore sites for production operations.

Despite their comparative advantage in production costs, albeit temporary, rural areas, by definition, may never achieve another important factor in regional development: the presence of agglomeration economies. Edwin S. Mills and Bruce W. Hamilton (1984) show that urbanization was the most important prerequisite for agglomeration economies, a concept first introduced by Isard (1975), within which firms locate near like firms in order to benefit from established suppliers and product demand. As the number and variety of firms increase in a region, so do opportunities for agglomeration economies that, in turn, attract more firms.

Rural areas have also had the opportunity to benefit, again temporarily, from world-wide demand for locally produced goods and services. Charles Tiebout (1962) suggests two important benefits of export markets. First, the added demand enables firms to produce more which lowers unit production costs and increases internal economies of scale. Second, export markets help sustain regions because they can tap

into external economies; therefore, even if local demand slows due to economic downturns, firms still continue some level of production in order to meet outside demand. Of course, export markets also increase regional vulnerability to national and international economic downturns. Arguably, export markets may have caused rural economies as much harm as good during the last half century. The three traditional rural industries of agriculture, manufacturing, and natural resources have all supplied export markets and, consequently, have suffered losses as competition increased in an increasingly globalized market place (Glasmeier and Howland, 1995, Long, 1987, and Mazie and Killian, 1991). Because rural areas have depended so heavily on these industries, their economies have become unstable over time. When analysts (e.g., Glasmeier and Howland, 1995, Office of Technology Assessment, 1991) wrote of the "crossroads" at which rural America found itself at the onset of the 1990s, they were referring to the potential for continued economic decline in traditional rural industries versus the possibility of shifting rural fortunes toward alternative industries.

Michael Porter (1990) recognizes that competition between regions has evolved such that factor comparative advantage no longer adequately explains economic development for three reasons: (1) technological change; (2) comparable factor endowments; and (3) globalization. Technology has diminished the weight of once-important costs of production. Telecommunications, for example, has reduced the need for transportation. Regional factor costs are fairly comparable as infrastructure and work force characteristics have become increasingly similar across regions. Finally, firms now operate globally with suppliers and customers all over the world so that regional concentrations of either has lost its importance. Porter notes that comparative advantage still matters somewhat in regions dependent upon natural resources industries and low-skill manufacturing, i.e., rural communities. Unfortunately, like rural America, these regions are therefore susceptible to global competition. "Today's low labor cost country is rapidly displaced by tomorrow's," according to Porter (1990: p. 15).

When Porter (1990) introduced his alternative theory, called "competitive advantage," he confirmed the importance of urban locations over rural. He argues that firms relocate to be near institutions, labor supply, and/or industrial networks that give them an edge over their competition, i.e., his so-called "competitive advantage." To develop, it is incumbent upon regions to identify and foster whatever competitive

advantage(s) might exist. This task is not easy for rural areas. A few might show off local university research¹⁹ or those located just outside the periphery of metropolitan regions might tap into regional, although not local, attributes for competitive advantage. In the virtual absence of concentrated economic centers, skilled labor, or diversified industrial bases and in the face of economic instability and minimal institutional capacity for development, however, rural competitive advantage may well be an oxymoron.

In the first chapter of *Geography and Trade* (1991), Krugman raises the importance of location to new levels with his realization that, as an international economist, he had written for years about economic geography without being aware of it. "Most of regional economics, and some but not all of urban economics, is about geography" (p. 1). In other words, Krugman, like many economists, uses location as a lens for observing economies and the spatial concentration of activity, i.e., urban cores. In a rare and passing reference to rural areas, Krugman (1991, p. 15) explains their spatial disadvantage.²⁰ The small size of nonmetropolitan economies, he says, generally inhibits scale economies, labor skills, and financial resources. In a sense, all that happens due to concentration of economic activity (e.g., specialization, localization, and agglomeration in industries) is unlikely to happen in rural areas.

The regional development analysts probably overlook rural areas for the very reason they are called rural, because the areas are isolated from centers of economic activity and population. Such circumstances, in fact, are likely to serve as an example of why development does not happen or is unsustainable. Alternative, less location-oriented strategies have been considered in the smaller literature on sub-regional development, to be discussed next.

Rural Development Studies: Identifying the Economic Dilemma

Compared to regional development, the subdiscipline of rural development is deficient in formal theory. There is no generalizable paradigm at work, no single prescription for success, no highly visible economist to influence the direction of

¹⁹ Two of the six rural host communities in the study were home to universities. The State University of New York - Plattsburgh was located in Plattsburgh, New York (Plattsburgh AFB) and Northern Michigan University was located near Gwynn, Michigan (K.I. Sawyer AFB).

²⁰ Krugman does, however, frequently refer to the agriculture sector in his core-periphery model in which he theorizes on where manufacturers and farmers located relative to each other.

research. Indeed, in their introduction to a special issue of *Growth and Change* devoted to theory in rural development, rural analysts William Ward and James Hite (1998) caution readers that they will not find formal theory, per se, in the four quite excellent papers chosen for the publication. Rather, they will find contributions toward the "development of a nontrivial and implementable body of theory" for the field (p. 247) . In *Economic Adaptation: Alternatives for Nonmetropolitan Areas* (1993), David Barkley compiled the research of economists, sociologists, and geographers who analyze the many issues related to how rural America might best adjust to the "new economic climate."²¹ The contributors to Barkley's edited volume, like those to the *Growth and Change* issue, offer policy recommendations and suggestions for strategies in the practice of rural development based upon their analyses of data from the field.

Policy and strategy recommendations for rural development are wide ranging and, therefore, hard to categorize much less generalize. For the purpose of relating the literature to this study, however, I attempt to do both by generalizing upon two broad categories: research with and without recommendations linked to location. Most research in rural development, particularly that conducted by economists, falls into the former category. Recognizing that rural areas often lack the spatial attributes that typically aid development, several studies have looked for development solutions, such as industrial recruitment, retention, and tourism, to work around the location deficiencies. Starting with the post-war strategy of industrial recruitment, some analysts recommend targeting the types of business that require neither proximity to economic centers or major modes of transportation, e.g., telecommunication companies (Galston and Baehler, 1995) or back-office processing centers (Glasmeier and Borchard, 1994). Drawing on a more contemporary strategy, Glasmeier et al. (1993) recommend that rural areas should place priority on the retention of manufacturing branch plants, referring to them as the "economic lifeblood" of the region. They argue against favoring "home-grown" business and fostering flexible manufacturing, both of which were popular strategies beginning in the 1980s, at the expense of manufacturing branch plants citing significantly greater employment by the latter. Finally, some analysts (e.g., Galston and Baehler, 1995, and Reeder, 1998) recommend that communities capitalize

²¹ Defined as one with more international trade, less government regulation, decreased demand for traditional rural industries and increased demand for services and high technology.

upon the rural quality of life by focusing on tourists and/or retirees.

The problem with place-based solutions in rural development is that they fail to recognize how crippling location is for some rural areas--relatively few are the archetypal bucolic hideaway just up the interstate from the growing metropolis. Industrial recruitment and retention strategies, although certainly worth trying, are a long shot given the competition among rural communities for businesses willing to operate well outside of metropolitan regions, particularly in the globalized market. And, while some rural communities are quaint destinations, many are simply remote and unlikely to attract tourists.

The rural development literature is, by no means, restricted to spatial studies, however. Many analysts have sought alternative resources for rural development given the inherent limitations of location. The work in this area tends to recommend bolstering local capacity to achieve economic development by building up the local resource base. Much has been written, for example, about the nature and supply of labor in rural areas and, again, how to improve upon it (e.g, Findeis, 1993). Some argue that workforce education is the solution (e.g., Glasmeier and Howland, 1995, McNamara and Deaton, 1996). Others argue that labor demand, not supply, is the problem (e.g., McGranahan and Gelfi, 1991). They cite rural "brain drain," i.e., the out migration of young, educated adults who leave their hometowns when they can not find professional employment upon college graduation.

In a particularly interesting applied study of rural development, Michael McGuire et al. (1994) demonstrates a link between strategic planning processes and capacity development. The team of analysts compared a group of small communities that engaged in "community-wide" strategic planning with those that did not and found significantly greater development capacity in the former. Capacity scores were based on the nature of public participation in planning, community structure in terms of diversity in leadership and linkages with other governments, and development tools, such as infrastructure and community spirit. Furthermore, capacity was greater for communities outside growth corridors and further away from urban centers suggesting two things. First, communities located closer to metropolitan regions derive some development capacity from outside their localities. Second, the more remote nonmetropolitan communities depend more upon local economies and, therefore, have more incentive to build their own capacity to manage development.

The involvement of federal government in local economic development has been the subject of much analysis although not many analysts have focused on rural communities in particular. One possible criticism of federally aided local development might be the potential for supplanting, rather than fostering, private investment. This has not been found to be the case when the federal government invests in rural communities. Marie Howland and Ted Miller (1988) and Beth Walter Honadle (1987) conducted separate studies of the impact of the U.S. Department of Housing and Urban Development's Urban Development Action Grants (UDAG) in nonmetropolitan areas. The findings of both studies included evidence of job generation that would not have occurred but for local use of UDAG funds. There were still problems, however, related to development capacity. Honadle reveals that local returns generated from UDAG funding required some level of development capacity to be in place. For example, managing private developers was the most challenging task for the grant communities. In five of the ten cases observed, developer turnover either derailed federally funded projects or impeded job generation.

Rural development research helps fill the gap between the recommendations of regional development theory and the reality of rural economies. My study corroborates the findings of Howland and Miller (1988) and Honadle (1997) on the importance of federal involvement in rural development. I found that rural host communities strategically applied their relatively short-term federal subsidies toward the creation of sustainable institutional development capacity (e.g., establishing public-sector development agencies, hiring experienced economic developers). Although they all suffered population and employment losses due to the transfer of base workers, the rural host communities in the study made gains in terms of their ability to withstand future economic crises as a direct result of the development experience, both institutional and individual, they acquired in base redevelopment.

Asset-Building Development Strategies: Solutions for the Needs of Today and Tomorrow

Over the past decade, the importance of building or accumulating assets to improve long-term development capacity has emerged in two separate fields of study: community development and sociology. The former looks at groups while the latter is concerned with individuals, but there is a clear overlap in their development strategies. In recent years, analysts in both fields have recommended that by enhancing their asset

base, communities and individuals will be prepared to cope in times of crisis (e.g., Kretzmann and McKnight, 1993, in community development and Sherraden, 1991, in sociology). Individual assets take the form of home ownership, savings accounts, and educational degrees, to name a few examples, while community assets may take the form of publicly owned real estate, public capital, and development organizations. Interestingly, the move toward asset-based strategies represented a similar shift in these fields away from more corrective strategies according to these analysts. Throughout the 1990s, community development typically dealt with evaluating and then dealing with the needs of a population. Strategies sought to overcome inter-related problems, such as inadequate childcare, school drop out rates, and child abuse. At the same time, national welfare policy focused on providing income subsidies to individuals or families to help them cope with problems such as job losses or disabilities.

Both needs-based and income-based strategies for development seek to implement corrections as problems are identified. In contrast, asset-based strategies attempt to improve the ability of communities or individuals to resolve problems as they will inevitably continue to occur into the future. Assets, such as the examples listed above, therefore, are believed to improve an individual's or a community's capacity for solving problems. John Kretzmann and John McKnight (1993: p. 6), both community development analysts, define assets as "gifts, skills, and capacities of the individuals, associations, and institutions" within a community. In a similar vein, sociologist Michael Sherraden (1991: p. 96) defines assets as "stocks of wealth" in a household.²² Furthermore, Sherraden suggests several benefits from accumulating assets that could apply to communities as easily as individuals such as: increased stability; future orientation; development of other assets; and the ability to take risks.

Karen R. Polenske (2001) was the first to link the concept of asset-based strategies to regional economic development arguing that they are an overdue alternative to the more traditional income-based strategies, i.e., those for which outcomes are measured by income growth. Instead, she suggests measuring regional development by the changes in the sum total of regional tangible and intangible assets, such as capital, work force skills, natural resources, institutional capacity and the like. Polenske elaborates on

²² Sherraden (1991) contrasts assets with income which he defines as "the flow of resources" through that household such as money, goods, and services.

the application of asset-based strategies by arguing the importance of public policy to facilitate access to development assets. It is not enough that resources are available (e.g., federal funding or institutional development knowledge). Rather, they must be accessible to those who plan and manage economic development (e.g., public officials or community based organizations).

I agree with Polenske's assertion that although resource availability is important, resource accessibility is what matters. In this study, I found that the communities identified available resources, but they were not always able to access those resources for any number of reasons²³; evidence supporting Polenske's argument about the importance of resource accessibility. But, I suggest that there is yet another critical component to render these strategies most effective: asset capitalization. I also found that even when communities accessed resources, however, they were not always able to capitalize upon them (e.g., when there was insufficient market demand for an asset like airfields). It is also not enough that resources are available and accessed. Rather, they must be accumulated as development assets and capitalized upon in order to generate returns for economic development. In this way, resources evolve into community development assets. Asset capitalization is implicit in the literature on asset-based development strategies. In this dissertation, I make it an explicit strategy component.

Military-Base Redevelopment Case Studies: Lessons for the Prototypical Host Community

A number of analysts have written about military base closures although very few of them examine the rural experience in much depth. Impact analyses make up the bulk of this growing body of work (e.g., Bradshaw, 1993, Daicoff et al., 1970, Dardia, 1996, Hooker and Knetter, 1999, and Kodrzycki, 1995). Two of the more frequently cited studies measured the short-term economic impact of base closures. In a study for the U.S. Arms Control and Disarmament Agency, Darwin Daicoff et al. (1970) conducted a statistical analysis of 80 closures announced in the 1960s; he also studied on the cases of nine host communities (two rural). For the RAND Corporation, Michael Dardia (1996) looked at three California host communities (none rural) adjusting to

²³ For example, the Air Force and host communities sometimes had conflicting goals for the outcome of property disposition--the Air Force wished to minimize its costs or even generate revenues while the host communities wanted the property at no cost with improvements made before transfer. In another example, the lack of community consensus on reuse alternatives sometimes delayed or even derailed base redevelopment progress.

closures announced in the first two BRAC rounds. The findings of these two studies were quite similar. Both analysts concluded that the actual impacts of military base closures are far less than anticipated by host communities. Beyond the positive generalities, however, both implied that rural host communities were more likely to suffer negative impacts. Daicoff et al. found that when on-base employment represented at least five percent of the host community's population, base closure would negatively impact employment.²⁴ Dardia developed a model of community characteristics that worked for and against economic recovery. In addition to the ratio of base employment to local population, he found that a high ratio of military children to total school enrollment, distance from urban areas, and population losses also worked against recovery but all of which are common characteristics of rural host communities.²⁵

Case studies of the experiences of host communities in planning and implementing strategies for base reuse are nearly as common as impact studies in the literature on military-base redevelopment (e.g., Benton, 1998, on redevelopment of the Presidio; Hankowsky, 1995, on the Philadelphia Naval Shipyard; and Podagrosi, 1996, on Chanute Air Force Base). Surprisingly few contain analyses of closures in rural areas despite the fact that one in nine bases closed during the 1990s was located in a rural area and more than a third of the bases to close during the 1960s and 1970s were rural sites (Rowley and Stenberg, 1993). Bernard J. Frieden and Christie I. Baxter's *From Barracks to Business: The MIT Report on Base Redevelopment* (2000) is among the most extensive analyses to date of the challenges and opportunities that host communities face in base redevelopment. Yet, only one of the 24 installations they visited for a case study was located in a nonmetropolitan county. And, not one of the four case studies conducted by the Harvard School of Design in its report to the U.S. Economic Development Administration was rural (Vigier et al., 1996). Nevertheless, this latter team of analysts recommended changes to the base-closure process based on the experiences of "different communities who have to various degrees of success navigated

²⁴ Base employment was 5+ percent of county population in five of the six rural host communities in the study. At the sixth site, Plattsburgh, NY, base employment was well over five percent of the city's population.

²⁵ The ratio of military children to total school enrollment, though not specifically analyzed in this study, was known to be high. Teacher layoffs and/or school closings were reported in all four of the case study host communities.

the difficult transition from a defense base economy to a civilian one" (Vigier et al., 1996: p. i). The challenges inherent to military-base redevelopment in rural areas might well have been useful to the study.

Only two studies in the military-base redevelopment literature to date (i.e., Isserman and Stenberg, 1994, and Rowley and Stenberg, 1993) specifically analyze the rural experience. Both analyzed the long-term impact of base closures from the 1960s and 1970s on nonmetropolitan host communities and arrived at fairly similar conclusions despite differing research methods. In a report to the U.S. Department of Agriculture's Economic Research Service, Rowley and Stenberg (1993) compared economic indicators and base-related job changes between nonmetropolitan and metropolitan counties where military installations had shut down. Isserman and Stenberg (1994) estimated the recovery of seven nonmetropolitan base-closure counties by comparing their economies with those of a control group of similar counties in which military bases did not close.

On some points, my study and the previous two converge while on others they do not. Rowley and Stenberg (1993) showed that nonmetropolitan host communities had replaced a greater percentage of the federal civilian jobs lost due to base closures than the metropolitan host communities; an interesting finding corroborated by my study. Both the Rowley-Stenberg and Isserman-Stenberg studies pointed to the potential in the property left behind by the military in the form of land, structures, and personal property. According to the former team of analysts, "such assets, wisely and strategically used, can often lead to redevelopment of the local economy, making it stronger than before the base closed" (Rowley and Stenberg, 1993: p. 13). And, according to the latter team, "The former military bases offer assets that have economic value to the local economy even if they do not generate jobs quickly...Their availability can lead to improvements in the area that add people and jobs..." (Isserman and Stenberg, 1994: p. 16). I not only concur, but also provide evidence of the importance of asset capitalization for base redevelopment as well as future local economic development. Finally, Isserman and Stenberg (1994) recognize the potential in the federal screening process for rural base redevelopment suggesting that rural host communities be given "priority consideration" (p. 16). I showed how, in one case, the elected officials representing a rural host community convinced four federal agencies to move on base, which generated nearly enough jobs to replace the lost civilian

employment.

Despite findings in common, my study yields somewhat different conclusions than the previous two studies on rural base redevelopment. For instance, both teams of analysts stress the importance of the economic context of host communities in their recovery following base closures. Rowley and Stenberg (1993) conclude that 1969-1988 growth in economic indicators (i.e., employment, population, and income) was slower among the nonmetropolitan base-closure counties than for either the metropolitan base-closure counties or even nonmetropolitan counties in which there were no base closures. I did not analyze county-level economic indicators beyond 1990, because census data are not yet available for 2000. Estimates, however, point to declines that, I would argue, are inevitable given the relatively short period of time since base closures and, more important, the magnitude of Air Force operations in rural host communities. It is a foregone conclusion that population and employment are going to suffer when an employer moves out who once accounted for up to 24 percent of total employment. Income losses are to be expected as well given the fact that federal civilians typically earned among the highest wages in rural regions. Isserman and Stenberg (1994) conclude that "local initiative," a concept suggested first by Lynch (1970) in his analysis of base redevelopment and corroborated by my study, did not explain the success of some rural host communities over others. I would argue that it would have been difficult for these analysts to evaluate local initiative more than twenty years after organizing.

John Lynch produced what has been referred to ever since as the seminal work in evaluating military base redevelopment (1970). Working for the Institute of Defense Analysis while on leave from the Air Force, Lynch spent a year between 1968 and 1969 reviewing Department of Defense Office of Economic Adjustment (OEA)²⁶ files and press coverage on the experiences of a dozen small, but not necessarily rural, communities in which military bases had closed during the previous decade. My study corroborates at least three of the findings in the Lynch study despite the difference of thirty years in the making. First, Lynch suggests, as I found, that the crises inherent in base closures motivated communities to respond in ways that they otherwise might not.

²⁶ The OEA was created in 1961 to help host communities convert closed military bases for civilian reuse. The agency played a critical role in base redevelopment, particularly for rural host communities, which will be discussed later in this chapter and in Chapter Five on federal resources.

"The base closure experience is often the very stimulus needed to prompt the long-term economic growth of a local community" (Lynch, 1970: p. 232). Within the community asset building framework I propose in the next section, this very stimulus produced the only real local resource available in the host communities studied: residents. Second, Lynch suggests that public participation alleviated conflicts over base redevelopment. I found this to be the case among the host communities I visited for in-depth study and will refer to it in Chapter Four on local resources as an intangible return generated by the capitalization of resident reuse planners. Finally, Lynch credits OEA as a source of information for host communities on avenues for federal assistance. I will show in Chapter Five on federal resources that the OEA was, indeed, a critical source of information for host communities. As such, it helped the rural host communities, in particular, begin to improve their capacity for planning and managing base redevelopment.

Past research on military base redevelopment, particularly as it applies to the 1990s, provides the context for this present study. And, the fact that there have been so few studies to focus on the rural experience, none of them relating to the more recent closure rounds, begs the need for additional analyses.

Constructing a New Analytical Framework for Studying Community Asset Building

In Chapter One, I set forth the hypothesis that because the rural host communities in the study had few, if any, local resources, they relied upon federal resources available to them throughout the base-closure process to redevelop former air force bases. Based on the experiences of four host communities I observed through my case studies,²⁷ I found that they did indeed complement local with federal resources. Without federal assistance and the surplus property left behind by the Air Force, for example, base redevelopment might not have been possible within the time frame of the study--five to twelve years following closure announcement.²⁸ But, I also found that local resources were more plentiful and critical to redevelopment than I had expected. To some extent, local resources were to base-reuse planning what federal resources

²⁷ The four host communities were: Blytheville, Arkansas, Limestone, Maine, and Oscoda, Michigan, all of which are rural; and Rantoul, Illinois, which is located in the Champaign metropolitan region.

²⁸ The time frame of the study varied by closure site depending on the round in which Congress announced base closure: 1988; 1991; 1993, or 1995. The study period for all sites ended in 2000.

were to base redevelopment. Without area residents, for example, base-reuse planning might not have been possible, at worst, or slow at best. Likewise, reuse of the facilities and real estate left behind by the Air Force enabled base redevelopment as well as community recovery from base closures.

However, my hypothesis explained only part of the surprising success of the rural host communities in the study at keeping pace with their metropolitan counterparts when converting former air force bases for civilian reuse. Resources were certainly important because they were a starting point from which the host communities progressed through the long and challenging process of base redevelopment. From resources, these communities derived the assets they would then capitalize upon to benefit base redevelopment in the near term and, optimally, local economic development in the long term. Every host community established its own strategies for creating assets from available local and federal resources.

I found that, however variant the strategies, they all could be analyzed as having four steps: (1) resource identification; (2) resource acquisition; and (3) asset accumulation and (4) asset capitalization (Figure 2.1). I based this construct on the existing literature on asset-based development strategies and on the findings of my study. Kretzmann and McKnight (1993) were the first to suggest identifying resources as the first step in asset building. They emphasized that resources are not always obvious (e.g., the housing and decommissioned airfields on closed military bases) but often more subtle (e.g., the utilities and personal property). I found that the host communities "left no stone unturned," so to speak, in their search for resources in base-reuse planning and redevelopment. For example, one community identified the revenue potential in the base utility systems even though most others transferred base systems over to regional utility company at no cost.

Polenske (2001) signaled the importance of resource accessibility and Sherraden (1991) coined the term "asset accumulation." I found the two steps to be closely linked. Host communities first strategized how to gain control of a given resource and, equally important, then strategized how to retain control so that it, ideally, became a permanent asset rather than a temporary resource. Continuing the earlier example, access to the base utilities was extremely complicated. The decision to acquire the utilities necessitated the approval of residents in a referendum vote; all the while the regional utility company vocally disapproved. Once acquired, the community immediately sold

the electric system to one company and the gas system to another for millions of dollars. The utilities did not remain a permanent community development asset, per se, but the revenue derived from the sale heightened the level of local public capital available for investment in development activities or to serve as a financial cushion for economic downturns.

The last step, asset capitalization, is my contribution to the academic discussion on asset building as a development strategy. Accumulating assets certainly enhances a community's capacity to effect development, but it is asset capitalization that yields actual development. A doctoral degree, for example, could be described as an accumulated asset. A salaried teaching position is the return generated from the capitalization or use of such an asset. There were few assets to go unused among the rural host communities in the study. If the immediate needs of base redevelopment did not spur asset capitalization, then the demands for local economic development often called on newly accumulated assets. In Chapter Five, I contrast housing reuse in two of the rural host communities. The more successful of the two yielded multiple returns from its far-sighted capitalization of base housing including public revenue from unit sales and annual property taxes, an increase in the availability of affordable housing in the region, and the in-migration of new residents who purchased homes on the former base, many of whom were retirees from outside the region.

Figure 2.1 illustrates the four steps discussed in the previous paragraphs. In the next four subsections, I summarize my findings on the step-by-step application of asset-building strategies in base redevelopment. The examples provided are drawn from the case studies of one metropolitan and three rural host communities conducted for this research.²⁹

Resource Identification:

At the onset, the host communities looked around for whatever local resources were available immediately to help organize a response to the base-closure announcements. Residents emerged as a critical and early resource. None had prior experience with base closures, but all but one of the host communities had participated in efforts to reverse closure announcements during the 1970s. Residents were identified

²⁹ The case-study communities were: Blytheville, Arkansas; Limestone, Maine; Oscoda, Michigan; and Rantoul, Illinois.

as local resources for two reasons. First, there were very few, if any, public institutions or private organizations with development experience of any sort, much less in large-scale projects like base redevelopment. Second, residents had a stake in the outcome of base redevelopment especially in rural host communities where the Air Force was, as often as not, the last major employer to leave the region.

Figure 2.1
A Model for Community Asset Building

RESOURCE IDENTIFICATION

Strategy Goal: Finding any person, place, or thing that might be a resource for development.



RESOURCE ACQUISITION

Strategy Goal: Gaining local control over identified resources.



ASSET ACCUMULATION

Strategy Goal: Retaining local control over acquired resources so that they evolve into development assets.



ASSET CAPITALIZATION

Strategy Goal: Employing accumulated assets in order to generate returns--social, economic, or financial--for development.

Source: The author.

Not long after the closure announcement, as they learned more about the closure process, the host communities found that many federal resources were available to them as a direct consequence of the closure. The earliest of these was federal assistance for base-reuse planning. The DoD Office of Economic Adjustment (OEA) was created in 1961 to help host communities convert closed military bases for civilian reuse. Agency personnel were available immediately following the closure announcements; funding for reuse planning was close behind. Another major federal resource was the property left behind by the Air Force that, while not legally transferable for several years after closure announcements, was typically identified for specific reuse within the

two years after base closure announcements. Community representatives, often accompanied by a hired planning consultant, toured base facilities and inventoried personal property to help plan reuse. By the time the host communities attempted to access the former air force property, they knew well for what they were asking.

Resource Acquisition:

Identifying resources for base redevelopment was only the beginning. Accessing resources was the second step in community asset building. Resource acquisition varied depending on the type of resource. Local resources were, perhaps, easier for the host communities to access. When base-reuse planning was open to the public, residents responded to meeting announcements publicized by the local media. In two of the rural host communities, residents even volunteered for the formidable and long-term role of project leadership. When planning was less inclusive, reuse planning participants were accessed through appointments by organizers from local government or in the chamber of commerce.

Federal resources were often more complicated than local resources to access due, in large part, to federal regulations regarding the many aspects of military-base redevelopment. Even the most readily available resource was not automatically accessible. For example, the Office of Economic Adjustment assigned program managers to provide technical assistance to host communities as soon as Congress announced closures. In order to receive OEA planning grants, however, host communities were required to create reuse-planning committees and designate legal entities to serve as conduits for federal funds. This requisite staging process took five months, on average, among the rural host communities but just 1.5 months among the metropolitan host communities. The property left behind by the Air Force, on the other hand, often took communities years to access for several reasons. First, the Air Force had to vacate the property--typically two to three years after base closure announcements. Second, the community had to apply for transfers and negotiate agreements with the Air Force on the terms of transfers; different types of property, for example, residential and runways, necessitated different types of transfer methods and, therefore, additional applications and negotiations. Finally, the federal government could not legally hand over ownership deeds until parcels were cleaned of environmental waste, a process that could take well over a decade.

Resource acquisition was not automatic, not only in terms of time, but also in terms of outcome, especially in the case of federal resources. The most successful resource acquisition entailed incremental access strategies. In other words, if a community's first attempt at acquisition failed, they often tried another strategy. For example, host communities had to be persistent if they wanted to access base facilities for the purpose of leasing them to civilian tenants after base closure but prior to negotiated property transfers (typically, a period of one to two years). Air Force regulations on the use of its property were strict; leases were limited to one-year terms and included one-month "kick-out" clauses just in case the Air Force wanted the property back. Furthermore, leasing documents were prepared in Washington, D.C., by attorneys at Air Force headquarters rather than locally by the AFBCA. Six-month delays between the time local redevelopment authorities found its first prospective tenant and the time the Air Force prepared what was called an interim lease were common. Most host communities persevered. Frustrated by Air Force bureaucracy and concerned about losing prospective job-generating tenants, local redevelopment authorities applied political pressure through their elected officials when their attempts to follow the rules of leasing process failed to produce results.

I found that the less tenacious host communities failed to acquire some important federal resources. One of the rural host communities gave up trying to set up leases with prospective tenants after its repeated efforts to do so failed. Intervention by their elected officials only exacerbated the problem as the relationship between the local redevelopment authority and the AFBCA soured. The AFBCA reportedly declared that lease preparations were prohibitively expensive and that it would only embark on the process when tenants promised substantial job generation. After the first interim lease, the community never managed to negotiate another until it gained control of approximately one-half the base property through a long-term airport public benefit transfer. As a result, base reuse in this one community was delayed for over two years beyond base closure.

Asset Accumulation:

Asset accumulation, or retaining control over acquired resources, enabled communities to perpetuate the resource's value well beyond that of a temporary aid to that of an ongoing development tool or asset. The move from the second to third step

in asset building was important in that it signaled the communities' shift from working with resources, many of which were provided by the federal government, to working with their own development assets. As the communities accumulated more and more assets, they improved their ability to manage base redevelopment and, in time, local economic development activities as well.

Before offering examples of asset accumulation among the host communities, it would be helpful to first distinguish between resources and assets. First, resources are temporal in nature, while assets are more permanent. Sherraden (1991) defined resources as passing through a household (e.g., income flows in and out). Likewise, within the base redevelopment context, I have referred to resources as temporary, as available due to base closure, but not necessarily after the crisis subsides. Sherraden said that assets, on the other hand, could be stockpiled; a characteristic that also distinguishes assets from resources. A second difference between resources and assets is that communities can control the latter, but not the former. The federal government could withdraw its assistance virtually at any time during base redevelopment. In fact, OEA grants were limited to the purpose of reuse planning and, therefore, were less available after the completion of reuse plans. Even residents, the principle local resource among the rural host communities, could back out of base redevelopment at any time. I will show in Chapter Four that residents evolved from resources into assets when they committed their time to the project and as they gained expertise in base-related issues during reuse planning that could be applied to base redevelopment.

The best examples of the asset-accumulation strategies focused on the same outcome: continuity in project leadership through base redevelopment. Two of the rural host communities retained the long-term service of their local redevelopment authority directors by making sure their new hires had incentives to stay with the job. Given their remote locations, both host communities knew that retention was as important as hiring someone to direct the local redevelopment authority (LRA). Consequently, one community offered its first choice candidate a home on the former air force base at a heavily discounted price. The other community offered a six-figure salary in an area where median housing values were less than one-half that amount. Both candidates accepted the sweetened offers, moved to the host communities from out-of-state, and were still in their leadership positions through the end of the study period.

Base closures set the rural host communities back in terms of economic indicators such as population, employment, and regional income, but I suggest that asset accumulation put them ahead in terms of local development capacity. Like most of rural America, the communities in the study generally lacked the means to manage their own development such development expertise, institutions capable of leading large-scale development projects, and public capital. Asset accumulation enabled the rural host communities to build "toolboxes" for economic development from which they could draw tools to assist them in base redevelopment and local development activities as well. These toolboxes contained economic development professionals, public capital, public land, and experience in large-scale public development representing the enhanced development capacity among the rural host communities but also providing a safeguard against the next economic decline, seemingly inevitable among rural communities. The host communities in the study met the prospect of base closures in the early 1990s with virtually nothing to cushion the impact. By the end of that decade, they were far better equipped for planning and managing local economic development.

Asset Capitalization:

The fourth step in the model I propose for community asset building explicitly calls for the capitalization of the assets derived from available local and federal resources. Capitalization is the use of an asset in such a way that benefits base redevelopment in the short run and, optimally, local economic development in the long run. It was imperative for the rural host communities to make use of the assets they had accumulated in order for them to progress through base redevelopment. The large hangars left behind by the Air Force is one example of an asset that, when capitalized, could generate significant returns for host communities, but when left unused, they could actually be a burden. Built to house very large and heavy aircraft, these facilities were certainly spacious, but expensive to maintain. Lease revenues from the hangars helped sustain small commercial airports at three of the host communities and helped cover building maintenance costs at the fourth. Hangar reuse, whether for aviation tenants or not, generated jobs and public revenues, eased overall maintenance costs, and helped maintain momentum for further base redevelopment.

Development assets did not have to be physical in order to be capitalized upon by the host communities. Many of the participants in base-reuse planning and

redevelopment, for instance, were less tangible as assets but, not unlike the former air force hangars, generated returns when capitalized or called upon to act. The local redevelopment authority (LRA) directors, for instance, generated enormous returns for base redevelopment in their communities including property acquisition, job generation, and rental income from tenants they attracted to the site. In fact, much of the enhanced development capacity enjoyed in the rural host communities could be attributed to the efforts of LRAs. Base redevelopment was a collection of the returns generated from the capitalization of the tangible and intangible asset accumulated by the host communities. New neighborhoods evolved from base housing, for example. Aviation reuse hinged on the ability of host communities to control reuse of decommissioned runways and hangars. And, the mix of tenants to move into former air force facilities was an outcome of review processes that relied on the expertise of residents involved in reuse planning.

I found that there were at least three types of returns generated from the capitalization of assets accumulated in base redevelopment--financial, economic, and social--all of which mattered to base redevelopment and long-term local economic development.

Financial returns included public revenues from facility leasing, property sales, and, eventually, annual property tax collections. Each of the host communities in the study started generating financial returns from base redevelopment shortly after base closure as they leased former air force facilities and/or opened the once-exclusive golf courses to the general public. Rental income and recreation fees helped fund operations at the local redevelopment authorities such as property maintenance. The private and commercial airports, while not especially busy at any of the sites (Table 5.5), became self-sustaining during the study period based upon the rental income stream from aviation facilities. A few years after closure, one of the host communities generated additional financial returns from the sale of property (e.g., housing units) and base facilities (e.g., utility systems) acquired through a no-cost economic development conveyance. With substantial public capital, possibly for the first time in its history, this rural community invested at least some of its profits back into base redevelopment. A much-needed health clinic opened on the site of the former base hospital--its operations subsidized by the local redevelopment authority. Finally, the most sustainable financial return generated in base redevelopment has been the property taxes paid by the private

owners of former air force property. All the host communities studied added property to their jurisdictions; two have been able to generate annual property taxes since the late 1990s and the other two benefit from fees in lieu of taxes paid by, in one case, the local redevelopment authority, and in the other case, by a private housing developer, in return for public services like fire and police protection.

The economic returns in the form of new business, new jobs, and in-migration were, perhaps, more recognizable than the strictly financial returns. Private businesses and, in one case, federal agencies moved into facilities that had been occupied for decades by the Air Force. Some of these new tenants shifted or expanded their operations from nearby sites but, oftentimes, they were new to the communities and their regions. Over the course of the study period, most of the host communities in the study gave up their dependence upon the military industry and moved toward greater diversification in their local economies. As the new businesses moved into the host communities, jobs were generated for residents through the reuse of former air force facilities. In all but one case studied, there was at least one new tenant who employed 100+ workers that attracted media attention, e.g., a telemarketing firm moved into the base exchange at one rural site and a the cargo maintenance operation of an airline company moved into the hangars at another. At the metropolitan host community, a couple of local manufacturers expanded their operations into base facilities. New businesses to replace the Air Force and new jobs to replace the lost federal civilian employment were not the only economic returns to be gained by asset capitalization, however; in-migration was important as well. The in-migration of new residents attracted to the jobs or the base housing helped offset population losses due to base closures.

Finally, social returns from asset capitalization included both tangible and intangible benefits for the host communities in the study. First, there were visible benefits to host communities when they were able to capitalize upon the recreational and healthcare facilities once reserved for military use. Even the metropolitan host community in the case study boasted about the substantial increase to the availability of municipal recreation services when it added in-door and out-door facilities acquired at no cost for public benefit. Golf courses were standard on air force bases and in good condition. Golf Digest reportedly named the Scottish-links style course at one rural site as the "top new resort course for 1993" (PARCELS, 2002). Another tangible social return

was the provision of healthcare in reuse, especially critical for military retirees who once depended upon the base for services. One host community managed to reuse part of the former base hospital as a health clinic by capitalizing not only on the structure but also on the medical equipment it convinced the Air Force to leave behind.

There were also invisible or intangible benefits to host communities in base redevelopment that could be as important as any of the more obvious financial and economic returns. Two intangible social returns in base redevelopment included: (1) the satisfaction among residents as base reuse progressed; and (2) sustained community support. When Congress announced base closures, inevitably, there were fears among residents and even local leaders of their community losing its identity with the Air Force at the very least and becoming a ghost town at the very worst. Base redevelopment helped ameliorate these concerns, which were more acute in the rural host communities but were reported, nonetheless, by the one metropolitan host community in the case study. Eventually, there was some level of reuse at every site. It may not have taken place immediately or on a large scale, but, eventually, the local redevelopment authorities began to find reuses for the hundreds of vacant facilities and housing left behind by the Air Force. It was so important to one rural host community for base redevelopment to begin, in fact, that it transferred over 800 units of housing and several service buildings to a private developer at no cost in order to set residential reuse in motion.

Sustained community support for base redevelopment activities was another important social return generated by public participation. Residents, especially those in rural host communities, were often stakeholders in the outcome of base redevelopment. I found that when residents had the opportunity to participate in and, in some instances, commit their time to the project, they served the dual purpose applying their acquired expertise in base-related issues and communicating the status of project activities to the rest of the community. The more that was known about base redevelopment, the stronger was local support. In contrast, I found that when public participation in was constrained, it was more difficult for reuse-planning committees and/or local redevelopment authorities to sustain support for their activities and conflict seemed inevitable.

Conclusion: Outline of the Analytic Chapters

The research for this dissertation comprised two parts. In the first part, I asked how nonmetropolitan and metropolitan host communities differed in terms of their development capacity at the onset of base redevelopment. I also asked whether or not location impeded base redevelopment in rural areas. Chapter Three contains the analyses and the answers to these questions. In brief, I found that the nonmetropolitan host communities kept pace with their metropolitan counterparts in terms of base redevelopment progress, an unexpected but important finding, despite major gaps in the economic stability between the two.

The second part of the research for this dissertation was driven by these initial findings. Knowing that rural host communities were relatively successful at redeveloping closed military bases, I asked how they managed to do so, what strategies they employed and why. Chapters Four and Five contain the analyses and answers my second line of inquiry. In a sense, to make up for what they lacked in terms of location, rural communities identified and accessed resources available to them locally and as a result of base closure. Resources evolved into project assets the communities could repeatedly capitalize upon to benefit base redevelopment in the short run and, optimally, local economic development in the long run. Local resources, primarily residents but also Air Force personnel, are the focus of Chapter Four. Federal resources, such as funding and surplus Air Force property, are the focus of Chapter Five.

I distinguish between the types of resources in community asset building for three reasons, one logistical and two analytical. First, numerous resources factored into base redevelopment, too many to explain in a single chapter with any hope of clarity. Applying one category, such as resource origin, aided the organization of my analysis. Second, local resources are inherently available for any local economic development projects and, therefore, my findings on their access and capitalization should be generalizable to other cases in rural and/or community development. And, third, I demonstrate that federal resources, though not necessarily available, are critical to local economic development, particularly given the lack of local development capacity among rural host communities at the onset of base redevelopment projects. This aspect of my study confirms the importance of federal involvement in rural and community development established in earlier studies (e.g., Honadle, 1987, Howland and Miller, 1988, Isserman, 1997).

Chapter Three

Down But Not Out. Rural Progress in Base Redevelopment

According to the literature on how regions develop presented in the last chapter, rural areas have long been at a disadvantage for many reasons--some spatial, some institutional, and some historical--all of which have been well documented. The small size of rural economies generally inhibits traditional stimuli for development like scale economies, highly skilled labor supply, and financial resources (Krugman, 1991). Isolation due to the long distances to larger centers of activity not only restrains development opportunities but also exacerbates the problems of economic stagnation, such as persistent poverty and out-migration (Butler, 1990). The small number of businesses and institutions curtails the probability that clusters or industrial networks emerge, but, in larger economies, these clusters and networks have been found to stimulate development (Porter, 1990). Finally, to its detriment, rural America has relied for too long on its traditional industries of agriculture, manufacturing, and natural resources, all of which have declined in recent decades (Glasmeier and Howland, 1995).

Given these disadvantages, I ask two questions in this chapter:

- How did development resources in the rural group of host communities compare to those in the metropolitan group?
- Did rural locations impede base redevelopment?

I argue in this chapter that the group of rural host communities in the study³⁰ certainly lacked development opportunities, but were, nevertheless, relatively successful at base redevelopment compared to the metropolitan group. As evidence, I first present my analyses of the economic, geographic, and institutional circumstances among the 26 host communities prior to the base-closure announcements. I found that there were significant gaps between the two groups in the stability of regional economies, the urbanization, and the incidence of local development institutions to aid base redevelopment. By some measures, the disparity between the two groups in the study was even greater than that between the two groups nationally. Second, I present my analyses of their progress in base redevelopment when compared to the

³⁰ The six rural host communities in the study were: Blytheville, Arkansas; Gwynn, Michigan; Limestone, Maine; Oscoda, Michigan; Peru, Indiana; and Plattsburgh, New York. The entire list of host communities and air force bases to close in the 1990s is provided in the appendix.

metropolitan host communities. I found the rural host communities achieved the major milestones in base redevelopment--related to planning, facility leasing, and job generation--at the same pace, or slightly faster, than the metropolitan host communities.

The Rural Development Disadvantage

The rural host communities in this study typified rural America in many ways. My analysis of their economic histories revealed that all suffered previous economic setbacks beginning with the collapse of farming in the 1950s and the decline of traditional rural industries in the decades since. Between the rural and metropolitan host communities, the county-level indicators had a significant gap that even exceeded the well-known disparity between these two groups nationally (Henry, 1993). My comparison of urbanization measures revealed that the rural host communities were disproportionately remote in location while the metropolitan host communities were disproportionately located in highly populous regions. Finally, when I analyzed the survey responses from local redevelopment authorities, I found that there were relatively few local institutions, either public or private, to assist in rural base redevelopment.

A History of Economic Losses

The military was not the first industry to move out of the rural host communities I examined in the study. Like the rest of rural America, most of these communities had suffered repeated economic losses over the last half century due in large part to their dependence on the traditional rural industries. The agriculture industry collapsed during the 1950s in all six of the rural host communities when the demand for farm labor dropped dramatically due to increasing mechanization in farming processes (Table 3.1). During the 1970s, two of the communities experienced losses in other major industries. The century-old mining industry in Gwynn, Michigan (K.I. Sawyer AFB) lost employment as foreign competition in iron production increased. The transportation industry suffered severe setbacks in Peru, Indiana (Grissom AFB) when the railroad shut down after several decades in operation. The manufacturing industry stagnated or declined in four of the communities during the 1980s when the increasingly globalized marketplace heightened competition among the world's suppliers. Throughout the nation, plant closures were common during that decade as

manufacturers sought lower production costs overseas.

Table 3.1 shows the decline in employment within each of major rural industries and federal government. The purpose of the table is two-fold: (1) to show the number and types of declining rural industries; and (2) to indicate the time frame within which employment in each of the industries declined. Federal government employment, for instance, fell off during the 1990s due to military base closures. The other major rural industries, however, had already lost employment by the start of the 1990s.

Table 3.1
Decline in Major Industry Employment* across the Rural Host Communities
(percent)

	Blytheville, AR	Gwynn, MI	Limestone, ME	Oscoda, MI	Peru, IN	Plattsburgh, NY
Share Federal Government Employment in Total Employment						
1990	14	12	16	28	19	11
1999	1	1	3	1	6	2
Share of Farming Employment in Total Civilian Employment**						
1950	48	3	27	19	19	17
1990	8	0	7	3	6	4
Share of Manufacturing Employment in Total Employment						
1980	26	4	16	9	29	13
1990	25	5	14	11	25	12
Share of Other Major Sector Employment in Total Employment***						
1970	n/a	14	n/a	n/a	8	n/a
1990	n/a	6	n/a	n/a	3	n/a

Source: U.S. Bureau of Economic Analysis (2001a)

* County-level employment.

** Percentage of civilian employment only due to the constraints of 1950 census data.

*** In and around Gwynn, Michigan, mining was a major industry due to the prevalence of iron mining. In Peru, Indiana, transportation was a major industry due to the prevalence of the railroad.

The military is not considered a traditional rural industry, but the host communities in the study were no less dependent on air force employment than they had once been on jobs in farming, manufacturing, and natural resources. Military-base closures drastically reduced federal government employment in these communities

within the course of one decade, while the more traditionally rural industries declined at a relatively slower pace. In 1990, federal government jobs accounted for 11 to 28 percent of countywide employment (Table 3.1). After the base closures, federal employment dropped to one to three percent in all but one of the rural host communities.³¹ The agriculture industry experienced a similarly severe drop off in employment, but it did so over the course of four decades rather than one (the decline was sharpest during the 1950s). Manufacturing employment generally peaked among the host communities by 1980, but it declined during the next decade, particularly in those communities in which production jobs accounted for a significant share of countywide employment. Even in the two host communities where industry decline hinged on one company with a large employment base (Norfolk and Southern Railroad in Peru, Indiana, and Cleveland-Cliffs Iron in Gwynn, Michigan) as the Air Force had, employment losses were slower to come about than in the case of 1990s air force base closures.

The economic histories of the rural host communities in the study illustrate the argument presented in Chapter One against the so-called rural rebound. By 1990, these communities were struggling economically. One by one, they had experienced decline or even collapse of their major industries. The Air Force was, for some, the last to go. The military industry remained longer, but it left faster. Federal government employment accounted for as much as one in four jobs in 1990. Less than a decade later, the sector accounted for one in 17 jobs at most and, more typically, one in 50 jobs (Table 3.1). In the rural characterization of Glasmeier and Conroy (1994), most of these communities were at a "crossroads" in terms of development. Following base closures, continued economic stagnation was not only likely but also probable given that the military industry was, in some respects, the last to go.

Urbanization Gap: Not Just Rural but Remote

On average, the rural host communities in the study were 244 miles from the nearest major city.³² Four of the closing air force bases had been located just inside the Canadian border with the United States to meet the demands of the Strategic Air

³¹ In Peru, Indiana (Grissom AFB), federal employment at six percent of total county employment reflects the fact that only part of the base closed; the Air Force still controls the airfield for its Reserves.

³² Defined as a 1990 population of 100,000+.

Command (SAC).³³ Even by rural standards, these northern sites were especially remote. They enjoyed minimal urban influence as defined by the Economic Research Service (ERS) of the U.S. Department of Agriculture. Most were located in counties nonadjacent to metropolitan regions, meaning that they did not abut metropolitan regions. In fact, the incidence of host communities located in nonadjacent nonmetropolitan counties was ten percentage points higher than found nationally (Table 3.2). At the other extreme, the incidence of metropolitan host communities that were part of high-population regions was 18 percentage points higher than found nationally. For example, the former George, March, and Norton Air Force Bases were all part of the Riverside-San Bernardino, California, metropolitan region where the population in 1990 was 2.6 million. And the former Homestead AFB was in the Miami, Florida, metropolitan region (population 1.9 million).

Table 3.2
Urban Influence of Metropolitan and Nonmetropolitan Host Communities Relative to the Nation, 1990

Location	Host Community Counties (n=26)		United States Counties (n=3,089)	
Metropolitan Counties				
Part of large metropolitan region *	11	55%	301	37%
Part of small metropolitan region **	9	45%	512	63%
Totals:	20	100%	813	100%
Nonmetropolitan Counties				
Adjacent a metropolitan region	2	33%	979	43%
Nonadjacent a metropolitan region	4	67%	1,297	57%
Totals:	6	100%	2,276	100%

Source: Butler (1990)

* Large metropolitan region defined as a metropolitan statistical area (MSA) population of greater than one million.

** Small metropolitan region defined as a MSA population of less than one million.

³³ The Air Force's Strategic Air Command formed after World War II to build up a nuclear arsenal ready for deployment at a moment's notice. Northern border sites enabled air routes over the Arctic Circle toward potential bombing targets in the former Soviet Union. The SAC was deactivated in 1992 following the end of the Cold War.

The rural host communities were disproportionately isolated from larger economies, while the metropolitan host communities were disproportionately located near major centers of economic activity. Adjacency is an important distinction in the classification of rural areas. Nonmetropolitan counties that abut metropolitan regions, described as adjacent, are known to derive spillover benefits from the nearby larger economic centers such as labor demand, training opportunities, and better wages. In contrast, nonadjacent nonmetropolitan counties have been shown to have greater poverty, more out-migration, and higher unemployment (Butler, 1990). In effect, remote communities like the majority of those in the rural group are more apt to suffer the spatial disadvantages inherent in rural development. On the other hand, the majority of the metropolitan group of host communities, theoretically, could tap into development assets typically available in major economic centers.

Metropolitan Economic Growth versus Rural Economic Decline

A gap in urbanization is to be expected between the rural and metropolitan host communities; the relative width of this gap is what matters to this study. An economic gap between nonmetropolitan and metropolitan regions of the country is also expected and has been well documented (Henry, 1993) but, once again, it is the width of the gap or the disparity between regional economies that matters. My comparison of economic indicators revealed that the two groups diverged even more than expected. The fact that the differences between the two groups in the study exceeded that well known gaps found nationally increased the odds against the rural host communities in base redevelopment.

The greatest disparity between the two groups of host communities was negative population growth found in the nonmetropolitan group compared to overwhelmingly positive growth in the metropolitan group (Table 3.3). Between 1980 and 1990, the decade prior to most base-closure announcements, the six nonmetropolitan host communities were located in counties that actually lost one percent of their aggregate population. In stark contrast, the metropolitan host communities were located in counties that grew an impressive +27 percent. This 28-percentage-point difference between the two groups in the study was twice the gap found between nonmetropolitan and metropolitan regions nationally.

Table 3.3
Economic Indicators for Base-Closure Counties and Nationally, 1990

Economic Indicators	Nonmetro Host Community Counties (n=6)	Metro Host Community Counties (n=20)	Nonmetro U.S. Counties (n=2,276)	Metro U.S. Counties (n=813)
Population Growth, 1980-90 *	-1%	+27%	+1%	+15%
Civilian Unemployment Rate **	8.6	6.8	6.9	6.1
Per Capita Income, 1989 *	\$10,486	\$14,135	\$10,904	\$15,442
College Graduates ***	15%	21%	13%	23%
Military & Federal Civilian Jobs****	15%	6%	2%	3%

Sources: U.S. Bureau of the Census (1990a, 1990b)
U.S. Bureau of Economic Analysis (2001a, 2001b)

* Values calculated from aggregated data.

** Values are unweighted county averages.

*** Percentage of population aged 25+.

**** Values calculated from aggregated data and presented as a share of total full- and part-time employment.

Two of the economic indicators for the rural group of host communities were severe enough to meet the U.S. Economic Development Administration's (EDA) definition of economically distressed areas. First, all but one of the communities met the EDA's criterion that the local unemployment rate exceeded that of the nation's by at least one point. With an average of 8.6, the rural group not only well exceeded the national unemployment rate of 6.3 at the time, but they also exceeded the average for the metropolitan host communities of 6.8. Second, the annual per capita income for the rural group of \$10,486 was less than 80 percent that of the national per capita income in 1990, another of the EDA distress criteria. It was also substantially less than the income level in the metropolitan group of \$14,135.

As expected, the rural group of communities was far more dependent upon the federal government for jobs. Fifteen percent of total county employment, when aggregated for the six rural host communities, was in either military or federal civilian jobs compared to just six percent in the metropolitan group. Nationally, the incidence of federal workers was far less in 1990 at 2-3 percent. Rural dependency on federal jobs obviously exacerbated the impact of base closures. Table 3.1 shows, for example, that

federal employment in one of the rural host communities was as high as 28 percent and dropped to just one percent by the end of the decade.

This analysis of economic indicators showed that the metropolitan host communities in the study were in a much better position in 1990, prior to the decade of air force base closures. On the whole, they were emerging from a decade of strong population growth with a well-educated, well-paid work force. In contrast, the rural host communities had suffered population losses during the 1980s, were experiencing relatively high unemployment rates in 1990, and their workers had less training and lower wages than workers in the metropolitan host communities.

A Lack of Institutional Capacity

In his theory of competitive advantage, Michael Porter (1990) recognized that there were more than spatial factors at work in regional development. He suggested that businesses not only compare the costs that directly impact production between regions, but they also look for regional institutions that could indirectly benefit production opportunities. These institutions may take the form of industrial networks, research centers, and economic development organizations, just to name a few examples. Like most regional analysts, Porter does not examine rural circumstances, per se. Implicitly, however, application of his theory diminishes as the incidence of regional institutions decreases. In other words, the smaller the region, the less likely there are to be institutions to benefit industry.

Based on a survey I conducted in 1997 of the local redevelopment authorities responsible for redeveloping former air force bases, only two of the respondents from rural sites reported any involvement in base redevelopment by organizations outside the public sector (Table 3.4). In both cases, the private organizations were local chambers of commerce. The rural host communities were more likely than metropolitan host communities to rely on the public sector (i.e., local, state, and federal government) for resources in base redevelopment. The case of Oscoda, Michigan (Wurtsmith AFB), illustrates the dearth of institutional capacity among the rural host communities. Prior to the Wurtsmith closure announcement in 1991, there were few municipal staff serving Oscoda. Planning had been the exclusive responsibility of the elected part-time Board of Trustees. Economic development policies were made, more or less, by the local chamber of commerce in Oscoda. The county did revive its long-

dormant economic development agency³⁴ at the time but, otherwise, there were no other institutions that served regional industry either directly or indirectly.

Table 3.4
Summary of Organization Types Involved in Base Redevelopment

Types of Organizations Involved in Base Redevelopment	Nonmetropolitan Host Community Responses (n=4)		Metropolitan Host Community Responses (n=10)	
	# responses	share of total	# responses	share of total
Local Government	3	75%	7	70%
Local/Regional Nonprofit	2	50%	5	50%
Local/Regional Private	0	0%	4	40%
State Government	4	100%	7	70%
State Public Authority *	3	75%	7	70%
Federal Government	4	100%	10	100%

Source: Stanley (1998)

* Public authorities were often created to act as local redevelopment authorities.

In contrast to the dearth of institutional resources available in the rural host communities, the respondents from metropolitan sites reported assistance from a variety of organizations both in the private and public sectors. Private, nonprofit organizations involved in base redevelopment projects tended to be established economic development corporations that provided technical assistance during reuse planning and then marketed the former air force facilities nationally and even internationally. Private, for-profit organizations involved in base redevelopment were almost always real estate brokers who helped with facilities marketing, typically at the local level.

The rural host communities lacked the breadth of the institutional capacity enjoyed by many of the metropolitan host communities. Both groups certainly turned to all levels of the government for resources, but the metropolitan group also turned to organizations in the private sector for assistance in base redevelopment. In Chapter

³⁴ According to Oscoda leaders, county officials reactivated its economic development commission to serve more as a conduit for anticipated federal funding to subsidize base redevelopment than as a resource for redevelopment activities.

Five, I will show how the rural host communities overcame their relative lack of development capacity at the onset of base redevelopment projects by creating much-needed institutions to lead local economic development.

Rural Progress in Base Redevelopment

Despite clear evidence that the rural host communities in the study lagged behind their metropolitan counterparts in terms of economic stability and institutional capacity, they were, nonetheless, successful at base redevelopment. All the rural host communities in the study managed, at least partially, to convert former air force bases for civilian reuse. By the end of the 1990s, for example, there was a commercial airport at the former K.I. Sawyer AFB in Gwynn, Michigan, operating 100 flights per day. The former Loring AFB in Limestone, Maine, was home to four federal agencies and a national telemarketing firm. The cargo maintenance operations for a domestic airline operated out of the hangars of the former Wurtsmith AFB in Oscoda, Michigan. A state prison set up operations at the former Grissom AFB in Peru, Indiana, and Federal Express' truck-driving school moved into the dormitories and an administration building at the former Eaker AFB in Blytheville, Arkansas. Table 3.5 illustrates the full range of reuses at each of these sites as reported on the websites of local redevelopment authorities in 2002.³⁵

My analysis of Department of Defense (DoD) tracking data on conversion progress across base-closure sites revealed that the six rural host communities exceeded, albeit not always by much, metropolitan host communities according to three of the most common measures: (1) reuse planning; (2) facility leasing; and (3) job replacement. First, they were slightly faster at producing base reuse plans, an Air Force requirement for transferring federal surplus property into local control. Second, facility leasing began within six months of base closures for a slightly greater percentage of the rural group of sites than the metropolitan group. And, third, the ratio of jobs gained through redevelopment to federal civilian jobs lost due to base closure was much higher at the rural sites than at the metropolitan sites.

³⁵ The list of reuses represents base redevelopment in 2002 and, therefore, is an overstatement of activity during the study period, which ended two years prior in 2000.

**Table 3.5
Summary of Base Reuses in Rural Host Communities***

Types of Reuse	Blytheville AR (Eaker)	Gwynn MI (KI Sawyer)	Limestone ME (Loring)	Oscoda MI (Wurtsmith)	Peru IN (Grissom)	Plattsburgh NY (Plattsburgh)
Agriculture	X		X		X	
Aviation	XX	XX		XX	XX	XX
Education	X					X
Federal Gov't			XX	X	XX	
Food-related Service			X		X	X
Health Services				X		X
High Technology						XX
Housing	X		X	X	X	X
Manufacturing	XX		X	X		XX
Recreation, Social	X	X	X	X	X	X
Retail, Other Services	X	X	X		X	X
State /Local Gov't			X		XX	
Telecommunications			XX			

Sources: Local redevelopment authority websites (2002); the author.

* X indicates reuse type on base; XX indicates reuse is a significant at generating jobs.

Host Communities Hit the Ground Planning

The first step in accessing former military facilities for local use was production of a base reuse plan for submittal to the Air Force. Before the Air Force formally transferred any parcels of land, it needed to know what host communities planned to do with the property. The Air Force then prepared its disposal documentation accordingly and arranged for environmental clean up as necessary. Given the importance of the base reuse plan to both host communities and the Air Force, it has long been a common measure of local progress in base redevelopment.

The median time for rural host communities to produce a reuse plan was 21 months after the closure announcement, two months shorter than the median for the metropolitan host communities (Table 3.6). During that time, the rural host communities created a formal reuse-planning committee, hired consultants to assist in the plan's production, and held public hearings to present reuse alternatives to

residents. In the planning process and the plan itself, every acre had to be accounted for, every structure identified, and all equipment inventoried. Ultimately, the Air Force required communities to identify a preferred reuse of surplus property³⁶ as well as any alternative reuses considered. The final document was typically over 100 pages in length and served as a general guideline for all future redevelopment activities.

**Table 3.6
Progress in Base Redevelopment: Nonmetropolitan vs. Metropolitan Sites**

Measure of Performance	Nonmetro Sites (n=6)	Metro Sites * (n=22)
1. Total number of jobs created in conversion by 2000	4,649	33,771
2. Ratio of jobs created to air force civilian jobs lost	0.99	0.81
3. Median number of jobs created across sites	798	1,150
4. Time to produce reuse plan (months after closure announcement)	21	23
5. Percentage of sites where leasing of former air force facilities began within six months of closure	67%	64%

Sources: Office of Economic Adjustment (1995-2000) for measures 3 and 5.

Air Force Base Conversion Agency (2001) for measures 1, 2, and 4.

* There were 20 metropolitan host communities in the study, but there were 22 closure sites because two metropolitan host communities each experienced the closure of two, rather than just one, air force bases.

Development expertise may have been rare in the rural host communities, but redevelopment enthusiasm was not. In all but one community, reuse planning began immediately following Congress' closure announcements, if not before.³⁷ Residents, community leaders, and public officials all participated; state and county representatives often did as well. In the case of the Loring AFB closure, for example, five other small towns in addition to Limestone, Maine, were impacted, all of which were represented in the planning process. In another example, Eaker AFB straddled the borders of Blytheville and Gosnell, Arkansas. These two neighboring, but

³⁶ Surplus property is the term used for acreage available for state and local reuse after the conclusion of the federal screening process during which some of property formally exceded by the Air Force might transfer to other federal agencies.

³⁷ The host community of Limestone, Maine, deliberately delayed reuse planning until all attempts to prevent closure of the Loring AFB had been exhausted. The story is included in Chapter 4 .

demographically dissimilar, towns joined forces to plan for their future.

Facility Leasing: The Opportunity to Generate Public Revenues in Base Redevelopment

When the Air Force moved out, its former facilities were, at least ideally, available for reuse. Early facility leasing was important to host communities and base conversion for three reasons: (1) leases potentially generated public revenue through rental income; (2) early reuse helped prevent facility deterioration; and (3) the presence of tenants demonstrated the presence of market demand for base reuse. Despite the obvious benefits of facility leasing, the first lease, in particular, was often a formidable challenge for host communities. The Air Force still owned base property for several years past closure and, therefore, made the final decision regarding prospective leases. Its standard lease included a one-month kick-out clause and was limited to one-year terms, which reduced the Air Force's risks in permitting civilian reuse of its property. According to my interviewees, prospective tenants, however, often found the leases to be too restrictive.

Within six months of base closures, 67 percent of all the rural host communities had leased at least one former air force facility (Table 3.6).³⁸ In at least two cases, at Eaker and Wurtsmith AFBs, civilian tenants moved on base within hours of the Air Force's departure. In fact, the local redevelopment authority in Oscoda, Michigan, even managed to move in a small manufacturer while Wurtsmith AFB was still operating in other base facilities. The metropolitan group was nearly as successful at early leasing as their rural counterparts. Sixty-four percent were leasing former air force facilities shortly after base closure. As in Oscoda, the local redevelopment authority in Rantoul, Illinois, facilitated the expansion of a local manufacturer into Chanute facilities while the air force base was still in operation.

Job Generation: The Opportunity to Replace Lost Federal Civilian Jobs

Early job generation was as important as early facility leasing. Again, host communities and base redevelopment benefited from rapid replacement of the jobs lost due to base closure. First, job opportunities were created for the local labor force,

³⁸ Leases were only counted if they generated revenue. Oftentimes, the local redevelopment authority moved on site shortly after base closure but they, in effect, paid no rent to themselves.

hopefully before skilled labor, in particular, moved out of the area. Second, new jobs were big news in small towns, which created momentum for further redevelopment. Finally, new jobs not only meant residents might stay in the area, but that others might move in, which helped recoup population losses resulting from base closure.

By the end of the 1990s, base-redevelopment projects in the six rural host communities had replaced 99 percent of the aggregate 4,710 federal civilian jobs lost to air force base closures (Table 3.6).³⁹ In comparison, the metropolitan group had replaced 85 percent of the jobs lost during the same time frame. Because the median number of new jobs at rural sites was significantly less than that of the metropolitan sites, fewer jobs were needed to replace the federal civilian employment count prior to base closure. The difference in rural and metropolitan labor supply must be taken into account, however. Before the air force bases shut down in rural communities, the jobs on base had comprised 3.5 percent of aggregate employment compared to less than one percent on the metropolitan host communities. Anecdotal evidence suggests that the federal civilians typically transferred out of rural areas due, in part, to the lack of local employment opportunities. Limited labor supply is an inherent problem in rural development and, in the case of rural host communities, the supply was further weakened by this out-migration of air force personnel. In metropolitan host communities, however, not only was labor supply more abundant but also intra-regional transfer opportunities were more common so air force employees did not necessarily move out of the area.

Conclusion: Rural Location Did Not Impede Base Redevelopment

Rural development is inherently challenging for a number of reasons. Rural economies suffer many disadvantages compared with metropolitan economies, ranging from long-term dependence on stagnating industries to distance from major economic centers to the lack of institutional capacity. The rural host communities in the study were typical of rural America in 1990. They had all suffered the decline of a major

³⁹ Job generation in base redevelopment is often compared only to the federal civilian jobs lost due to closure in studies of base redevelopment (e.g., Frieden and Baxter, 2000) even though the number of military personnel assigned to military installations is generally greater. The multiplier (i.e., the measure of one job's impact on the local economy) for federal civilian employment is generally thought to be greater than because military personnel typically live on base, are more transient, and spend less time off base (Rowley and Stenberg, 1993).

industry (or industries) in the decades prior to the rapid demise of the military industry during the 1990s. They lagged well behind their metropolitan counterparts according to every major economic indicator. Most were located so far from metropolitan regions that there was little hope for interaction with larger markets. And, finally, there were few organizations in these communities outside the public sector to assist in base redevelopment.

The many disadvantages the rural host communities in the study faced in base redevelopment might have represented obstacles to base redevelopment. However, their progress during the study period was comparable to that of the metropolitan host communities. They produced reuse plans slightly faster, more often leased former air force facilities soon after base closure, and generated as many or more jobs through redevelopment as the metropolitan group. Therefore, the answer to the question posed at the beginning of this chapter, "Given these disadvantages, did rural locations impede base redevelopment?" is no.

The next question is obvious. How did they do it? The long answer can be found in the next two chapters. The short answer is asset building. Due to the virtual absence of economic, geographic, or institutional resources, the host communities identified and accessed alternative resources to aid them in the daunting and arduous task of base redevelopment. From these resources, they derived much needed development assets. With a growing stockpile of assets upon which to capitalize, the host communities generated returns for base redevelopment and local economic development. As will be seen in Chapters Four and Five, the implementation and effectiveness of asset-building strategies differed across the host communities and across the various resources. Nonetheless, the framework presented in Chapter Two encompassing the four steps to these strategies (identifying resources, accessing resources, accumulating assets, and capitalizing assets) aids the analysis of asset building in military-base redevelopment.

Chapter Four

Organizing Local Resources

By the onset of the 1990s when Congress was announcing that military bases across the country were to close, rural America had yet to turn around its long-term economic stagnation. On the whole, the rural host communities in the study⁴⁰ were no exception. In the previous chapter, I showed that these communities faced many obstacles to base redevelopment due to their rural locations. Relative to the metropolitan host communities, their regional economies were not only smaller but also weaker and often insular given the long distances to major economic centers. Furthermore, there were fewer institutions in the rural host communities that might have helped with base redevelopment directly or indirectly, partially because of their location and partially because of their small size.⁴¹ Despite the many disadvantages traditionally associated with rural development, base redevelopment projects in the rural host communities progressed in much the same way as those in metropolitan host communities. In this chapter, I ask how they did it.

- How did the rural host communities in the study compensate for location in base redevelopment?

I argue that base redevelopment was not hampered by rural locations because host communities enhanced their limited capacity for economic development by creating a stock of assets derived from local and federal resources. From these resources, the host communities accumulated assets that, when capitalized, benefited base redevelopment in the short run and local economic development in the long run. Such a strategy was hardly new but it has been known by different names depending on the literature, as discussed in Chapter Two. According to the rural development literature, for example, the host communities engaged in capacity-building processes (McGuire et al., 1994; Murray and Dunn, 1995). Similarly, the community development literature calls it asset building (Kretzmann and McKnight, 1993; Green and Haines, 2001). Finally, it is called asset accumulation in the literature on sociology (Sherraden,

⁴⁰ The six rural host communities in the study were: Blytheville, Arkansas; Limestone, Maine; Oscoda, Michigan; Peru, Indiana; and Plattsburgh, New York; and Gwynn, Michigan.

⁴¹ Institutions with development capacity such as economic development agencies or real estate brokers might directly benefit base redevelopment. Institutions that serve as a development stimulus such as industrial networks or research centers might indirectly benefit base redevelopment.

1991) and asset-based development in regional development (Polenske, 2001). There are two common characteristics of the communities using among these strategies: (1) initial limited development capacity (on the part of an individual, community, or region); and (2) the amassing of assets to improve opportunities for future development. In Chapter Three, I demonstrated how rural host communities met the first characteristic. In Chapters Four and Five, I illustrate how they met the second characteristic as well.

My argument is based upon the findings of four case studies of host communities: three rural and one metropolitan.⁴² In this chapter, I present my analyses of development assets derived from the local resources accessed by host communities. Local resources are defined as those that would have been available regardless of base closure. In the rural host communities, residents emerged as the single, most important local resource. In the first section, I summarize my analysis as to how residents became involved in base redevelopment projects in their communities and then the many ways in which they contributed to the progress of redevelopment and, optimally, to the future of local economic development. Then, in the remaining sections, I present my findings on three avenues through which residents themselves evolved into development assets: (1) participation on the base-reuse-planning committees; (2) local leadership of planning and redevelopment; and (3) expertise of former and current air force personnel in redevelopment.

Asset Building with Local Resources

In metropolitan areas, local resources for development are apt to be more plentiful than in rural areas. Even the elected leaders in the rural host communities were ill equipped to deal with the demands of base redevelopment. For example, Mayor Katy Podagrosi of Rantoul, Illinois (Chanute AFB), the metropolitan host community, immediately stepped up to lead her constituents through the multi-year process of closure and redevelopment. To support her, there was also an economic development professional on the municipal staff in Rantoul. In contrast, the elected officials in the rural host communities hesitated to take on responsibility for base

⁴² The four case-study communities were: Blytheville, Arkansas, Limestone, Maine, and Oscoda, Michigan, all of which are rural; and Rantoul, Illinois, which is located in the Champaign metropolitan region.

redevelopment because most considered the project far too risky to manage alone. And, there were no development professionals on the staff of any of the rural local governments. In fact, there were few staff at all. In Limestone, Maine, and Oscoda, Michigan, for example, the police chief and town clerk were the only full-time municipal workers prior to the base-closure announcement.

Residents willing to participate in reuse planning were not difficult for the host communities to identify or access, the first two steps in the analytical framework for asset-building development strategies. The rural host communities were small; residents knew one another and, by and large, they wanted to help out in the recovery process. In addition, base closures stood to impact nearly everybody: schools were predicted to close due to diminished student populations; local enterprises would lose base-related business; and neighbors who worked on the base would be moving on. In every case, I found that local residents dominated the membership of reuse-planning committees and even project leadership. In some, but not all, the cases, I found that air force personnel who remained behind after base closure due to retirement or reassignment to the field office overseeing base conversion for the Air Force Base Conversion Agency (AFBCA) mirrored their neighbors' interest that base redevelopment help the community to recover.

The most effective strategies for identifying and accessing interested residents stressed inclusion during reuse planning and, to some degree, into base redevelopment. Two of the host communities, in a sense, identified all area residents as potential resources for base redevelopment.⁴³ Residents who volunteered served longer when they took the initial step to participate. Long-term involvement mattered not only because the base closure and redevelopment process is lengthy but also because residents grew increasingly informed about the many and varied project components and, therefore, more capable at guiding reuse activities as time went on. In rural Oscoda, Michigan (Wurtsmith AFB) and metropolitan Rantoul, Illinois (Chanute AFB), residents responded to published meeting notices in the local media. Some Wurtsmith reuse-planning committee members went on to help with base redevelopment. Chanute reuse planners served for five years due to the long time gap between the 1988

⁴³ In the other two host communities, reuse-planning committee members had been appointed by the local chamber of commerce or local governments.

closure announcement and operational closure in 1993. Residents who volunteered to lead base redevelopment also committed to their projects for the long term. Dean Wiltse of Oscoda, Michigan, stayed with the Wurtsmith base redevelopment for eight years and Harold Sudbury of Blytheville, Arkansas, stayed with Eaker base redevelopment for seven years. Finally, air force personnel actively sought out positions in base redevelopment in each of the cases; they all continued to be in service through the end of the study period in 2000.

Personal initiative was an important first step in gaining the commitment of resident participants in reuse planning and base redevelopment. I found, however, that a prerequisite or strategy for "converting" residents, so to speak, from local resources to project assets was the formalization of their participation. In other words, when residents gained titles or assumed specific roles for the project, their participation was not only legitimized, but was necessary for the conversion effort, not unlike a job. At first, most reuse-planning committees operated as one body with all members playing similar parts, such as brainstorming ideas for reuse, for example. Dean Wiltse, for example, successfully campaigned for the elected position of Oscoda Township Superintendent on a platform of aggressive leadership for Wurtsmith redevelopment. Harold Sudbury volunteered for his first leadership position as chair of the reuse-planning committee, but he was later appointed by the governor of Arkansas to serve as the chairman for the Eaker LRA.

In the same two host communities in which the planning process was inclusive, it was also structured after this initial "open" period. Subcommittees formed to solve the many issues in redevelopment and/or to explore the feasibility of alternative reuses. Assignments were made according to the professional expertise or personal interest of reuse committee members. For example, bankers served on financial subcommittees or homeowners whose property abutted the former base might have served on the environmental concerns subcommittees.

As residents evolved into project assets, host communities enhanced their capability to plan and manage base redevelopment. Only the metropolitan host community enjoyed local expertise in economic development at the time of base-closure announcements. But, by the time the bases closed, the rural communities had established some development expertise among their residents. Local intelligence about the base-redevelopment process generated significant and multiple project

returns, which I will discuss in depth throughout this chapter. However, briefly, I offer an example of capitalization of homegrown resident expertise in base redevelopment at each of the rural sites of case study. For example, local leader Harold Sudbury pushed Eaker reuse planning, so that the host community was prepared for the Air Force to move out a brief 18 months after the closure announcement, just in time for the first C-NET operation to move on site. The Wurtsmith LRA tapped reuse-planning committee members to serve on its tenant review committee, so as not to lose their expertise on base issues and reuse guidelines established during the planning process. Air Force personnel proved invaluable to all the host committees often in stark contrast to their colleagues in Washington, DC, or at other shuttered bases. As an example, Dave Bellyea, AFBCA site manager in Limestone, Maine, structured the requisite environmental clean up at Loring, so that local contractors could compete with outside suppliers.

The Reuse-Planning Committee: Getting Started

Even before Congress announced the second round of base closures in 1991, the rural host communities had already started to organize their response. The local chambers of commerce initiated the organizing effort in two of the communities and a regional economic development agency facilitated organizing in the third. Within the year, the Department of Defense (DoD) Office of Economic Adjustment (OEA), responsible for helping host communities convert closing military bases to civilian reuse, had formally recognized reuse-planning committees in all three rural host communities.⁴⁴ The agency assigned a project manager to each and appropriated the first round of funding for planning. With OEA's guidance and the services of planning consultants, reuse-planning committees identified goals for base redevelopment, learned how they might achieve their goals through reuse, and produced a formal plan for submittal to the Air Force.⁴⁵

Accessing residents as a local resource for reuse planning actually benefited from

⁴⁴ To avoid confusion, the reuse-planning committees will be distinguished by the name of the closing air force bases. For the record, however, the formal names of the reuse-planning committees were: Eaker AFB--Eaker Committee, Blytheville-Gosnell Development Authority; Loring AFB--Loring Readjustment Commission; and Wurtsmith AFB--Wurtsmith Area Economic Adjustment Committee.

⁴⁵ Reuse plans tended to run over one-hundred pages in length. They presented the case for communities' preferred reuses for base redevelopment with supporting documentation such as land use plans, business plans, personal property inventories, and forecasts for job creation.

the dire economic conditions in the rural communities at the time of the base-closure announcements. The departure of the Air Force, by far the largest employer in each of the three communities, affected everyone. "We all had a neighbor or knew someone who was moving because of the base closure," explained Mayor Reams (2000) of Gosnell, Arkansas (Eaker AFB). Recovery hinged on community action. Depending on the host community, residents volunteered or were appointed to participate on the formal reuse-planning committee, positions they held for at least one year but often longer.

At a minimum, reuse-planning committees satisfied the Air Force's requirements for disposing of surplus property. The outcomes of the reuse planning process, however, far exceeded the committees' required function. I present two cases that illustrate the ways in which reuse planning aided base redevelopment projects well after the submission of the base reuse plan. The first case is Oscoda, Michigan (Wurtsmith AFB), where reuse-planning committee members developed an expertise regarding redevelopment policies that they later applied in the prospective tenant-review process. The second case is Limestone, Maine (Loring AFB), where residents fought the base closure before embarking on reuse planning. The closure decision was never reversed, but the community set up an argument for federal assistance in base redevelopment that they would apply with repeated success for several years after the Loring closure announcement.

Homegrown Experts and Policy Makers

The members of the Wurtsmith reuse-planning committee in Oscoda, Michigan, responded to meeting announcements placed by township leaders in the *Oscoda Press*, the weekly local newspaper. After a few months, there were complaints that the committee was too large. However, the lead reporter on the Wurtsmith story believed that the community's involvement was "cumbersome but critical" to continuing support for base redevelopment (Smith, 1998). The fact that there were no serious local conflicts in Wurtsmith redevelopment during the 1990s is evidence of the wisdom in the reporter's observations. In contrast, political battles did arise early on in two other rural host communities, where reuse-planning committee members were appointed rather

than volunteers.⁴⁶

Not only did Wurtsmith redevelopment enjoy lasting community support, but it also benefited from the long-term commitment of many of the reuse-planning committee members. When community leaders hired Carl Sachs in early 1992 to manage base redevelopment, his first task was to convene the Wurtsmith reuse-planning committee as 13 substantive subcommittees for information gathering and policy making relevant to the final reuse plan.⁴⁷ Subcommittee assignments took advantage of residents' skills. For example, the chamber of commerce president chaired the Visitation and Hospitality Subcommittee and, as such, conducted tours of Wurtsmith facilities for prospective tenants. An accountant from nearby Tawas City served on the Finance Subcommittee. And, residents who worried about water contamination from Wurtsmith wells served on the Environmental Concerns Subcommittee.

Once they became recognized as a local resource, the residents who served on the Wurtsmith reuse-planning committee evolved into an important asset for base redevelopment. They became experts on the many aspects of the base property and its potential reuse. As such, they established guidelines for how best to approach redevelopment with respect to the interests of the rest of the community. Under Sachs' direction, that expertise carried on after the reuse plan was completed in late 1992. The Wurtsmith reuse-planning committee, as an entity, reached its conclusion, but some of its subcommittee members went on to serve the Wurtsmith LRA by reviewing the appropriateness of prospective tenants. Letters of intent, accompanied by supporting documents, required approval by as many as five subcommittees depending on the nature of the proposed reuse. Overall approval hinged on the absence of any 'black marks' in subcommittees' analyses of business profiles that included management plans

⁴⁶ In Limestone, Maine, Loring reuse-planning committee members seriously disagreed on the preferred reuse of the former air force base. One member and the planning consultant supported aviation reuse while the rest of the committee did not. The disagreement led to the committee's early dissolution; the Loring LRA ultimately produced the reuse plan.

In Blytheville, Arkansas, the mayor also disagreed with the Eaker LRA first about the market feasibility of aviation reuse and later about housing reuse. Conflicts between the City and the LRA continued until the late 1990s when the mayor retired.

⁴⁷ Subcommittees of the Wurtsmith reuse-planning committee were: 1) Business Services; 2) Economic Development; 3) Education and Training; 4) Environmental Concerns; 5) Finance; 6) Health and Welfare; 7) Housing; 8) Promotion and Marketing; 9) Public Relations; 10) Social Concerns; 11) Tourism and Recreation; 12) Veteran Affairs; and 13) Visitation and Hospitality.

and environmental record, financial statements, growth forecasts, and credit checks.

The former Wurtsmith reuse-planning committee members certainly influenced the tenant-review process. "We turned down more people in the beginning than we accepted," according to Wurtsmith LRA director Sachs (1998). In fact, the reuse planners were serious about applying guidelines for reuse they had helped to establish. Job generation was a primary goal of tenant review, but some types of development were unwelcome at Wurtsmith. Two policies drove the selection of prospective tenants: (1) no commercial tenants; and (2) no tenant failures. These policies clearly restricted Wurtsmith redevelopment opportunities, but they also protected community businesses, residents, and even the project's future from unmonitored reuse--"returns," in effect, from the capitalization of the homegrown development expertise of residents involved in reuse planning.

The "no compete" policy discouraged commercial tenants to prevent any further negative impact from Wurtsmith's closure upon the Oscoda downtown and waterfront districts. Five years after closure, a few vacant buildings were still evident downtown, but new construction was underway.⁴⁸ A mile away on the former air force base property, however, there were also vacancies. Facilities like the officer's club and the bowling alley remained unoccupied because commercial reuse was the strongest reuse possibility. Demolition is expensive and, therefore, the structures remained vacant but deteriorated. Nonetheless, the Wurtsmith reuse planners dutifully enforced their 'no compete' policy until the Oscoda Board of Trustees enacted zoning regulations in 1998 that limited land use on the former base property to noncommercial activities. The reuse of some Wurtsmith facilities was curtailed under the "no compete" policy, but the experience at two other host communities suggests that the reuse-planning committee was justified in limiting competition with local commercial districts. The downtown districts in Blytheville, Arkansas (Eaker AFB), and Rantoul, Illinois (Chanute AFB), were already in decline by the time of base closure, and many businesses closed when military personnel moved away. The interests of downtown merchants were never incorporated into base redevelopment plans, however. Years later, the Blytheville and Rantoul local governments finally dealt with the plight of their downtown districts, when, in a conservative estimate, one-third to one-half of the commercial store fronts

⁴⁸ A national drug store chain opened a store in downtown Oscoda in mid-1998.

were vacant.

The "no failure" policy in Oscoda, Michigan, stemmed from the Wurtsmith reuse-planning committee's desire to overcome doubts about the marketability of the base. They believed that sustained reuses were as important as new reuses to the momentum of redevelopment and, therefore, feared that anything short of a successful image could jeopardize future redevelopment opportunities. In fact, subcommittee members were so committed to the "no failure" policy, that when Sachs once recommended a prospective tenant to the township board of trustees despite the presence of a black mark on his financial record, a banker on the Finance Subcommittee resigned in protest. The reuse planners' commitment to preventing tenant failures in base redevelopment generated the return they hoped for; several years passed before any of the tenants at the former Wurtsmith AFB moved out and, even then, the loss could not be labeled a failure. In 1997, a small tool-making operation closed shop, following its acquisition by a larger company. In 1999, the only aviation tenant on site also moved on, again due to its acquisition by another firm. An indirect benefit of the long-term tenancies that grew from minimal "failures" or cancelled leases was facility upgrades. The aviation firm, one of the long-term tenants, for example, renovated the several buildings it leased at the former Wurtsmith AFB and even constructed a new hangar. The host community, however, owns the property and, therefore, any improvements made by tenants. The upgrades to the aviation-related facilities helped the Wurtsmith LRA attract a replacement aviation within a short time.

The "no failure" policy may well have perpetuated a positive momentum of base redevelopment and heightened the quality of base facilities, but there were no start-up businesses on site five years after closure because they could not pass the strict review process. In its attempt to minimize the risk of tenant failures, the Wurtsmith reuse planners and the LRA missed an opportunity tap into another potential local asset: entrepreneurs. Business births and small businesses generate far more jobs than the occasional relocating branch plant of major corporations according to David Birch (1979) in his well-known study on the factors of local job growth.⁴⁹ In contrast to rural

⁴⁹ The Birch job-generation studies are now over 20 years old, but they helped shift the focus of economic development agencies from business attraction of labor-intensive manufacturers to include development of small businesses. Birch analyzed Dun and Bradstreet data pertaining to the histories of 5.6 million business establishments from 1969 through 1976 (and, in a later study, 1969-1981). By tracking

Oscoda's concern about repeated closures on the site of the former Wurtsmith AFB, the Chanute LRA in metropolitan Rantoul, Illinois, encouraged entrepreneurs to move on site. According to Mayor Podagrosi, other base-closure communities pass over small businesses because "they may think that the job impact is not great enough or there is a risk of failure. I think there's no reason not to take a chance wherever there's a chance for growth."

"Hardship" as an Asset

The OEA advised, but did not mandate, just how communities were to go about organizing in response to closure announcements. However, in all the host communities save one, reuse planning began immediately after, if not before, Congress' closure announcements. Limestone, Maine (Loring AFB), residents hesitated to organize so soon for reuse planning. For nearly two years, the Northern Maine Development Commission (NMDC), the state agency that facilitated both the Save Loring and the Loring reuse-planning committees, gave priority to the former activity. Director Bob Clark (1999) explained that their approach reflected the desires of area residents:

People were afraid that if the federal government ever got wind that reuse planning was underway, they would swoop in and close the base anyway. The majority of the region wanted to take the Save Loring effort as far as they could. They saw less risk in the time lost to the Save Loring approach than in reuse planning approach. There is still this kind of thinking even years after Loring's closure. For example, in Bath, Maine, they don't want to talk about a pending base closure for fear of looking prepared.

The NMDC realized that access to Limestone-area residents would take time. In order to commit to serving on the Loring reuse-planning committee, members needed first to ascertain that the 48-year-old air force base would, in fact, be closing. Because the community had experience saving Loring from closure, it wanted to try again. In the late 1970s, the base was targeted for downsizing under the Carter administration. Residents believed the Save Loring committee successfully argued that closure would

changes in location, employment, and corporate affiliation, he concluded that very local little job growth or loss was attributable to the out-migration of business. Instead, the ratio of local business start-ups to failures and the ratio of business expansions to contractions were stronger determinants of job growth. Birch does not qualify his results by urbanization.

cause severe economic hardship on the region, which had become increasingly dependent upon the Air Force as a result of the long-term military build up, while other regional industries fell into decline.⁵⁰ In his research on military-base redevelopment stemming from 1960s and 1970s closures, John Lynch (1970) cites the governor of New Hampshire as sharing the committee's sentiment about the unfair impact of base closures. "The federal government comes into a locality with high wages; they help keep private industry out. Thus, when and if the government closes the facility or reduces its activity, the community is doubly hit (Governor John King, January 9, 1964)."

The same argument was the essence of Limestone's lawsuit against the Air Force filed in 1992 but, unlike its predecessor, failed to reverse closure of Loring AFB.⁵¹ Nevertheless, the Save Loring process facilitated access to committed residents for base-reuse planning. After two years of fighting closure, they had become inured to the inevitable: the region would lose yet another major regional industry. Residents and elected officials united to plan for base reuse. The Loring reuse-planning committee, which was formally established in 1992, adopted the structure of the Save Loring Committee with six towns represented in the process: Limestone, Caribou, Caswell, Fort Fairfield, Presque Isle, and Van Buren. In addition to the voting members representing the impact communities as they were called, there were also nonvoting members on the Loring reuse-planning committee representing the governor's office and the Congressional delegation for northern Maine.

The organizational structure that the Loring reuse-planning committee adopted from the Save Loring Committee was not the only asset to emerge from this important local resource. The "hardship" argument, as I will refer to it, generated returns for the Loring redevelopment project time and again. The lawsuit may have been the first opportunity for Limestone, Maine, residents to declare their frustration with what they perceived to be the patent unfairness in the Loring closure, but it was certainly not the

⁵⁰ According to David Sorenson (1998), a professor at the Air War College in Mobile, Alabama, the Carter administration removed Loring AFB from the 1977 closure list in return for Maine Senator Muskie's vote to ratify his Panama Canal Treaty.

⁵¹ Limestone was not alone in its attempt to reverse the BRAC decision. Virtually all base-closure communities fought closure with similar arguments that the resulting negative economic impact violated the third criterion for BRAC-recommended closures. However, most communities simultaneously fought closure while planning reuse rather than in tangent. Limestone's lawsuit was not unusual either. Rantoul, Illinois (Chanute AFB) also filed a lawsuit against the Air Force in 1989 and, like Limestone, withdrew two years later.

last. Loring LRA director Brian Hamel capitalized and, in fact, elaborated upon the hardship argument when negotiating with the Air Force in 1997 for the transfer of 3,935 acres of surplus property on the base. Like many others committed to Loring redevelopment, Hamel argued that the federal government owed the host community assistance in Loring redevelopment due to the especially harsh economic impact of base closure in so remote a site in northern Maine. In a new twist, however, he explicitly threatened to refuse to accept conveyance of the surplus property unless the federal government helped out with redevelopment.⁵² In addition to the no-cost transfer of the property, Hamel convinced the Air Force to continue its subsidies for property maintenance and LRA operations through 2002. Unique among all host communities of 1990s base closures, the Loring LRA benefited from millions of dollars in Air Force funding for fully eight years beyond base closure and five years beyond the negotiated property transfer.⁵³

Later in this chapter, I analyze how the hardship argument motivated the Loring AFBCA site manager to implement his own economic development strategies for base redevelopment. For example, he structured Air Force contracts for the requisite environmental clean-up so that local businesses could compete with vendors from outside the region. His enthusiasm for helping the host community recover from base closure stood in stark contrast to the effort of AFBCA site managers at the other rural host communities. In Chapter Five, I analyze how the Maine Congressional delegation capitalized upon the hardship argument in order to generate several returns for Loring redevelopment including multiple job-generating federal reuses when the other rural host communities attracted none.

The Role of Community Leaders

In its *Community Guide to Base Reuse* (1995), the OEA stressed the contribution of community leaders in base redevelopment.⁵⁴ Only one page of the manual describes the

⁵² Hamel knew that the Air Force wanted to dispose rather than retain Loring AFB due to the high cost and inconvenience of maintaining and securing the remote property.

⁵³ Typically, the Air Force covered the cost of property maintenance under caretaker agreements with host communities from the time of base closure through the time of major property conveyances. Once the control of base property transferred to LRAs, however, they assumed financial responsibility for maintenance.

⁵⁴ The *Community Guide to Base Reuse* can be found in the offices of all local redevelopment authorities.

roles of state and federal government participants, but four pages are devoted to the role of community leaders beginning with the following statement: "Economic adjustment in response to a base closure begins and ends with the community leaders. Effective decision making rests with those most impacted by the closure – those who have the greatest stake in economic recovery" (p. 5). Community leaders, albeit uncompensated, are further advised on what their job entails: taking responsibility for learning everything they can about closing base and the economic impact of closure; personally serving as a catalyst for local organizing; staying abreast of all the issues consequent to base closure and direct the community toward solutions; and finding the capital to implement reuse plans.

In metropolitan host communities, leaders were easily identifiable and accessible because they were elected officials. In Rantoul, Illinois, for instance, Mayor Katy Podagrosi was the undisputed leader of the Chanute reuse-planning committee and then the Chanute LRA. Podagrosi had been in office for four years when the base closure was announced in late 1988. Despite the holiday season, she immediately called a meeting of her staff, community leaders, and elected representatives from the region to discuss a plan of action. Within a few months, she organized Rantoul residents to participate on the reuse-planning committee, an entity like the Wurtsmith reuse-planning committee discussed in the last section that contributed. Still later, she created the Chanute LRA as a department within local government.

In contrast to the Rantoul mayor, project leaders were not readily identifiable in rural areas, but they were accessible (Table 4.1). At the time of the base-closure announcements in 1991, the elected officials in all three of the rural host communities lacked Podagrosi's assertive leadership style, and they did not want the responsibility of base redevelopment.⁵⁵ In their stead, residents volunteered to take the lead in two of the rural host communities in the study, Oscoda, Michigan (Wurtsmith AFB), and Blytheville, Arkansas (Eaker AFB).⁵⁶ The leadership experiences in the two cases were

⁵⁵ The Blytheville, Arkansas (Eaker AFB), mayor, in his 70s, was nearing the end of his political career. The Oscoda, Michigan (Wurtsmith AFB), township supervisor was reportedly a capable administrator but not aggressive enough to tackle the project. In Limestone, Maine (Loring AFB), there was high turnover in the mayoral office, a part-time position. At the time of the base-closure announcement, the mayor was recent college graduate.

⁵⁶ In Limestone, Maine (Loring AFB), early leadership fell to the Northern Maine Economic Development Corporation and, later, the governor appointed a well known resident to chair the reuse-planning committee.

similar. First, the local chambers of commerce who took the early lead in responding to base-closure announcements served as the conduits for community access to individual leaders. Dean Wiltse, then president of the Oscoda-AuSable Chamber in Oscoda and Harold Sudbury, then a member of the industrial development committee of the Blytheville Chamber, both learned about base redevelopment at least a year before the formal closure announcements when the chambers, essentially the only development-oriented organizations in these host communities, started contemplating their futures without the air force. By the time Wiltse and Sudbury stepped up to lead their communities, they had some sense of what base closure would mean and what base redevelopment entailed.

**Table 4.1
Community Leaders in Host communities**

Host Community (Air Force Base)	Local Leader	Title(s) in Base Redevelopment	Tenure
Blytheville, AR (Eaker)	Harold Sudbury • Lifelong county resident • Owner of radio stations and cable company	• Eaker Committee chair • Eaker reuse-planning committee chairman • Eaker LRA chair	1991 1991-1992 1992-1998
Limestone, ME (Loring)	Jack McCormack • Hospital director	• Loring reuse-planning committee chair	1991-1994
Oscoda, MI (Wurtsmith)	Dean Wiltse • Ten-year Oscoda resident • Owner of restaurant/pub	• Wurtsmith reuse planning committee member • Oscoda Township Supervisor	1991-1992 1992-2000
Rantoul, IL (Chanute)	Katy Podagrosi • Lifelong Rantoul resident • Mayor, journalist	• Rantoul Mayor	1984-1997

Source: The author.

The fact that Wiltse and Sudbury volunteered as community leaders was evidence of their commitment to base redevelopment. Immediately, their leadership yielded intangible project returns because, they, in effect, put a face on the path to recovery. Both were well-known, local businessmen whose personal success, in the

perception of many residents, boded well for the future of base redevelopment. Sudbury, for example, owned several radio stations and a cable company in Blytheville, Arkansas. Nonetheless, residents cited his political connections in Little Rock and in Washington, D.C., as his strong suit for leading Eaker redevelopment, a process many believed would inevitably become political at some point. The military presence in Blytheville had always been unstable, a predicament that residents attributed to politics.⁵⁷ Bankers, merchants, and residents alike shared the belief that Eaker continued to stay open as long as the Arkansas politicians remained in good favor in Washington. Despite the near impossibility of a closure during most of the 1980s before the BRAC legislation in late 1988,⁵⁸ rumors of a closure threat circulated the region every few years.

When Sudbury and Wiltse volunteered to be project leaders in their respective host communities, they allayed resident fears about the future after base closure. After decades of economic decline, the rural host communities certainly had cause for concern. Even the residents of the metropolitan host community in the study worried about "becoming a ghost town" (Podagrosi, 1998). More tangible returns were made possible when their leadership roles were formalized into titled positions. In this way, both community leaders evolved from local resources into longer-term assets for base redevelopment. For instance, Wiltse who was in his early 30s at the time, successfully campaigned for the part-time office of Township Supervisor in 1992 promising aggressive leadership in Wurtsmith redevelopment. Residents believed him and, as the president of the local chamber of commerce, Wiltse was already playing a lead role in organizing for reuse planning. He fulfilled his campaign promise over the course of two full terms before resigning in 2000. Sudbury wore a series of titles during his tenure with Eaker redevelopment including chair of the two reuse-planning committees and chair of the Eaker LRA, at six-year appointment by the Arkansas governor made in 1992.

Sudbury and Wiltse gained development experience "on the job," enhancing their

⁵⁷ Eaker AFB opened in 1942 as an army airfield, closed three years later, and opened again as an air force base during the 1950s. Between 1975 and 1979, the base was targeted for closure but remained open.

⁵⁸ Legislation enacted in the 1970s required the DoD to notify Congress of proposed closures and to prepare analyses on the economic and environmental impacts on host communities. According to the U.S. General Accounting Office (1997), the requirements effectively discouraged any intentions of the DoD to close unneeded facilities.

usefulness, i.e., asset value, as community leaders. As advised by the OEA, they each took the initiative to learn all they could about the complicated process of base redevelopment, organized reuse planning and helped create LRAs. They worked hard to implement base reuse plans by, in effect, building development assets derived from other local and federal resources. During their leadership tenures, Sudbury and Wiltse aided their projects by capitalizing on their own, newly acquired expertise in base redevelopment and, just as often, by capitalizing upon the assets they had helped their communities accumulate. For example, both helped organize reuse planning and both were instrumental in hiring professional economic developers to direct the local redevelopment authorities. They also took lead roles in attracting private sector reuses for the former air force facilities. Because Sudbury and Wiltse had staked their reputations on progress in base redevelopment, these leaders deservedly garnered much of the credit for improving local development capacity in the process.⁵⁹ In the remainder of this section, I offer examples of the capitalized returns generated by these community leaders.

Sudbury: Political Savvy in Local Leadership

Under Sudbury's leadership, the Eaker reuse-planning committee produced a reuse plan in record time, literally years ahead of most other host communities (Table 4.2). The fact that he was able to do so is evidence of the political acumen he brought to his role as project leader. It was "critical to identify what the competing interests were between various players and bring them together and convince them that a united front was the best chance at getting redevelopment to occur" (Sudbury, 2000). He assigned the mayors from Blytheville and Gosnell, the two municipalities abutting Eaker AFB, to the executive subcommittee. To work together on the Eaker reuse-planning committee, however, the mayors had to overcome generations of subtle rivalry between the two adjacent but dissimilar communities. Blytheville, one of two county seats, was larger with a diverse population (1990) of 22,906 and a variety of commercial activities from hotels to feed stores. Gosnell, population 3,783, had long been a bedroom community

⁵⁹ After several years as their communities' leaders in base redevelopment, however, both Sudbury and Wiltse began to feel more criticism than admiration from residents who disagreed with one or another aspect of the large-scale, long-term projects. Mayor Podagrosi in Rantoul, Illinois, reached a similar point in her leadership of Chanute redevelopment, at which time she resigned.

to both Blytheville businesses and the air force base. Both were severely impacted by the closure: Gosnell stood to lose 60 percent of its residents while Blytheville lost both residents, though not nearly as high a percentage, and businesses.

Table 4.2
Milestone Achievement in Redevelopment
(months past the base closure announcements*)

Milestone	Host Community (Air Force Base)			
	Blytheville, AR (Eaker)	Limestone, ME (Loring)	Oscoda, MI (Wurtsmith)	Rantoul, IL (Chanute)
Organize Reuse-planning committee	4	12	4	11
Organize LRA	16	24	14	49
Hire Planning Consultant	2	23	8	12
Produce Reuse Plan	9	47	16	53
Attract First Tenant	17	48	21	52
Operational Closure	17	39	24	57

Source: The author.

* Loring, Eaker, and Wurtsmith AFBs were announced for closure in June 1991. Chanute AFB was announced for closure in December 1988.

Eaker redevelopment was exceptionally productive during the first couple years. It had to be. Eaker AFB shut down operations a mere 18 months after Congress announced its closure and six months ahead of schedule. Sudbury and the host community welcomed the Air Force's revised plans, because they were anxious to gain control of the property in order to implement their reuse plans.⁶⁰ A sense of urgency helped motivate reuse planners to set aside their differences long enough to hire a planning consultant, produce the reuse plan, hire an LRA director, and even set up their successor organization in plenty of time for closure in December 1992. Sudbury's group was so cohesive at the time that the nine-member board of directors from the reuse-planning committee moved over to the new LRA board in tact.

When the Air Force moved out of its facilities at Eaker AFB in mid-December 1992, the newly formed Eaker LRA had lined up an aviation tenant to move in

⁶⁰ Ironically, Eaker's rapid shutdown stood in stark contrast to the metropolitan base in the study. Chanute AFB in Rantoul, Illinois, shut down nearly five years after the 1988 closure announcement.

immediately thereafter. Once again, Sudbury's political acumen, this time coupled with his understanding of regulations dictating tenancy at closed air force bases, generated returns for Eaker redevelopment that, otherwise, might not have happened. Express One, a cargo airline, moved into a hangar and an administration building one day later to operate a mail hub for the Christmas season under a short-term contract with the U.S. Postal Service. The new LRA director attracted the airline, but Sudbury ensured that the Air Force produced the necessary interim lease allowing the operation to move into recently vacated Eaker facilities. When the lease was not yet ready at the time of closing ceremonies, Sudbury and the LRA counsel lobbied Arkansas representatives in Washington, D.C., to get their help in convincing Air Force headquarters to push the lease through. Their pressure tactics worked. The interim lease was produced in time for Express One to move on site, and employ hundreds of local residents to sort mail while flying planes full of mail in and out.

Sudbury's clout in making redevelopment happen as early as one day after closure yielded immediate benefits like jobs and business for local hotels and caterers. The long-term returns were even more important, however. The Christmas Net or C-NET operation, as it is known locally, has returned annually to the former Eaker AFB every year since 1992 save once when the Postal Service tested another site. Even though it lasts only one month each year, it has been a consistent aviation reuse. In 2000, the Eaker LRA won an EDA grant to construct a new hangar tailored to the needs of C-NET, thus enabling year-round aviation reuse in the existing hangars. If Sudbury, with the help of the LRA counsel, had not persevered in securing that first interim lease from the Air Force, albeit at the last minute, the host community might well have lost an opportunity for aviation reuse in base redevelopment.

Wiltse: Maximizing Wurtsmith Assets

Wiltse decided early in his leadership tenure that local control over base redevelopment would yield the most benefits for his community.⁶¹ Oscoda, Michigan, was a small township (1990 population: 11,958) that had long relied on the Air Force to

⁶¹ Host communities learned about base redevelopment experiences through OEA-sponsored "fly-arounds" in which local leaders visited communities in which military bases closed during the late 1970s. The National Association of Installation Developers and the Air Force were two other important sources of information on the redevelopment process.

support its local economy where double-digit unemployment rates were not uncommon. Wiltse understood well that the community lacked development capacity. At the time of the base-closure announcement in 1991, there was no public capital to invest in redevelopment, no development expertise outside the local chamber of commerce, and little in the regional economy to attract industry. Like many on the reuse-planning committee, he believed that the most efficient way to redevelop the base was to maximize the return on its assets. Some assets were obvious, like the airfields and hangars. Wiltse, however, saw asset potential in everything on base though and "left no stone unturned" in his quest to create jobs or revenues by capitalizing upon the base.

Ironically, one of the earliest assets Wiltse helped create came from Oklahoma rather than Wurtsmith. When it was time for the township to hire a director for the Wurtsmith LRA, he wanted a development professional who understood the limitations of rural communities but would be capable of tapping into the resources on base. Carl Sachs, who had 15 years experience in small town economic development (most recently in Guthrie, OK), accepted the job in large part due to Wiltse's influence. The then-president of the local chamber of commerce impressed Sachs with his leadership qualities and his assertiveness. Wiltse "had a 'want it all' attitude," explained Oscoda's first economic developer (Sachs, 1998). There were to be "no compromises" in base redevelopment. In fact, in one of the community's earliest attempts to capitalize upon base assets, the hiring committee offered Sachs the right to purchase, at a significant discount, one of the nicest single-family homes on the base five years after hire as incentive for him both to take the job and stay in the community.

Wiltse was unusually creative in his ability to convert base resources into development assets. When a major aviation company hesitated to expand its cargo maintenance operations into the Wurtsmith facilities, Wiltse showed the company's president a long list of personal property left behind by the Air Force and, therefore, available at no cost for reuse. The list not only covered aviation equipment like de-icers, cranes, and towing vehicles that were sure to impress, but it also included office furniture, jeeps, and tooling equipment that mattered to the cash-strapped firm. The example presented in the first part of this chapter regarding the sale of the base utility systems was Wiltse's idea. He questioned the revenue potential of the systems that, at the time, were targeted for transfer to the regional supplier. The Wurtsmith LRA hired

a consultant to determine how the township could access the systems. The proposed process was complicated, relatively lengthy, and politically dangerous⁶² but Wiltse focused on the outcome: public capital to invest in the start up of a health clinic on base. His determination paid off. In 1997, Oscoda sold the electric system for \$1.2 million and received a down payment of \$100,000 from the gas company.⁶³ The Wurtsmith LRA turned over \$500,000 to the new Oscoda Community Health Clinic, a much needed reuse to replace the lost hospital facilities upon which area residents had long depended.

By the time Wiltse decided not to run for reelection after two years as Oscoda Supervisor, the township had amassed numerous development assets, both institutional and physical. The Wurtsmith LRA Wiltse helped create and staff was, in fact, a department within local government; a substantial addition to a community that, just a decade prior, operated with only a town clerk and a small police force. The base airport converted to a cargo maintenance facility that Wiltse convinced to move up to Oscoda. Base facilities continued to generate public revenues for the township throughout the study period including the golf course, airfields, the housing, and numerous small manufacturing operations.

The Role of the Air Force in Base Redevelopment

The Air Force played a major and important role in base redevelopment. Without the assistance of air force personnel, in fact, base redevelopment was very likely impossible. Base commanders helped host communities inventory the property on base so that they could produce reuse plans. After base closure, the AFBCA prepared leases with local redevelopment authorities and new tenants, produced the requisite disposal documents, and, eventually, negotiated the transfer of surplus air force property to local redevelopment authorities.

⁶² The proposal to "acquire" the base utilities from the Air Force (at no cost through an economic development conveyance) and then sell them to the regional utility suppliers required approval through public referendum voted upon by Oscoda residents. The Wurtsmith Base Conversion Agency (WBCA), an organization created by the state to function as the caretaker of the base property until time of transfer, lobbied against the referendum, as did the utility suppliers.

⁶³ Wiltse's political battle with the WBCA even generated revenues. The state authority shut down two years earlier than legislated after the director resigned having been publicly charged with wrongful dealing with the regional utility supplier (i.e., promising a no-cost transfer of the base utilities). Wiltse successfully lobbied the state to direct WBCA's \$200,000 in annual funding to its successor, the Oscoda-Wurtsmith Airport Authority, for its first two years in operation.

Pentagon expectations of base closures during the 1990s, however, put the Air Force at cross purposes with host communities. Like the OEA, the AFBCA's mission was to help local redevelopment authorities in converting former military property for civilian reuse. Unlike the OEA, however, the AFBCA was also assigned the task to help the Air Force achieve its two larger goals in closing bases: (1) to save money by eliminating the operations of numerous bases from its annual budget; and (2) to generate revenues from the sale of base property to state and local governments and private developers. In contrast, host communities, particularly those in rural areas, wanted to convert the military property for civilian use as quickly and as cheaply as possible to preclude economic decline.

Despite the lofty and also burdensome goals of their superiors in the Pentagon,⁶⁴ however, local air force personnel were also community residents and, as such, were potential resources for base redevelopment. But the dual and often conflicting responsibilities of the Air Force in closing bases made it a less easily identifiable resource to host communities. A few air force employees, particularly recent retirees, worked toward redevelopment with the same enthusiasm as their civilian neighbors, but many in the Air Force dutifully followed military regulations dictating property disposal. Regulations often hampered, even crippled, redevelopment. For instance, when the Air Force hesitated to produce an interim lease to accommodate Express One's move into Eaker facilities, the departing base commanders were reportedly concerned about their liability for private reuse of military air control equipment. Aviation reuse mattered far more to the host community than the Air Force, while property protection meant more to the Air Force than the host community.

Like the community leaders discussed in the last section, air force personnel who wanted to help essentially identified themselves. In each case study, there emerged one air force employee who actively sought out a job in base redevelopment. In two host communities, the AFBCA site managers were life-long residents who had worked for years as civil engineers on base prior to closure. In the two other host communities, two

⁶⁴ The Military Department seriously overestimated the revenue potential and the savings resulting from base closures (U.S. General Accounting Office, 1997). Revenues were minimal because so much of the property declared excess by the Air Force was conveyed at no cost to federal agencies who requested transfer through the federal screening process and to state and local governments through public benefit transfers. Less than five percent of Air Force surplus acreage ever sold at 'market' rate to private developers. Even when Air Force sold its property, it typically did so at below-market prices. Near-term savings were minimal due to the high cost of environmental clean up required for property transfer.

recent retirees were hired to manage the new commercial airports housed in the same facilities and airfields that these former pilots had been working around for years.

On one hand, access to these former air force employees for base redevelopment was a matter of luck. Two host communities were simply fortunate that the air force personnel most suited to manage the AFBCA at their sites were life-long residents of the area. In fact, in one of these communities, the new site manager literally lived next door to the base. In contrast, the AFBCA site managers at the other communities were military rather than civilian and, therefore, felt more allegiance to the Air Force. On the other hand, LRAs were well aware of the beneficial resource in air force pilots who retired locally. It was not at all uncommon for former air force airfields when converted to commercial reuse to be managed by former air force pilots. Consequently, access was a matter of tailoring job advertisements toward pilots' skill base.

Once again mirroring the community leaders discussed earlier, air force personnel who found employment in base redevelopment were committed to their jobs. All four men were still in their positions at the end of the study period in 2000. They brought substantial talent to their work, but they also gained "on the job" training that enabled them to become increasingly useful "assets" to base redevelopment. In the remainder of this section, I offer my analysis of the creative ways in which air force personnel directly benefited base redevelopment by drawing on just one of the case studies, Limestone, Maine, in which AFBCA site manager David Bellyea made Loring redevelopment his personal mission.

The AFBCA as an Asset for Base Redevelopment

According to its mission statement below, the AFBCA⁶⁵ sounds like the best friend of closure communities with ambitions not unlike those of the OEA, i.e., to make base conversion happen. The AFBCA had an even greater opportunity than OEA to assist host communities because they owned the property that would become a critical asset for planning and managing redevelopment.

AFBCA is responsible for assisting communities in the conversion of

⁶⁵ The AFBCA was originally named the Air Force Base Disposal Agency. It formally changed its name in recognition of its mission to not just dispose of property but to assist host communities convert military property to civilian reuse. However, federal transfers often took years to transpire and, in the meantime, the Loring LRA maintained the property through its Caretaker Contract with the Air Force.

closing and realigning bases from military to civilian use and ensures that property at these Air Force installations is made available for reuse as quickly and efficiently as possible. AFBCA provides civilian reuse transition planning (sic), caretaker services to include installation protection, maintenance and operations, environmental planning, compliance and restoration and the disposal of real property and related personal property. (Air Force Base Conversion Agency, 1996, p.1)

David Bellyea, the Air Force's Deputy Base Engineer at Loring AFB when he applied for the position of AFBCA Site Manager upon base closure, embodied his organization's mission to the long-term benefit of Limestone, Maine. He quickly emerged as an important facilitator of Loring redevelopment. Bellyea explained that, at first, he saw his role as primarily serving the Air Force's interests by protecting its property, a formidable task given that \$350 million had been invested in new construction and renovations during the late 1980s. But, as a life-long resident of northern Maine and a farmer until 1980 when he was hired as a civilian to work with the Loring civil engineering squadron, he was also well aware that the region's long-term economic decline would be exacerbated by the base closure. Therefore, Bellyea also saw his role as serving community interests wherever possible during the closure and property disposal process. If anything, he tipped the scales toward his community.

Under Bellyea's leadership, the Loring field office for AFBCA "didn't assist in economic development per se but tried not to get in the way of it either." Despite his modest claim, Bellyea was clearly an asset to Limestone. In fact, he deliberately incorporated economic development strategies while facilitating the proper disposal of air force property. At the encouragement of field aides for Senators Cohen and Mitchell, the Loring AFBCA targeted area businesses in competitive bids for environmental clean up contracts. Bellyea's office structured requests for proposals (RFPs) so that the scope of work was within the capability of small, local firms. Consequently, there were as many as twelve bids on an RFP rather than a couple from larger, more established firms. Consequently, the dirt haulers, excavators, and equipment vendors, for example, were all local.

For Bellyea, not getting in the way of economic development also meant serving as a buffer between the community and Air Force bureaucracy. In this capacity, he generated financial returns for base redevelopment. Most caretaker agreements tapered off in scope and compensation as facilities were leased to tenants who then picked up

the cost of property maintenance. The initial Loring agreement contract through which the Loring LRA employed 35 people, however, stayed relatively constant for its five-year duration. Bellyea, who oversaw the contract, recognized the high fixed costs of maintaining the enormous amount of air force property on site; for example, the fire department, utilities, and water ran as high as \$2 million per year.⁶⁶

The Loring AFBCA, under Bellyea's leadership, worked toward base redevelopment in ways not unlike the LRAs in the other rural host communities. Reuse of the central heating plant is a good example. One of the most expensive components of maintaining former military bases, particularly those located in cold climates, has been converting a centralized heating system that had served one user for decades into individual lines to serve several reusers. Timing was as much an issue as cost. On one hand, early tenants were concerned about sharing the high cost of operating the central heating plant when the base was only partially occupied. On the other hand, the standard one-month kick-out clause in their leases deterred many tenants from investing in individual gas lines. Bellyea took the lead in resolving this problem at Loring by proposing a three-year, building-by-building conversion to the Air Force. He successfully argued that by doing so, the Air Force would slowly but surely reduce the enormous cost of heating the entire base. He further recommended that the Air Force pass on 80 percent of the predicted savings to the Loring LRA to help them finance building conversions.⁶⁷

The AFBCA as an Obstacle to Base Redevelopment

Bellyea's approach to his position as AFBCA site manager was all the more exceptional when compared to the style of other site managers in host communities. The AFBCA field offices at the former Wurtsmith and Eaker AFBs prioritized air force over community interests resulting in frequent conflicts. The Wurtsmith AFBCA, for example, demonstrated the position of the Air Force early in the redevelopment process. When, after several months of delay, it finally prepared the first interim lease

⁶⁶ In 1991, when Congress announced Loring's closure, the Air Force declared 10,534 acres as excess. Of that total, the Air Force retained 229 acres for its Defense Finance and Accounting Service operation and transferred 4,535 acres to other federal agencies, the Departments of Interior (Fish and Wildlife refuge) and Labor (Job Corps site).

⁶⁷ The same approach to ameliorating heating expenses was applied at the former Wurtsmith AFB; however, the Wurtsmith LRA, rather the AFBCA, conceived the idea in discussions with its planning consultant.

for a mid-size manufacturer willing to move on site even before formal base closure, the bulk of the lease revenue was assigned to the Air Force thereby thwarting the host community's first move toward self sustaining redevelopment. The Wurtsmith LRA agreed to go forward with the lease despite the lack of rental income because it so desperately wanted the manufacturing jobs in redevelopment. The AFBCA for the former Eaker AFB in Blytheville, Arkansas, was even less supportive of base redevelopment. There, the AFBCA maintained tight control over its property until it was fully conveyed five years after base closure. "Our philosophy was that it was our property, our responsibility and, until that was no longer the case, we would do with it what we wanted," according to Jerry Branum, the last and reputedly the most benign of the AFBCA site managers to work at the former Eaker AFB.⁶⁸ Interim leasing was especially difficult for the Eaker LRA, for example, because the AFBCA refused to go to the expense of lease preparation unless there was evidence of substantial job generation.⁶⁹ As a result, most reuse was delayed until the long-term airport lease was negotiated under a public benefit transfer almost three years after closure.

I found that the host communities benefited when the AFBCA site manager was a civilian, a long-term, if not life-long, resident of the region, and near retirement. Bellyea fit all these criteria as did Vernon Suits at the former Chanute AFB. Suits replaced the Chanute's first site manager who was transferred after Rantoul Mayor Podagrosi complained to the OEA and AFBCA headquarters in Washington, D.C., that she was unresponsive to the community.⁷⁰ The Limestone, Maine, and Rantoul, Illinois, communities benefited because these more *local* site managers understood the economic dilemma of base closures on host communities. In effect, Bellyea and Suits concerned themselves with the spirit of the AFBCA mission rather than the letter of the law. Because they were near retirement, these site managers could relax their approach to property disposal with less fear of retribution by their superiors. In contrast, military and mid-career AFBCA site managers likely found it difficult to juxtapose Air Force

⁶⁸ In fact, the many conflicts between the Eaker LRA and the AFBCA took place prior to negotiation of the economic development conveyance in 1997. Once transfer of the property to the Wurtsmith LRA had been fully negotiated, the AFBCA effectively relinquished its control over redevelopment. Branum's term as AFBCA site manager began shortly thereafter.

⁶⁹ According the Eaker LRA, the AFBCA reported that interim leases cost \$50,000 to prepare.

⁷⁰ Any tours with prospective tenants had to be cleared through the AFBCA site manager who held all the keys to base facilities. Podagrosi unaffectionately dubbed the Air Force's stance toward community access to the base just before and after closing as "the Hanes syndrome--it don't say Hanes until I say it says Hanes."

regulations in base closure and property disposal with community needs for development opportunities.

Conclusion: Asset Building Strategies Started with Local Resources

Host communities rallied for base redevelopment. What they lacked in place-based resources to stimulate development, they made up for in the enthusiastic commitment of residents toward economic recovery. I have shown in this chapter that residents were, in fact, the single-most important local resource among the rural host communities. Residents volunteered to help plan base reuse, to lead base redevelopment, and, a few air force personnel contributed their experience in converting the military base they knew well for civilian reuse.

I argue in this dissertation that the host communities in the study employed asset-building strategies to make up for their lack of development capacity at the onset of the base redevelopment projects. They accumulated assets by tapping into resources that were available to them. Residents were the most readily identifiable local resource in the rural host communities where, unlike the metropolitan host community, Rantoul, Illinois, public officials did not want to risk what little public capital there was in base redevelopment (Table 4.3). Due to the small size of rural host communities, I found that many residents believed they had a stake in the successful outcome of base redevelopment. They wanted to help so they were not difficult to access. Published meeting notices for reuse planning were enough to attract dozens of volunteers. The chambers of commerce served as a conduit for community access to project leaders who first learned about the closure and redevelopment processes as members of the only development organizations in their communities.

The first two steps in the analytical framework I proposed in the last chapter, therefore, were not difficult for the host communities in the study to achieve. In contrast, I will show in the next chapter on federal resources how complicated these two steps can be. Even the third step, asset accumulation, required minimal strategy. Residents committed to their roles in base redevelopment when their functions were defined, i.e., when they gained titles for their involvement such as Oscoda Township Supervisor in the case of community leader Dean Wiltse or subcommittee assignments or AFBCA site manager. The longer residents stayed with redevelopment projects, the more valuable they grew as project "assets" due to their acquired expertise in various

Table 4.3: Community Strategies for Asset Building with Local Resources

<p>Blytheville, Arkansas <i>Including all stakeholders</i></p>	<p>Limestone, Maine <i>Six impact communities</i></p>	<p>Oscoda, Michigan <i>Chaos with a purpose</i></p>	<p>Rantoul, Illinois <i>The mayor leads the way</i></p>
<p>Resource Identification: Identifying any person, place, or thing that might be a resource for development.</p>			
<p>Harold Sudbury, member of the local chamber of commerce and early project leader, wanted to include all stakeholders in Eaker reuse planning to reduce the potential for political conflict.</p>	<p>The Northern Maine Economic Development Corp. (NMEDC), who took the early lead, wanted to include representatives from the six towns surrounding Loring AFB in organizing a response.</p>	<p>The township wanted to include all interested residents in WurtSmith reuse planning because: residents were stakeholders in base redevelopment; and resident participants could disseminate project information.</p>	<p>Mayor Katy Podagrosi assumed the role of leading base redevelopment. The city's staff economic developer, hired a decade earlier to help the community diversify after a base-closure scare, helped her.</p>
<p>Resource Acquisition: Gaining local control over identified resources.</p>			
<p>The local chamber of commerce invited its members, public officials, and a few nonmembers to participate in reuse planning. The mayors of Gosnell and Blytheville, Sudbury, and the county judge comprised the executive committee.</p>	<p>Each of the six impact communities appointed representatives to, first, the save-the-base committee, and, a year later, to the reuse planning committee. Senate aides and governor's staff participated too.</p>	<p>The reuse planning process was open to the public. For several months, meetings were chaotic brainstorming sessions. Dean Wiltse, president of the local chamber of commerce, volunteered to lead the project.</p>	<p>Immediately after the closure announcement, the mayor first arranged a meeting of community leaders and public officials to discuss a plan of action. Months later, she invited all residents to participate in reuse planning.</p>
<p>Asset Accumulation: Retaining local control over acquired resources until they can be capitalized as assets.</p>			
<p>Some reuse planning participants moved on to serve on the board of the LRA. Their history on the project provided them with expertise in base-related issues. Sudbury was appointed the first LRA board chairman.</p>	<p>Conflict during reuse planning led to the early dissolution of the committee. The staff hired to administer the reuse planning committee carried their expertise to base redevelopment.</p>	<p>Resident reuse planners divided into substantive subcommittees where they begin to gain expertise on base-reuse issues. The community elected its informal project leader, Dean Wiltse, as Township supervisor</p>	<p>The mayor won reelection twice while leading base redevelopment. Resident reuse planners worked for years on the base reuse plan due to long time, 4.5 years, between the closure announcement and operational closure.</p>
<p>Asset Capitalization: Employing accumulated assets to generate social, economic, or financial returns for development.</p>			
<ul style="list-style-type: none"> • Base reuse plan was produced in 9 months. • LRA board member had years of experience in guiding reuse, which they applied to tenant review in base redevelopment. 	<ul style="list-style-type: none"> • Base reuse plan produced eventually. • Long-term administrative staff applied knowledge of base-related issues to redevelopment. 	<ul style="list-style-type: none"> • Base reuse plan produced in 16 mos. • Resident reuse planners applied their expertise on base-related issues to tenant review for LRA. • Lasting community support for base redevelopment activities. 	<ul style="list-style-type: none"> • Base reuse plan. • Lasting community support for base redevelopment activities. • Residents reuse planners take on responsibilities in redevelopment such as museum administration.

base-related issues.

The final step in asset building, capitalization, was a challenge when the host communities started with local resources, namely residents. Unlike base facilities like housing, for instance, where reuse was more obvious, the potential returns generated from resident involvement in base redevelopment were somewhat less tangible but important just the same. Public participation in base-reuse planning generated at least two positive outcomes for base redevelopment. First, the expertise on base-related issues that residents gained during planning could be put to use during redevelopment as evidenced by the role Wurtsmith reuse planners played in the tenant-review process. Because they had participated earlier in setting guidelines for appropriate redevelopment, residents made significant contributions by ensuring it was implemented as planned.

There was a second, less tangible, way in which residents were a local resource that, when capitalized upon by the host communities in the study, helped increase local development capacity. McGuire et al. (1994) found that community-wide planning processes measurably increased local development capacity especially for more remote communities. My conclusions on the outcomes of reuse planning are similar. The more participative the process, the greater was public support for base redevelopment. In the two host communities in which all residents were welcome to join the reuse-planning committee, the public solidly supported redevelopment activities for several years into the projects. Only when the closure crises were well over did disagreements over reuse particulars arise. In the other two host communities where reuse-planning committee members were appointed, public support was less stable. When conflicts arose, redevelopment processes slowed in order to focus on resolution rather than redevelopment as was the case in Limestone, Maine, during the reuse planning process. The delays did more than postpone redevelopment, however. In Blytheville, Arkansas, the Eaker LRA lost control of an important development asset as a result of its conflict with city officials and, therefore, lost an opportunity to gain development capacity.

I argue that conflict arose in Limestone and Blytheville host communities due, in part, to the fact that these communities restricted public participation in reuse planning and, in doing so, lost the opportunity to secure long-term project support from area residents. To be fair, however, battles in both these communities began over a contentious subject: reuse of the obvious federal resource in air force base closures, the

decommissioned airfields. In Chapter Five, I show how the communities looked to the airport facilities on closing bases as well as a number of other federal resources as critical for base redevelopment.

Chapter Five

Exploiting Federal Resources

The primary, and often the only, local resource available to the rural host communities subject to case study was residents. In contrast, the metropolitan host community I studied drew upon institutional, economic, and geographic resources as it embarked on base redevelopment. As I explained in the last chapter, the mayor of Rantoul, Illinois, the metropolitan host community in the study was not only fully capable of managing a large-scale redevelopment project, but she was also supported by an economic developer on her staff. In addition, the regional economy, traditionally stable, was growing at the time of the Chanute closure announcement. According to Mayor Katy Podagrosi, who was confident there was a market for the base facilities, "Eventually, the market would absorb the property but it would take a while" (1998). In fact, right after the Chanute closure, the U.S. General Services Administration sold 762 acres to private developers through public auctions in 1993 and 1994.⁷¹

The rural communities in the study had fewer formal local resources than their metropolitan counterpart, but federal resources like funding, technical assistance, and surplus property were equally available to both. Federal resources, therefore, helped level the playing field in base redevelopment between rural and metropolitan host communities. Federal resources originated with one or another federal government agencies such as the Department of Defense (DoD) Office of Economic Adjustment (OEA), the Economic Development Administration (EDA), the U.S. Congress, and, of course, the Air Force surplus property, structures, real estate, and equipment, that remained behind after base closures. Asset-building strategies, however, required more than the mere availability of additional resources which leads to the question I pose in this chapter:

- How did the host communities in the study exploit available federal

⁷¹ Less than five percent of the 70,000 acres available for redevelopment during the 1990s was sold to private developers. As federal surplus property, military bases, or portions thereof, were available to the private sector only after the public sector foregoes the opportunity to develop. The Village of Rantoul requested 1,363 acres including the airfield, hangars, classroom buildings, and recreation facilities through a series of public benefit transfers, the only means available to LRAs in the early 1990s for receiving property at no cost. Rantoul leaders worked with the GSA to sell the remaining property at auction because they could not afford to purchase it at market price and they did not want the financial burden of maintaining the property until reusers were found.

resources in base redevelopment?

I continue my argument about the effectiveness of asset-building strategies in base redevelopment. Rural host communities may have lost a major employer when the Air Force moved out, but, paradoxically, they had access to a windfall of federal resources for redevelopment as a result. Resources that, like those found locally, ultimately enhanced the long-term development capacity in these communities. In the first section of this chapter, I summarize my analysis, based on case studies,⁷² as to how host communities first identified and accessed federal resources to help them in reuse planning and base redevelopment and then converted these resources into more permanent project assets to be capitalized upon to generate public revenue and new jobs. In the remaining sections, I present my findings on asset building that started with the most common federal resources in base redevelopment: (1) federal assistance; (2) surplus housing; and (3) surplus airfields.

Asset Building with Federal Resources

Because the rural case-study communities were all part of the second round of base closures, they could safely assume that they would get help from the federal government in many forms: funding, technical assistance, federal reusers, and the eventual control of surplus property. By 1991, federal assistance was well underway for the redevelopment of several air force bases announced for closure in 1988. In fact, reuse had even begun at Pease AFB in southern New Hampshire. By no means, however, was there a well-worn path between closure announcement and job-generating base redevelopment that the host communities in the study could follow. In other words, they had to be strategic.

Host communities had help identifying federal resources from what was typically the first federal resource they tapped into: the Office of Economic Adjustment (OEA), an agency created within Department of Defense (DoD) in 1961 to assist communities adversely impacted by "significant Defense program changes" like base closures (OEA, 2002). In addition to providing substantial planning grants to all host communities, the OEA offers technical assistance of which "identifying resource

⁷² The four case-study communities were: Blytheville, Arkansas, Limestone, Maine, and Oscoda, Michigan, all of which are rural; and Rantoul, Illinois, which is located in the Champaign metropolitan region.

requirements and possible sources" is a part. The OEA introduced its project managers to host communities shortly after formal closure announcements. For several years thereafter, the project manager both functioned as a resource for funding and assistance and identified other potential resources such as those that will be highlighted in this chapter: the federal screening process and base property.

I found that when host communities cast a wide net in terms of identifying federal resources that might be of value in base redevelopment, they generated more development assets over the course of the project. Creativity was necessary not only in identifying, but also in accessing resources. Accessing federal resources was entirely unlike accessing local resources with the possible exception of the OEA whose project managers readily involved themselves in base redevelopment. There were regulations to be followed, information about resources to be gathered, and what seemed like an endless sequence of hoops through which host communities jumped in order to acquire the federal surplus property, in particular, but other resources as well. Determination was not the only important component of access strategies. When there were barriers to analyze, host communities often had to revise their original approach and try again. I found that the most tenacious communities were as incremental in their access strategies as they were tactical. In this chapter, I address the frustration of host communities with federal requirements dictating access to much-needed resources. Those that survived the bureaucracy by modifying their access strategies accordingly derived the full benefit of the resources acquired. Those less capable of revising their plans generated less than optimal returns.

Soon after the onset of base redevelopment projects, there was evidence of growing development capacity among the host communities as they organized for base redevelopment. They invested OEA funds to create organizations for reuse planning first and later for base redevelopment. They hired development professionals to take responsibility for the highly visible task of project management. I found that this early capacity building greatly enhanced a community's ability to capitalize upon its newly acquired assets. Honadle (1987) noted in her research on the impact of UDAG grants in nonmetropolitan areas that the recipient communities often lacked the ability to manage the grants or the funded projects. She found that small-town leadership, as often as not, lacked authority over the actions of private developers. She also found that UDAGs were under-solicited by rural communities because many even lacked the wherewithal

to apply. With OEA's assistance and the luxury of time,⁷³ one of the first tasks of host communities was to create that very capacity of managing a public development project and the many players involved. In this way, the host communities in this study were a step ahead, so to speak.

The increased capacity with which the host communities approached base redevelopment was permanent. The organizations charged with project management in the near term should, theoretically, serve the host communities in the long term as well. For example, Oscoda, Michigan, created the Wurtsmith LRA as a department in local government. Township leaders had the foresight to task the new organization with the added mission of overseeing development in two other parts of the community, the downtown and the waterfront districts. This was the first of what would become a stockpile of assets into which the community could tap for the purpose of local economic development. I argue in this chapter and the next, that the accumulation of assets and the capitalized returns of these assets will help the communities sustain the next economic crisis. There has already been some evidence of sustainable development which I will discuss in this chapter. In the late 1990s, Oscoda, Michigan, recovered quickly from the loss of a major employer because the community was able to draw on a number of assets it had gained from base redevelopment including substantial public capital and an economic development professional.

Investing Federal Funds

Without the prospect of federal funding in base redevelopment, rural host communities of base closures would have been faced with a difficult choice: either to attempt base redevelopment, but risk what little local public capital was available, or to lock the gates to the base, but risk continued economic decline. Federal funding to aid base redevelopment projects was a certainty. In the early months and even years following closure announcements, in fact, federal funding was a critical resource supporting host communities as they attempted to plan and redevelop thousands of acres of base property. From the communities' perspectives, at best, they might succeed at base redevelopment by gaining new taxable property, new jobs, and new residents.

⁷³ On average, host communities had 2-3 years to organize for and plan base reuse before bases actually shut down operations.

At worst, they might fail at base redevelopment, gain nothing but also lose no more than they already had through base closure--a major employer. By investing federal, rather than, or at least far more than, local, funds in base redevelopment, I believe that host communities realized their opportunity to take some risks in development and to plan for long-term as well as short-term outcomes. In this section, I begin with a discussion on access strategies and move onto an example of how host communities took advantage of the availability of federal funding to permanently improve their development capacity even beyond the scope of base redevelopment.

Two Closure Rounds was Company But Four was a Crowd

Host communities had plenty of help identifying sources of federal funding and, for a few years at least, access was often as not a matter of asking; i.e., writing grant proposals. In addition to the OEA, advice about funding sources came from other host communities, particularly those in previous closure rounds who were further along in the redevelopment process, and from the air force.⁷⁴ The information continued to flow about where host communities could go for federal funding, but access eventually grew more difficult due to increased competition. By the fourth round of base closures in 1995, there were around 100 host communities competing for federal assistance.

The case-study communities employed one or two strategies to compete for federal funds, particularly the larger grants available for infrastructure improvements from the EDA and FAA (Table 5.1).⁷⁵ One strategy was to improve the grant requests and another was to improve their timing. The Eaker LRA, for instance, hired an experienced grant writer to improve their chances at winning grants in the increasingly crowded field. Rick Johnson joined the fledgling LRA staff in late 1992 just before the base shut down. In eight years, he generated \$8.5 million through five EDA grants, half again as much as the average level of such grants among either the rural or the metropolitan host communities. As an experienced grant writer, Johnson knew to tap federal funding sources outside those normally accessed by host communities. Because

⁷⁴ Reuse planners and LRAs were encouraged to meet and share information through different avenues including the National Association of Institution Developers (NAID) and attendance at various DoD-sponsored conferences on base redevelopment issues.

⁷⁵ The significant difference between FAA funding between the two groups was due to the fact that many of the metropolitan sites converted to full-time commercial airports with the financial support of FAA.

Blytheville, Arkansas, was rural and part of an unstable regional economy, the LRA was eligible for EDA's Sudden and Severe Dislocation grant, for example.

**Table 5.1
Federal Funding for Base Redevelopment (\$,000), 1998**

Host Community (Air Force Base)	OEA	FAA	EDA	Total
Blytheville, AR (Eaker)	\$2,673.6	\$90.0	\$8,450.0	\$11,213.6
Limestone, ME (Loring)	2,935.0	0.0	4,567.0	7,502.0
Oscoda, MI (Wurtsmith)	1,997.0	139.5	9,717.5	11,854.0
Other Rural AFBs (n=3)	1,957.8	964.5	3,590.0	6,512.3
Rantoul, IL (Chanute)	1,154.9	936.5	7,622.2	9,713.6
Other Metro AFBs (n=21)	1,350.0	9,778.6	5,207.4	16,336.0

Source: U.S. General Accounting Office (1998)

The Wurtsmith LRA timed its grant requests in a strategy to maximize funding support from federal agencies while it was still readily available. According to Director Carl Sachs, financing base redevelopment was the least of his problems due to the availability of federal and state grants, at least during the early years after the closure announcement. He characterized remote Oscoda, Michigan, as the "poster child" for needy host communities. In time, however, he realized that the LRA's applications for grant monies were as likely to be rejected as they were to be accepted. Fortunately, the Wurtsmith LRA had taken full advantage of federal funding while it was available as evidenced by the community's rapid progress through the major milestones of base redevelopment. The Wurtsmith reuse-planning committee produced the base reuse plan in 16 months, 6 months ahead of the median among the rural host communities. Before the base closed, there were civilian tenants on site and not long afterwards, redevelopment started to generate a steady stream of rental income from multiple reuses on the site.

Seeking Long-terms Returns on Local Investment of Federal Funds

Federal assistance enabled rural communities to take on formidable base redevelopment projects despite their lack of development experience and local capital. The most strategic application of federal funds, therefore, created lasting institutional

and individual development expertise. I found that the case-study communities capitalized upon federal funding, in essence, by investing in institutions. They enhanced local development capacity by setting up the organizational infrastructure needed to steer base redevelopment in the short run. In the long run, however, these new organizations and professional staff strengthened the communities' ability to withstand their next economic crisis, a seemingly inevitable event in rural areas. Revisiting the fact that the Eaker LRA hired grant writer Rick Johnson is one example of how the case-study communities gained development capacity through the investment of federal funds. The initiative behind Johnson's hire was, of course, base redevelopment, and OEA funds paid most of his salary for a few years. Even after OEA funds ceased to subsidize the Eaker LRA's planning activities, however, the host community continued to benefit from Johnson's grant writing acumen. For instance, the current mayor of Blytheville, Arkansas, has called on the Eaker LRA and Johnson, in particular, for help writing grant proposals for projects outside of base redevelopment.

Another example of visionary investment of federal funds available for base redevelopment was that of Oscoda's expansion of its municipal government staff through well-planned allocation of OEA funding. The Michigan township wanted to maintain control over Wurtsmith redevelopment. It felt justified in doing so because the base was located entirely within its jurisdiction. However, in 1991, at the time of the base-closure announcement, there were very few full-time staff working in municipal government.⁷⁶ Local leaders applied some of the nearly \$2 million in OEA funding to create the Oscoda Office for Economic Development. They then wisely hired an experienced economic developer in 1992 as director. This new department of local government functioned primarily as the Wurtsmith LRA but overall local economic development was within its purview.⁷⁷ As critical as the reuse of Wurtsmith's facilities was to the local economy, local leaders ensured that base redevelopment did not detract from the township's traditional commercial areas: the downtown and waterfront

⁷⁶ Anticipating the base-closure announcement, the Oscoda Board of Trustees created the position of Township Superintendent, similar to that of a city manager, in early 1991. The only other full-time staff were the police chief and town clerk.

⁷⁷ Both the scope and structure of the Wurtsmith LRA were relatively uncommon among the rural host communities. The other five rural LRAs in the study were all public authorities created for the explicit purpose of base redevelopment. The one metropolitan LRA in Rantoul, Illinois (Chanute AFB) was a local government entity. However, it focused on base redevelopment for several years after closure. After Rantoul's long-term economic developer passed away in 1997, the LRA director expanded his responsibilities to include the off-base development.

districts where many businesses closed around the time of base closure.

By the end of the study period, when the base closure crises had long subsided and redevelopment was well underway, Oscoda's government had established institutional development capacity where there had been virtually nothing ten years prior outside of the local chamber of commerce. I am not the first to suggest that development capacity is all the more critical in rural communities who, it would appear based on the economic history of rural America, are more vulnerable to economic crises. As evidence, Oscoda survived another setback in 1999 when the largest employer in town shut down operations laying off as many civilians as the Air Force had six years earlier. American International Airways (AIA), an aviation cargo maintenance operation that moved into the Wurtsmith hangars one month after base closure, was acquired by another airline and then closed by new management. Residents lost jobs, many of them skilled, and the township lost lease revenues. The crisis was no different in magnitude than base closure, but the community's ability to manage the crisis on its own was greatly improved. The township had control of the property, a long list of aviation equipment, and an experienced economic development department to find a reuse for it. Within a few months of AIA's exodus, another cargo maintenance moved into the renovated hangars once owned by the Air Force.

Summary:

The short-term gains for base redevelopment from local investment of federal funding were obvious. The long-term gains, I argue, were less obvious but equally important. For instance, all the case-study communities enhanced their development capacity by creating local redevelopment authorities with the help of OEA funds for reuse planning. This was an important funds use because it helped the host communities institutionalize their growing capacity for economic development while focusing on the demands of base redevelopment. As OEA funding subsided over the years after base closure, the rural host communities gained development assets to help sustain them past the time of federal subsidies. In this section, I cited Blytheville's asset in its prolific grant writer and Oscoda's asset in its staff economic developer just to explore a few of the many examples of development assets to emerge from federal funding. And, as the demands of base redevelopment lessened by the end of the study period, the host communities not only enjoyed many of the goals they had aspired to

such as facility reuse but they also benefited from their improved ability to withstand future crises.

Maximizing the Outcome of the Federal Screening Process

The federal government was an important source of funding and technical assistance for all host communities, but it was also the source of jobs for a few. Under the federal screening process mandated by the Surplus Property Act of 1944, federal agencies could request transfer of the property at closing air force bases. Host communities generally welcomed federal reuse of former air force facilities because it could generate much-needed jobs. I found that rural host communities, however, were far less likely than their metropolitan counterparts to access the benefits from the federal screening process (Table 5.2). Ten percent of the excess acreage at closed air force bases located in metropolitan host communities was transferred directly to federal agencies such as the Bureau of Prisons or the Department of Veteran Affairs, but only two acres of the excess acreage at five of the rural host communities were reused by federal agencies.⁷⁸ The rural host communities realized the benefit of the screening process, but, with the exception of Limestone, Maine (Loring AFB), they were unable to access this federal resource because they could not compete with the great number of closed military bases located in metropolitan regions. It appeared that federal agencies no more wanted to relocate to rural areas than private companies. The Eaker LRA, for example, lost its bid for a Border Patrol training facility to Charleston Naval Air Station despite months of negotiation with the U.S. Department of Immigration and Naturalization Services.⁷⁹

Loring Redevelopment: Accessing Federal Reusers

In contrast to the virtual absence of federal reuse in the other rural host communities, four federal agencies moved on the site of the former Loring AFB in Limestone, Maine (Loring AFB). Federal reuse at this remote site along the Canadian

⁷⁸ In fact, these 2 acres were not transferred as the result of the screening process. When the Wurtsmith LRA discovered that the federal agency planned to construct a new building nearby, they lobbied their congressman to shift the location to Wurtsmith.

⁷⁹ U.S. Attorney General Janet Reno even publicly announced the INS move onto the former Eaker AFB which, apparently, caught the attention of South Carolina Senator Strom Thurmond's staff who successfully lobbied to shift the Border Patrol training facility to a closed military base in South Carolina.

border was substantial; nearly one-half of the excess acreage on the enormous base transferred to the Department of Interior, the Defense Finance and Accounting Service, the Job Corps, and the Maine Army National Guard. That Limestone successfully exploited the federal screening process and federal site selection processes to benefit both Loring redevelopment and the future of the regional economy is an understatement. Far more federal reuses and federal jobs exist at the former Loring AFB than at any other closed air force base including those located in metropolitan communities; not by chance but through political clout.

**Table 5.2
Federal Reuses of Closed Air Force Bases**

Host Community (Air Force Base)	Excess Acreage *	Federal Reuse Agencies	Acreage (% of excess)
Blytheville, AR (Eaker AFB)	3,286	-----	0 (0.0%)
Limestone, ME (Loring AFB)	10,534	<ul style="list-style-type: none"> • DoD DFAS • DoI Wildlife Refuge • DoL Job Corps • Maine Army National Guard 	4,764 (45.0%)
Oscoda, MI (Wurtsmith AFB)	1,941	<ul style="list-style-type: none"> • USDA Forest Service 	2 (0.1%)
Other Rural AFBs (n=3)	11,401	-----	0 (0.0%)
Rantoul, IL (Chanute AFB)	2,174	-----	0 (0.0%)
Other Metro AFBs (n=21)	56,374	<ul style="list-style-type: none"> • USDA Forest Service • FAA • DoD DFAS (3), Coast Guard, Reserves (2), Navy (2), Army • DoJ federal prisons (3) • Veteran Affairs hospitals (2) • DoI wildlife refuge, national park • DoT highway ramp 	5,512 (10%)

Sources: Air Force Base Conversion Agency (2001); U.S. General Accounting Office (1998)

* Excess property on base (and sometimes off site as well) is that which the Air Force declares as in excess to its mission and, therefore, available for transfer to other federal agencies. Surplus acreage, on the other hand, is the property on- and off-base that the federal government declares as surplus to its needs.

Abbreviations: DFAS - Defense Finance and Accounting Services; USDA - U.S. Department of Agriculture; DoD - Department of Defense; DoI - Department of Interior; DoJ - Department of Justice; DoL - Department of Labor; DoT - Department of Transportation; FAA - Federal Aviation Administration

Limestone accessed federal reuse for Loring AFB through its elected representatives in Washington, D.C. The Maine Congressional delegation employed a similar strategy to that used by the Save Loring committee (explained in the last chapter) but, were far more successful. Like their constituents, Senators Cohen and Mitchell and Congresswoman Snowe felt strongly that Limestone's geographic and economic isolation rendered it unusually dependent on the Air Force and, therefore, made Loring's closure all the more harmful to the regional economy. Congressional staff relied on this "hardship" argument when lobbying federal agencies during and after the screening process. Backed by the combined political clout of the three elected officials,⁸⁰ the strategy worked. Four federal agencies responded favorably to suggestions that they reuse land and/or facilities at Loring; two of whom committed prior to base closure to move on site.

The Maine congressional delegation persevered to make the "hardship" argument as effective an access strategy as it was. As evidence, they managed to attract one agency that had originally targeted only metropolitan sites. Limestone did not fit the location criteria for DFAS, the first federal reuser to announce its move to Loring. According to Loring LRA chairman Brian Thibeau (1999), "the DFAS RFP called for a \$30,000 proposal cost, a metropolitan location, and local 'give aways.'" The former air force facilities and personal property at Loring AFB helped the community meet the last criterion, but the proposal cost was prohibitive, and Limestone was hundreds of miles away north of Bangor, Maine, the closest metropolitan region. Nonetheless, Maine representatives believed that Loring was ideally suited for a DFAS operation⁸¹. Senate aides first lobbied successfully to remove the location preference from the RFP and then encouraged the Loring reuse-planning committee to submit a proposal. With the financial and technical assistance of the Northern Maine Development Corporation, they developed and submitted a proposal in 1993. The DoD may have revised its RFP as requested by the Maine congressional delegation but, in the end, Loring was the only

⁸⁰ In 1991, Maine's representatives enjoyed considerable clout due to seniority alone. Between them, Senators George Mitchell (D), Bill Cohen (R), and Congresswoman Olympia Snowe (R), had 41 years experience in Congress.

⁸¹ The Defense Finance and Accounting Service was another outcome of military downsizing. Created in 1991, the DoD consolidated hundreds of small field offices performing tasks related to personnel and payroll, for example, into 26 centers in an effort to increase efficiency.

rural location it selected for its DFAS operations.⁸²

Cost Savings and Job Generation through Federal Reuse

To a large extent, the Loring LRA waited for returns to be generated through federal reuse, namely jobs and cost savings. Toward the end of the study period, close to 500 new jobs had been generated through federal reuse of Loring facilities and another 310 students lived on site (Table 5.3). They were good jobs for the region. The majority of the jobs at DFAS, the Job Corps, and the Maine Army National Guard were full-time, paid relatively well, and included benefits. Reportedly, these more closely resembled the lost federal civilian jobs than most jobs in the region that typically were part time with low wages and no benefits. Furthermore, two of the federal reusers expanded operations after first moving to Loring. Both DFAS and the Maine Army National Guard generated more jobs at their new sites than originally expected. The Loring LRA credited the productivity of area workers and the high quality of the former Loring facilities for the expansions.

**Table 5.3
Federal Reuse at the Former Loring Air Force Base, Limestone, Maine**

Federal Reuse Agency	Move-in Year	Acreage	Jobs by 1999
DoD Defense Finance and Accounting Agency	1995	29	305
Maine Army Guard	1997	200	66
DoL Job Corps	1996	69	126
DoI Fish and Wildlife Services	1998	4,467	1
Totals:		4,764	498

Source: Loring Development Authority (1999)

The second important advantage in federal reuse of Loring facilities and property was the consequent savings in maintenance costs. One of the most daunting aspects of base redevelopment for the rural host communities was the cost of maintaining the property. The Air Force typically covered maintenance costs until they

⁸² Two other closed air force bases attracted DFAS, however, but both were located in major metropolitan regions: Denver, Colorado, (Lowry AFB) and San Bernardino, California (Norton AFB).

negotiated conveyance of property with LRAs who then took over. At Loring, the cost of heating facilities and removing snow was extremely high, running into the millions of dollars each year according to the AFBCA. Furthermore, there were over 10,000 acres on base. The DoI's Fish and Wildlife Refuge received transfer of a large chunk of the Loring property in 1995, thus alleviating the LRA of the burden in managing the substantial forest acreage. When the other three federal reuses moved to Loring between 1995 and 1996, they assumed the cost of facilities and property maintenance for their own acreage and paid the LRA a fee to maintain the base infrastructure.

Federal reuse of the former Loring AFB was clearly an enormous benefit to the host community, but there was one drawback. The Loring LRA lacked control over the redevelopment of nearly one-half of the base property including some of the nicest facilities. They welcomed the reuse because, for the first few years after the 1994 closure, the private sector showed minimal interest in base. The only real disadvantage in federal reusers was in the timing of their actual move on site. Most LRAs wanted base reuse to begin as soon as possible after base closure. Even the metropolitan host community in the study, Rantoul, Illinois, sought early reuse to avoid "becoming a ghost town" according to Mayor Podagrosi (1998). "We wanted to minimize the time between the loss of Air Force jobs and the creation of new jobs through Chanute's redevelopment." Some of the federal agencies at Loring committed to reuse prior to closure, but none moved on site until mid-1995 almost a year after base closure. The last moved on another two years later in 1997.

Summary:

But for federal reuse, Loring redevelopment may never have happened. The first major private-sector employer did not move on site until 1998, seven years after Congress announced base closure. Critical to the success at Loring, however, was access to the federal screening process as a resource for redevelopment. No other rural host community enjoyed such access; neither did any other metropolitan host community with the possible exception of Charleston, South Carolina, where the Naval Shipyard closed and a host of federal reuses ranging from the Immigrant Naturalization Service to the U.S. Postal Service moved in. Like Limestone, Charleston's access hinged

upon its influential elected officials in Washington, D.C.⁸³ Loring redevelopment clearly has benefited from federal reuses to move on site during the 1990s, but private reuse will take time. The reader will find little mention of Loring in the next two sections concerning the reuse of housing and airfields at closed air force bases, because, by the end of the study period, there was little of either.⁸⁴ According to LRA Director Brian Hamel, his staff "spends a lot of time setting more realistic expectations for what redevelopment will do for the regional economy" both in terms of timing and magnitude (1999).

Housing Reuse: A New Neighborhood in the Community

As a resource, former Air Force housing was easily identifiable but, at different times, it was both a blessing and a burden to host communities. The advantages were far more obvious at first than the disadvantages. There was plenty of housing. In addition to dormitories, there were more than one-thousand units per base, and most of them were in good condition. There was a mix of styles from multi-story dormitories to garden apartments to townhouses and single-family homes. Housing was located in on-base neighborhoods sometimes in wooded settings, on quiet streets, away from the airfields but close to recreation and services and schools. Environmental clean up was usually minimal, limited to asbestos removal for the most part. Best of all, for rural host communities, surplus military housing was available at no cost through economic development conveyances.

For rural host communities, there was also a downside to former air force housing. The addition of more units threatened small real estate markets already flooded with supply when air force civilians moved out of town. Reuse planners worried that an over-supply of housing units would deflate area rents. Many units failed to meet building codes in host communities. For example, duplexes often lacked firewalls between units and all homes lacked individual utility meters. Most housing was in reasonable condition, some units were not; demolition, however, was costly.

⁸³ Long-time South Carolina Senator Strom Thurmond enjoys considerable political clout and has been chair of the Armed Services Committee since 1994.

⁸⁴ There has not been full-scale redevelopment of Loring housing, but parts of it have been reused including the dormitories that serve the Job Corps students and some townhouse units that serve as temporary living spaces for incoming DFAS employees. There is no aviation reuse at Loring; however, one of the hangars has been reused by an agri-business that produces strawberry seedlings.

And, although housing was available at no cost, deed transfer often took years, which complicated the sale of units to prospective buyers.

The drawbacks complicated, but did not wholly diminish, the importance of this resource for rural host communities. In this section, I compare and contrast asset-building strategies based on the surplus housing in two of rural host communities. In the Oscoda, Michigan, case, the Wurtsmith LRA fully controlled both the access and redevelopment of the housing of the Wurtsmith housing. The host community, as a result, enjoyed many benefits, such as an increase in the availability of affordable housing units off base, public revenues derived from the sale and taxation of units that remained on base, and the in-migration of former downstate residents. In the Blytheville, Arkansas, case, however, the Eaker LRA only briefly controlled the base housing; rather, it served as a conduit between the Air Force and a private developer in the transfer of Eaker residential property. the reuse of Eaker housing has progressed some, but there have been few returns from housing redevelopment: no sales revenues; no property tax revenues; and minimal in-migration.

Access: Waiting Until The Time Was Right

There were several similarities in the access strategies employed by the Eaker and Wurtsmith LRAs: the timing, the property transfer method, and the interest of private developers. Accessing air force housing was not an immediate priority for either the rural host community. In fact, both LRAs deliberately delayed housing reuse to allow time for the local housing market to begin to absorb the off-base units left vacant when air force civilians transferred to other jobs. As intended, the strategic delay allowed time for the local housing markets in Blytheville, Arkansas, and Oscoda, Michigan, to stabilize. As evidence, two housing developers approached the Wurtsmith LRA and one approached the Eaker LRA with proposals for reuse of base housing. Before either LRA formally applied for transfer of residential property from federal into local control, they had already arranged for private sector reuse.

The rural host communities derived a second benefit from postponing housing redevelopment. As the LRAs were biding their time, Congress passed the Pryor Amendment that permitted housing transfers at no cost rather than market price as previously mandated by federal laws dictating the disposal of surplus property. In fact, Senator David Pryor of Arkansas recognized the difficulties Blytheville had in simply

affording access to Eaker assets and, therefore, wrote the legislation that would ultimately aid all host communities, but particularly those in rural locations. According to the 1994 law, as long as they could argue that former base property improved their opportunities for economic development, host communities could acquire federal surplus land and structures at no cost in rural areas and below the market rate in metropolitan regions. For example, the Wurtsmith LRA suggested in its four-volume application that three benefits could be expected from an economic development conveyance (EDC) for 550 acres:⁸⁵ (1) population "regrowth"; (2) annual property taxes for Oscoda Township from private homeowners; and (3) annual water and sewer fees for Iosco County (Wurtsmith EDC, 1995).

The host communities gained control of base housing, but not for years after base closure according to strategy. The Air Force negotiated no-cost housing transfers at the former Eaker AFB in 1997 and at the former Wurtsmith AFB in mid-1996 (Table 5.4). By modifying the rules of the game, so to speak, the federal government greatly facilitated the access of host communities to base property of all types, residential as well as commercial and industrial. Not only was property more affordable but its reuse was also less restricted. Had the Eaker and Wurtsmith LRAs attempted to access base housing any earlier, their options for no-cost transfer would have been limited public benefit transfers sponsored by federal agencies. However, reuse would have then been restricted forever to the named public benefit, e.g., for recreation when sponsored by the Department of Parks and Recreation or for affordable housing when sponsored by the Department of Health and Human Services.

Wurtsmith Housing Emerges as a Long-term Development Asset

By the time the Eaker and Wurtsmith LRAs submitted their applications for no-cost economic development conveyances of former air force housing in 1996 and 1995, respectively, they already knew how they were going to make use of this important federal resource. Unlike the comparable way in which the two host communities accessed base housing, however, there were few similarities in their capitalization strategies. I found that one community derived a major development asset in its

⁸⁵ Besides housing, the EDC conveyed nearly 200,000 square feet of commercial and industrial facilities including the former base exchange, commissary, and gymnasium, base utilities, and personal property on the former Wurtsmith AFB.

housing acquisition while the other did not despite the fact that the properties were comparable in many ways.⁸⁶ The Eaker LRA acquired the resource, but did not hold on to it long enough for it to become a significant asset because the housing was traded for the Eaker airfield. In contrast, the Wurtsmith LRA still owned some of the base housing at the end of the study period and, therefore, would continue to capitalize upon it over the course of two decades.

Table 5.4
Housing Transfer Process for Eaker and Wurtsmith Air Force Bases

Eaker (Blytheville, AR)	Event	Wurtsmith (Oscoda, MI)
June 1991	Congress announced base closure.	June 1991
December 1992	Base closure.	June 1993
June 1994	Private developer proposed plan for housing redevelopment.*	September 1994
May 1996	LRA submitted application to Air Force for EDC of residential property.	November 1995
September 1997	Air Force and LRA negotiated EDC thus shifting control of housing to LRA through long-term lease in furtherance of conveyance.	July 1996
May 1996	Housing redevelopment begins.	December 1996
December 1996	New residents begin to move into redeveloped housing.	February 1998
	Air Force completed transfer of first deed on a housing parcel.	Late 1997

Source: The author.

* In Oscoda, Michigan, a nonprofit developer was the first to propose a plan for the reuse of the prefabricated units on the former Wurtsmith AFB. Later, in November 1996, a for-profit developer proposed a plan to reuse the single and multi-family units.

⁸⁶ The Wurtsmith LRA removed one-half of the prefabricated units on base and planned to demolish some of the higher density structure leaving a total of 834 units in single- and multi-family housing for redevelopment compared to 928 units at Eaker AFB. At both sites, most units were constructed in the early 1960s when base operations expanded to become part of the Strategic Air Command. Duplexes dominated the housing stock followed by townhouses and there were ten single-family homes at each base to accommodate senior officers. While all base housing was regularly maintained, just over one-quarter of the Eaker units had undergone complete interior renovations as recently as 1991.

Once the Air Force started to transfer ownership deeds on residential parcels in late 1997, housing redevelopment at the site of the former Wurtsmith AFB generated the very benefits anticipated by the LRA in its application for a no-cost EDC and more. In addition to population growth and tax revenue, Oscoda Township generated substantial profits from the sale of housing for which it paid nothing. The Wurtsmith LRA negotiated with two developers, one nonprofit and one for profit, to transform the former military housing into a neighborhood now called the Villages of Oscoda. In 1996, Northeast Michigan Community Services Agency (NEMESIS) purchased more than one-hundred units of prefabricated housing to then sell as affordable housing off base for \$20,000-\$25,000 each. The next year, Aspen Square Management signed a contract with the Wurtsmith LRA to develop the remaining single- and multi-family housing (with the exception of the dormitories). In 1998, when the Air Force transferred its first ownership deed on a residential parcel to the Wurtsmith LRA, housing sales began. Over the course of several years, the township would generate \$2 million through housing redevelopment. By the end of the study period, hundreds of the units had been sold, mostly to retirees from downstate who then moved up to Oscoda. The newcomers started to pay local and regional taxes in 1998. More sales are anticipated as the Air Force continues to sign over ownership of base housing property and, subsequently, Aspen Square continues to exercise its right to redevelop those parcels.

Eaker Housing Functions as a Commodity

I found that the former Eaker housing, a retirement community called Westminster Village since 1996, has been far less definitive a development asset for Blytheville. The vast majority of the former Eaker housing stock was not added to the local property tax rolls because the developer, as a nonprofit entity, is not legally obligated to pay taxes. By 2000, the occupancy rate of less than 25 percent was lower and the turnover rate in rental units was higher than the developer had anticipated. The stock of regional housing has increased, but there are restrictions on residency at Westminster; only tenants age 55+ are permitted to live there. And, reportedly, most of the newcomers moved there from elsewhere in the county.

Two factors worked against the Eaker LRA in its attempt to redevelop the residential property on base. First, the local housing market was weak at the time of the base-closure announcement in 1991. One year prior, nine percent of the Blytheville's

housing was vacant, high even for rural communities.⁸⁷ Fewer new homes had been constructed during the 1980s than in any other decade since the 1940s; only 40 homes were constructed in 1989. Well aware that a flood of vacant homes would only exacerbate the weak housing market, the Eaker LRA intentionally delayed redevelopment of the 928 single and multi-family homes on base. When the Presbyterian Development Corporation (PDC), a private nonprofit organization, expressed an interest in the residential property in 1994, the Eaker LRA hesitated at first to enter negotiations with the developer due to their uncertainty about the housing market.

The second factor to work against the Eaker LRA in housing reuse was the growing conflict between it and the Blytheville mayor, who blamed the LRA for the slow pace of base redevelopment.⁸⁸ When the PDC turned to the mayor for help after the Eaker LRA hesitated at its proposal for housing reuse, the developer found an eager negotiator. The PDC agreed to renovate 828 units of Eaker housing and a number of commercial buildings (e.g., a parish and a small store) as an affordable retirement community. To make it happen, the mayor traded 192 acres of Blytheville property located at the end of the Eaker runway⁸⁹ for 925 acres of property including the residential parcels.⁹⁰ In an unusually complicated economic development conveyance, the Air Force transferred the non-aviation property at no cost to the Eaker LRA who immediately transferred 925 acres including the housing to the City of Blytheville who immediately transferred the residential piece at no cost to the PDC.

The Eaker LRA capitalized upon base housing only once. In effect, they used the housing to "pay" for the runway property without which the FAA would not sponsor the airport public benefit transfer necessary for a commercial airport. When it traded away the housing, the LRA lost control over future use of the property and, therefore,

⁸⁷ The 1990 vacancy rate on rental units for areas outside metropolitan regions was seven percent.

⁸⁸ The LRA blamed the Air Force for the slow pace of Eaker redevelopment. According to LRA officials, the AFBCA refused to process interim leases unless the prospective tenants promised substantial jobs. The relationship between the two parties soured soon after the base closed in late 1992. By 1995, there were very few reuses on site outside of C-NET, an annual one-month Christmas hub operation for the US Postal Service.

⁸⁹ The Air Force's Record of Decision revealed the fact that the City of Blytheville owned 191.6 acres at the end of former Eaker runway. When the Air Force expanded operations in the 1950s to serve the SAC, it needed to lengthen its runways onto city-owned land. The City agreed to allow the Air Force to use its property but requested that it revert back to local control if and when the base closed.

⁹⁰ In addition to the residential property, the Eaker LRA also traded archeological sites the City wanted to preserve and the revenue-producing farmland and golf course.

any further opportunities to generate returns from what might have been a long-term development asset. The Blytheville mayor also capitalized upon the base housing just once. In return, he (and, presumably his constituency) derived the satisfaction that base reuse was finally underway.

Any further returns generated from the use of former Eaker housing will be enjoyed almost exclusively by the PDC rather than by the host community of Blytheville, Arkansas. The private developer received the residential property at no cost from the City of Blytheville. All rental income goes directly to the developer; there is no profit sharing with the City despite its major contribution in the project. Because the PDC is nonprofit, it is under no obligation to pay property taxes to the City and, by the end of the study period, it had only recently begun paying a minimal fee in lieu of taxes. The developer reserved the profits from housing redevelopment for itself, but it shared its financial liability for the project with the City of Blytheville. The PDC had invested \$150,000 of its own funds but incurred another \$4.4 million in debt by the end of the study period; in part by using the base property as collateral. Nonetheless, the project was still far from solvent⁹¹ by 2000 and, in the event of future foreclosure, the City will have to pay the bank for property that it once owned, however briefly, and was never compensate for.

Summary:

The economic development conveyance method of transferring federal surplus property to host communities greatly facilitated host community access to former air force housing. The contrasting redevelopment of Wurtsmith and Eaker housing, however, illustrates how the identification and acquisition of federal resources were only the start of community asset building. Asset capitalization yielded returns but the two LRAs applied very different strategies to do so. The Wurtsmith LRA took a long-term approach and, consequently, are still generating returns from what was once a federal resource. The Eaker LRA, by necessity, took a much shorter-term approach to its use of base housing and, therefore, was able to capitalize on its housing only once as a commodity to trade for an asset of even greater value--the airfields, the subject of the

⁹¹ In its business planning, the PDC anticipated that it would break even once 350 units were rented.

next section.

Airfields: An Obvious Resource but Less Obvious an Asset in Rural Areas

The vast majority of the air bases to close during the 1990s were redeveloped as commercial airports. Military airfields are just as wide and typically longer than civilian runways, so that they were well suited for conversion. According to a report by the MIT Research Project on Military-base redevelopment (Frieden and Baxter, 2000), several factors beyond the physicality of military airfields influenced their conversion from military to civilian reuse. First, the timing was right. Air base closures took place just as regional airports were operating beyond capacity; the additional airfields helped meet the growing demand for air travel. Second, converting military airfields cost less than new construction and the FAA often subsidized any necessary upgrades. And, third, it was often less trouble to win the support of neighbors who were already accustomed to air traffic and/or anxious to see redevelopment happen than it was to overcome the general resistance of neighbors of planned airports. According to the MIT report, 20 of the 44 closing air bases⁹² had already converted to commercial airports and another 16 were expected to convert over time.

As has been the case with research on military-base redevelopment or on economic development in general, the experiences of rural sites are often not included in reports that generalize about what happens in most communities. Full-scale conversion from military to commercial reuse was the exception rather than the rule among the rural host communities of closing air bases. Only one of the six rural sites resembles the scenario described in the MIT report. The former K.I. Sawyer AFB located on Michigan's upper peninsula is now called Sawyer International Airport operating over 100 flights per day (Table 5.5), far more than any other reuse of rural airfields. The other rural host communities wanted aviation reuse and, to varying degrees, some were successful in achieving this goal. None, however, enjoyed the level of activity realized at former metropolitan air force bases. Instead, rural air force bases were far more likely to convert their airfields and hangars for the purpose of maintenance work.

Location hampered one of the most obvious reuses of closing air force bases in

⁹² Total includes air bases for the Air Force and the Navy.

rural sites. The host communities were unlikely to convert closed air bases into active commercial airports because, in contrast to their metropolitan counterparts, there was usually insufficient demand for air travel. There were no regional airports operating over capacity within a hundred miles of closing rural air bases. More likely, the closest airports were small feeders for regional airports located still another hundred miles on the other side. In this section, I show how rural location complicated access to airport property and challenged host communities as they attempted to capitalize upon the facilities.

Table 5.5
Commercial Airport Conversions of Rural Air Force Bases

Host Community (Air Force Base)	Airport Public Benefit Transfer (acres)	Commercial Airport	Activity (flights/day)
Blytheville, AR (Eaker)	1,701	Arkansas International Airport	22/ day*
Limestone, ME (Loring)	25	Loring International Airport	0
Oscoda, MI (Wurtsmith)	1,391	Oscoda-Wurtsmith Airport	115/week
Gwynn, MI (K.I. Sawyer)	1,387	Sawyer International Airport	108/ day
Peru, IN (Grissom)	0	n/a	0
Plattsburgh, NY (Plattsburgh)	4,230	Plattsburgh International Airport	75/year

Sources: Air Force Base Conversion Agency (2001)
AirNav.com (2001)

* Average for year. Most of the flight activity takes place during December serving the C-NET operation.

Fighting over Airports

The MIT report captured rural host communities in its analysis because there were airport public benefit transfers (PBTs) at five of the six sites.⁹³ Public benefit transfers were necessary for aviation reuse, but this popular transfer method did not, in

⁹³ In the case of Grissom AFB, the Air Force retained use of the airfield so transfer was unnecessary.

and of itself, make it happen. In other words, it was merely an access strategy for most rural host communities. Until 1994, when the no-cost economic development conveyance was legislated via the Pryor Amendment, a public benefit transfer sponsored by a federal or state agency was the only available means for host communities to affordably gain control of federal surplus property. And, the airport PBT was particularly useful because large tracts of land and several facilities could be conveyed through one process.⁹⁴ The FAA typically sponsored the transfer of property in addition to airfields and hangars so that rental income on ancillary buildings could help support airport operations.

The MIT Report suggested there was apt to be less community conflict over air base conversions than over airport construction. This is true, but again, it is more pertinent to the metropolitan setting. I found that there was conflict regarding air base conversions in some rural host communities but for a very different reason. Residents clashed not over the presence of a commercial airport but over its feasibility. In other words, they were unconcerned about the inconvenience of a busy airport "in their backyard," so to speak, but worried about the possibility that the airport would not be busy enough. Despite the popularity of airport conversions at closing military air bases, reuse-planning committees in rural host communities sometimes hesitated to imitate the efforts of their metropolitan counterparts. They enjoyed equal access to this enormous federal resource, but it was far less obvious what they could do with it in rural locations. The uncertainty of aviation reuse in rural areas led to conflicts over property access in two of the rural host communities in the study. In Limestone, Maine (Loring AFB), the conflict led to a more appropriate access strategy that incorporated, but did not focus, on the airport property. In Blytheville, Arkansas (Eaker AFB), the conflict ended with just the opposite result in which redevelopment not only focused on aviation but was constrained to the airport property. Despite the different outcomes, the source of the conflict was the same: when it came to accessing the property, residents disagreed about the sustainability of airport conversions in their rural communities.

⁹⁴ Other common public benefit transfers focused on education, recreation, and health but they usually focused on facilities like gymnasiums and hospitals.

The Question of Planning Aviation Reuse at Remote Sites

In Limestone, Maine, the conflict over airport conversion occurred relatively early in the process. Reuse planners disagreed on aviation as the preferred reuse to be presented in the base reuse plan required by the Air Force for property disposal. Those in favor included the Limestone representative on the Loring reuse-planning committee and the planning consultant who believed that an airport public benefit transfer was the best means of access to the airfields and hangars on base. They pointed to the proposal (not business plan) of a Chicago-based firm in using the facilities for a USAID-funded operation to ship food and supplies to third-world nations. Those against, or more accurately, those more cautious about aviation reuse included the other five representatives of impact communities. They referred to a feasibility study in which an engineering consultant found that there was insufficient regional demand to support general aviation at Loring and that it was too remote a location to realistically expect a cargo maintenance operation to move in. The debate continued for well over a year holding up property access for lack of an approved base reuse plan.

Ultimately, the delay actually helped the community access Loring property (because Congress enacted a new method of transferring federal surplus property at no cost), but it might well have derailed redevelopment altogether had it not been for outside intervention. In mid-1993, the governor and state legislature of Maine created the Loring LRA, a state development authority, to effectively replace the Loring reuse-planning committee after a one-year transition period. As control over Loring's reuse shifted toward the LRA, the voice of the dissenting member diminished.⁹⁵ The other half of the pro-aviation faction, the planning consultant, was dropped from its contract by the end of the year.⁹⁶ The change of players in Loring redevelopment effectively ended the conflict over aviation reuse, but the delay caused by several months of debate proved beneficial for property acquisition. By the time the Loring reuse plan was completed in 1995, the economic development conveyance had been legislated into existence by the Pryor Amendment. Unlike the other rural host communities who developed their access strategies when the airport public benefit was the primary

⁹⁵ A requirement for membership on the Loring LRA board was nonmembership on the Loring reuse-planning committee. While the reuse-planning committee was dismantling, the Chicago firm's proposal fizzled. A local radio talk show host broadcast a conversation with the firm's owner in which he boasted of taking advantage of the no-cost facilities at Loring.

⁹⁶ In fact, Loring LRA later sued the consultant for breach of contract.

method for acquiring large tracts of property at no cost, Limestone had a choice. Given the studied risk of depending on aviation reuse and its desire to avoid competition with other regional airports in northern Maine, the Loring LRA chose to access almost all of surplus acreage on base, 3,694 acres, through a no-cost rural economic development conveyance. However, it then sought the remaining 25 acres on which the hangars sat through an airport public benefit transfer in order to accommodate the private (rather than commercial) aviation needs of future tenants.

The Question of Implementing Airport Conversion

Conflict over conversion of the former Eaker runways erupted as implementation of the community-approved reuse plan⁹⁷ neared. The host community in Limestone, Maine, had time to get to the other side of their aviation debate, but Blytheville, Arkansas, did not. Consequently, the Eaker LRA modified its access strategy for the aviation property for the purpose of political expediency. I found the outcome to be less than optimal in terms of asset building. The Eaker LRA gained one federal resource, the airport, by trading away another, the base housing. I argued in the last subsection that the host community had benefited little from Eaker housing reuse as a direct result of the LRA's immediate, one-time capitalization of the base residential property. I argue in this subsection that, although the cost of accessing the airport property was higher in Blytheville, Arkansas, than for any other host community, the converted airport and aviation property has been an important long-term development asset for the community.

The structure of the aviation debate in Blytheville was similar to that in Limestone, Maine. The timing was different as I mentioned, however, and so was the political clout of the players; both of which affected the outcome. On one side of the debate, the Eaker LRA supported aviation reuse because it was the preferred reuse to come out of the reuse planning process. They pointed to success of the annual C-NET operation, albeit temporary, in making use of the hangars, control tower, and former Eaker runways. On the other side was the mayor of Blytheville who had grown impatient with the focus on aviation. In 1994, two years after the base closed, he was

⁹⁷ The Eaker reuse-planning committee agreed on aviation as their preferred reuse and, in two public hearings, residents supported the base reuse plan.

anxious for base redevelopment to begin. It had not. The mayor, supported by the city attorney and equally doubtful residents, suspected that the aviation reuse was, therefore, infeasible.⁹⁸ Unlike the Loring case in which the dissenter's influence was effectively extinguished by the course of events, the Blytheville mayor continued to wield power over Eaker redevelopment until he retired in the late 1990s.

Ultimately, the Blytheville mayor dictated the host community's access to almost all of the property at the former Eaker AFB because, in 1995, he discovered that he held the trump card in the debate over aviation reuse. In a surprise turn of events, the city of Blytheville found that it owned approximately 200 acres of property at the end of the runway.⁹⁹ The FAA refused to sponsor an airport public benefit transfer to more than one entity; therefore, any access strategy required negotiation between the Eaker LRA and the City. When the Eaker LRA offered to pay one dollar per acre, the mayor countered with a demand for ten dollars per acre; control over base redevelopment was more important to him than monetary compensation. Instead, he traded the runway acreage for over 900 acres of residential and revenue-generating property so that he could direct redevelopment.

The Eaker LRA, in a sense, "purchased" the city's runway acreage by ceding future control to other development.¹⁰⁰ At all other host communities, rural or metropolitan, airport public benefit transfers cost nothing. The Eaker LRA, however, traded all future returns on housing redevelopment and the annual revenue already generated from the golf course and farm land in order to access airport property. Ironically, one year after Congress attempted to ameliorate the expense of base redevelopment for rural host communities by enacting the Pryor Amendment, the Eaker LRA paid more for its runways than any of the other LRAs, rural or metropolitan. The deal prevented the Eaker LRA from capitalizing upon base residential property as

⁹⁸ I found that the mayor's objection was both practical and personal. He distrusted the Eaker LRA chairman whose family derived income from use of a fuel line to the base and, in the mayor's opinion, had steered base reuse toward that which was most fuel intensive. In fact, the pipeline was shut down permanently following base closure.

⁹⁹ The Air Force's Record of Decision revealed the fact that the City of Blytheville owned 191.6 acres at the end of former Eaker runway. When the Air Force expanded operations in the 1950s to serve the SAC, it needed to lengthen its runways onto city-owned land. The City agreed to allow the Air Force to use its property but requested that it revert back to local control if and when the base closed.

¹⁰⁰ The Air Force transferred non-aviation property to the Eaker LRA through a no-cost economic development conveyance two years later in 1997. The LRA then transferred most of EDC property to the City of Blytheville, again at no cost. Finally, the City transferred the residential property to a nonprofit housing developer, again at no cost.

discussed in the last section but it did not preclude capitalization of the airport property. In late 1995, the AFBCA negotiated a 30-year lease with the Eaker LRA on 1,700 acres surrounding the airfields. Within a few years, the Blytheville-Gosnell Regional Airport Authority was self sustaining based on rental income and fuel sales. The single most significant aviation reuse has been the annual C-NET operation during which the U.S. Postal Service has contracted with an airline to operate a hub during the holiday season to manage the increase in mail traffic. The host community derives several benefits from C-NET including hundreds of relatively high wage jobs albeit temporarily, rental income on Eaker facilities, and increased demand for area hotels and catering. At the end of the study period, a second aviation reuse, a cargo-painting operation, moved into one of the hangars site.

An Airport Acquisition Strategy that Required Asset Capitalization First

In the one rural host community I studied in which there was no discernable conflict over aviation reuse, the federal government doubted the feasibility of a rural airport conversion which complicated access just the same. Oscoda, Michigan, residents wanted to follow the advice of their planning consultant: to maximize the asset value of Wurtsmith facilities by matching reuse to prior use as closely as possible. The Air Force had used its hangars primarily for maintenance and, therefore, the planning consultant recommended that the Wurtsmith LRA delay hangar reuse until they could find an airline to move its cargo maintenance operation to Oscoda. The planning consultant and residents believed that, in time, the remote township could attract an airline, but the FAA had its doubts. Before it would sponsor a no-cost airport public benefit transfer of 1,391 acres associated with the airfields, the FAA required that Wurtsmith LRA identify an aviation tenant. According to Oscoda leaders, the federal agency's unusual prerequisite was based on their concern about the financial viability of a civilian airport in such a remote location.¹⁰¹ Consequently, the Wurtsmith LRA found itself in a Catch-22 situation: they needed the airport property to attract an aviation tenant, but they needed a tenant to gain control of the airport property.

Without legal access to the property, the Wurtsmith LRA embarked on a strategy

¹⁰¹ The FAA considers the revenue generating potential of structures like hangars and administration buildings alongside the runways to support airport operations. In essence, the FAA doubted that Oscoda would be able to reuse these facilities.

for capitalizing upon the base aviation facilities as advised by their planning consultant. In other words, they hoped to convince an airline to move its cargo maintenance operation into hangars owned and controlled by the Air Force. By the time Wurtsmith shut down operations in mid-1993, the LRA had successfully negotiated a lease with the only airline to even request a tour of the base. American International Airways (AIA) moved on site one month later. No other rural host community managed to find a full-time aviation reuse so soon after base closure. Under pressure by FAA's condition for property transfer, Oscoda, Michigan, perhaps, had more incentive than most to make reuse happen sooner rather than later. Unusually, both access and capitalization of the airfields hinged on the community's success. The AIA lease was not negotiated in one meeting. In fact, it required repeated meetings during which local leaders sought to overcome any and every objection put forth by AIA.¹⁰² After months of negotiations, AIA agreed to move into six former Wurtsmith facilities paying no rent for the first three years in return for its commitment to generate 200 new jobs.

Once the Wurtsmith LRA had capitalized upon the aviation facilities on base, it was able to move forward with property acquisition. The FAA sponsored the airport public benefit conveyance. In December 1994, the Air Force transferred control of the property over to the Oscoda and the LRA negotiated a 30-year lease on just under 1,400 acres including the runways, several structures, and personal property. In the meantime, AIA steadily grew into the township's largest employer, eventually employing more workers than the Air Force had. One year after it moved in, the airline employed 200 workers as it had promised in its early dealings with the LRA. In another three years, the airline employed 750 workers.

Jobs were the most obvious return on the LRA's capitalization of the former Wurtsmith airfields and hangars but there were other, less tangible results as well. That AIA agreed to move onto Wurtsmith after base closure was evidence that the private sector could be attracted to Oscoda, but, more important, it demonstrated that the

¹⁰² At first, American International Airways (AIA), headquartered two hours south in Ypsilanti, Michigan, was not interested in making the move. During a tour, which was several months before base closure, its president expressed concern about the limited regional supply of skilled air frame and power plant (A&P) mechanics. In response, the Wurtsmith LRA gathered evidence of 100 licensed A&Ps and another 200-300 in training. Later, when the airline weighed the cost of moving its cargo maintenance operation to Wurtsmith against the cost of expanding its downstate facility, the LRA provided a list of personal property, from vehicles to de-icers to office furniture, that would be available in reuse and reminded him that Wurtsmith had a test cell that enabled quiet testing of airplane engines.

township had the development acumen to make redevelopment happen. The LRA's interim lease with AIA was considered a major event both locally and state-wide. The governor flew in for the lease signing in May 1993 as did the AIA president despite the fact that the Air Force still had another month before formal base closure. Another less tangible return on aviation reuse at Wurtsmith was the demand for skilled labor which, in turn, increased the regional supply of skilled labor, namely aviation and propulsion (A&P) mechanics. When AIA shut down its Oscoda facility in 1999 following a merger with another airline, attracting another airline was less challenging because the township had more development assets to draw upon including a skilled but relatively inexpensive labor force. Shortly after AIA moved out, the cargo maintenance operation for TIMCO moved on site.

Summary:

As easy as former air force runways were to identify as a major resource for redevelopment, the rural host communities found them difficult to access. Concerns about sufficient regional demand for new commercial airports in rural regions were certainly valid. A consultant for the Loring reuse-planning committee determined aviation reuse to be infeasible in northern Maine where there were already enough feeder airports to serve the sparse population. The FAA openly doubted the feasibility of aviation reuse at the former Wurtsmith AFB given its remote location. Rural air bases did not share the market opportunities enjoyed by those in metropolitan sites. The problem of excess demand for regional airports was simply not the case for the rural host communities or for neighboring jurisdictions. The closest major airports were likely to be well over one hundred if not two hundred miles away. Rural air bases were not going to air travelers from so great a distance.

The issue of market demand affected asset capitalization strategies as much as it affected resource acquisition strategies among the rural host communities. The Eaker LRA paid a high price in working around the Blytheville mayor's objections to aviation reuse. There has been little in the way of aviation reuse at the site, however, beyond the annual C-NET operation and a small painting company. The small commercial airport has been self sustaining for years due to its ability to generate revenues from non-aviation reuses such as a truck driver training school that takes advantage of Eaker's open road system and some small manufacturers. The Loring LRA wisely limited its

ambitions for aviation reuse but, it too, had had no success attracting any kind of aviation reuse of its hangars and runways. Ironically, the most significant capitalization of airport property at the rural host communities I studied resulted from necessity. When the Wurtsmith LRA found that it had to find an aviation reuse or forfeit transfer of 1,700 acres of airport property, it responded to the pressure to do so.

Conclusion: What Worked and What Worked Better

In the previous chapter, I suggested that some strategies for capitalizing upon local resources worked better than others. I found the same was true for strategies for accessing and capitalizing upon federal resources. The difference between what worked and what worked better was in the amount and duration of returns generated. The federal resources were fairly comparable across the host communities. As the hosts of closing air bases, they had access to federal funds, federal reusers (where the Air Force would transfer property directly to another federal entity), housing, airfields, and other property on base. The capitalization strategies employed by the host communities, however, generated very different returns (Table 5.6).

Redevelopment of Loring AFB in Limestone, Maine, for example, had been dominated by federal agencies at the end of the study period in 2000. The host community capitalized most upon federal funding and the federal screening process and, as a result, created hundreds of jobs and several additional years of Air Force subsidies for property maintenance. Only recently have returns been generated through rental income from private tenants.

Wurtsmith redevelopment is absent federal reuse save two acres but the host community of Oscoda, Michigan, has enjoyed many returns from its capitalization of base property. A private aviation tenant moved into aviation facilities immediately after closure creating hundreds of jobs. Millions of dollars in public capital have been raised through the sale of former air force property that Oscoda received at no cost.

Oscoda's capitalization of base facilities worked better than most communities as evidenced by its returns. Likewise, Limestone's capitalization of the Air Force subsidies and the federal screening process worked better than literally all other host communities, metropolitan or rural. The capitalization strategies of the third rural host community subject to case study, Blytheville, Arkansas, worked but generated minimal

Table 5.6: Community Strategies for Asset Building with Federal Resources

<p>Blytheville, Arkansas <i>Waiting on the Air Force</i></p>	<p>Limestone, Maine <i>The hardship argument</i></p>	<p>Oscoda, Michigan <i>Never take no as an answer</i></p>	<p>Rantoul, Illinois <i>Any job is a good job</i></p>
<p>Resource Identification: Identifying any person, place, or thing that might be a resource for development.</p>			
<p>The LRA wanted gain control of the Eaker AFB property in order to move forward with reuse. The Air Force frustrated their attempts at interim leasing so they delayed reuse until they could lease property on their own.</p>	<p>The Maine Congressional delegation believed the federal government owed Limestone substantial assistance in Loring reuse because it had, in effect, (unfairly) created the economic crisis--the hardship argument.</p>	<p>The LRA wanted to maximize the asset potential of the property at the former Wurtsmith AFB in order to minimize the demands for local investment. The planning consultant advised that base reuse should mirror prior use.</p>	<p>Timing was important to Mayor Katy Podagrosi--she wanted to minimize the gap in time between Chanute's closure and reuse. The base facilities were an important resource for attracting job-generating tenants.</p>
<p>Resource Acquisition: Gaining local control over identified resources.</p>			
<p>The LRA accessed 1,701 acres through an airport public benefit transfer and 1995 and another 1,360 acres through a no-cost economic development conveyance in 1997. The negotiations for both took over a year due to the LRA's poor relationship with the Air Force.</p>	<p>Applying the hardship argument and their collected political clout, the Maine representatives convinced federal agencies to set up operations in Limestone or to revise their criteria for site selection so Limestone could compete.</p>	<p>The LRA refused to take no for answer in its attempts to access base property. They made repeated attempts succeeding, e.g., when the Air Force was slow to produce an interim lease for the first new tenant, the LRA applied political pressure through its D.C. representatives.</p>	<p>The LRA accessed 1,178 acres at the former Chanute AFB through an airport public benefit transfer in 1992--the only no-cost property transfer method available at the time for large conveyances. First, the dormant runway was upgraded with the help of an FAA grant.</p>
<p>Asset Accumulation: Retaining local control over acquired resources until they can be capitalized as assets.</p>			
<p>The LRA retained control of the airport property but transferred 925 acres of non-aviation property including the housing to the City of Blytheville. The City transferred the residential property at no cost to a private developer.</p>	<p>By the time the base closed in 1994, two federal agencies had committed to moving their operations to Limestone. Two others followed within a few years.</p>	<p>The township and the LRA struggled with the state authority control to maintain the base for state authority dissolved two years early ceding project leadership to the LRA.</p>	<p>The LRA shared control of base property with private developers who purchased various parcels through public auction. The LRA leased it facilities to virtually all prospective tenants--any job was a good job according to the director.</p>
<p>Asset Capitalization: Employing accumulated assets to generate social, economic, or financial returns for development.</p>			
<ul style="list-style-type: none"> • Job generation long after base closure. • Rental income to sustain the airport authority. • Visible base reuse. 	<ul style="list-style-type: none"> • Early job generation. • Rental income. • Facility reuse and property maintenance by tenants. • Visible base reuse. 	<ul style="list-style-type: none"> • Early job generation. • Rental income. • Facility reuse and property maintenance by tenants. • Visible base reuse. 	<ul style="list-style-type: none"> • Early job generation. • Rental income. • Facility reuse and property maintenance by tenants. • Entrepreneurial opportunities.

returns. The Eaker LRA invested its OEA funding wisely as evidenced by the hire and the continued benefit of a staff grantsman, but it has been less judicious in its use of other federal resources. Eaker housing has yielded few returns for the host community due to the way in which this resource was capitalized. When the Eaker LRA traded the housing for the airport property, it lost the ability to ever capitalize the residential portion of the base again. It also paid a high price to acquire airport property, typically accessed at no cost. The host community might have enjoyed returns on housing reuse, however, if city officials had been more strategic in their use of the property. The no-cost transfer of over 800 units as well as several small commercial buildings to a nonprofit developer was optimistic but certainly short sighted.

The outcome of capitalization strategies differed across the host communities, but they all did manage to create development assets from federal resources that will serve them well into the future. These assets, I argue in the concluding chapter to this dissertation, will aid future development activities and buffer the communities in the future during times of crisis. Table 5.6 illustrates

Chapter Six

Conclusion: Asset Building for Rural Development

Imagine Congress just announced a military base closing in Boston.¹⁰³ It is not too difficult to imagine, as well, the city's response. The Boston Redevelopment Authority (BRA), a quasi-public institution with fifty years experience in public development assumes responsibility for redevelopment. There are two other organizations in town with experience in base redevelopment, the Massachusetts Land Bank and the Economic Development Industrial Commission, who offer their assistance. The state makes a loan fund of \$200 million available to the BRA as it had done for Fort Devens redevelopment during the 1990s. The pending closure attracts media attention, because several hundreds of residents will lose their jobs and dozens of businesses will lose revenue when their contracts with the military are cancelled. Boston's Mayor Menino promises his constituency that redevelopment will be a high priority of his office. He then pledges the city's support to the BRA in the form of public capital, development staff, and a streamlined permitting process. The BRA invites the public to participate in planning. In a short time, a group of architects, neighborhood activists, professional planners, and academics join forces. The reuse-planning committee immediately goes to work to determine how the regional economy can best stimulate redevelopment. Several regional factors are considered strong magnets: the highly trained work force; elite universities; the shaken but surviving "dot-com" industry; biotechnology. In the meantime, a number of private developers conduct their own appraisals of the development potential in the base property.

Despite its abundant local resource base and a host of development assets to draw upon, the BRA knows base redevelopment will be complicated. It will be years before the military moves out; until then, access to the property for planning purposes will be controlled by base commanders. The facilities, even new construction on site, are not exactly in "move-in" condition. Many structures including thousands of housing units may not meet Boston's building code. Everything is connected to a

¹⁰³ During the 1990s, there were four base closings in the greater Boston metropolitan region: Pease AFB in southern New Hampshire closed in 1991; the Watertown Army Materials Technology Lab closed in 1995; Fort Devens located just outside Route 495 closed in 1996; and South Weymouth Naval Air Station closed in 1997. During the 1970s, there were base closures within the city of Boston: the Charlestown Naval Shipyard and the South Boston Naval Annex.

central heating plant. There are hazardous wastes on the site but the BRA will not know the extent of the environmental clean up until the military produces an environmental impact statement, which will take a few years. Then there is the fact that the military will still own the property for years to come. Nonetheless, the BRA will be expected to organize a reuse-planning committee, apply for federal funding, and produce a reuse plan before closure. Afterwards, it will be expected to find reuses for the vacant facilities on site, maintain and secure the property, and negotiate transfer of the property from the military. Speed matters, too. Hundreds of area jobs, thousands when military personnel are counted, will be lost within a couple years when the base shuts down operations. Left vacant, the property will deteriorate despite the BRA's best efforts at maintenance.

The BRA ponders its best course of action. Any number of alternative approaches could foster redevelopment of the site. The Boston metropolitan region benefited from a number of base reuse success stories in the 1990s. For example, the small town of Watertown just outside the city purchased the Army Material Technology Lab after it shut down in 1995 for \$7.5 million through an economic development conveyance, sold it to a developer for \$24 million who invested \$100 million in renovations before selling it to Harvard University for \$162 million (*Boston Business Journal*, 2001). Pease Air Force Base, in southern New Hampshire, converted into a trade port in 1991 making use of both its airport and its coastal location. Well over 2,000 people are employed now at the site; the Pease local redevelopment authority (LRA) now has the problem of insufficient space to meet market demand. Finally, Fort Devens located just outside Route 495 has been redeveloped as its own municipality. In addition to federal reuse at the enormous site encompassing nearly 5,000 acres, residential development is well underway as is light industrial reuse.

Now imagine the previous scenario without the parts that are "metropolitan." In other words, imagine it in a community, such as those in my study, where local resources are few, and development capacity almost nonexistent. First, there is no BRA or long-time mayor to step into project leadership. Second, there are no development institutions with experience in base redevelopment. Instead, the reuse-planning committee takes on the task alone without the help of long-time development institutions and elected leaders. Third, residents readily volunteer to serve on the reuse-planning committee, but, as a group, they lack the professional expertise enjoyed

by the same committee in Boston. Rather than architects and professional planners, members are more likely to be military retirees who have a fondness for the base and a need for the medical services on site, neighbors concerned about the impact of the base's hazardous wastes on the community, or downtown merchants. Fourth, the regional economy has become increasingly dependent upon the military as it was the last major employer in the area following a string of plant closures during the 1980s.

With minimal local resources and virtually no development capacity, this hypothetical community must embark on the very same process Boston faces, again hypothetically. Residents and elected officials alike wonder if base redevelopment is even feasible. Alternatives are few and expectations of the type of success enjoyed by metropolitan host communities seem overly optimistic. To do nothing, however, would exacerbate the region's economic decline at best, and, at worst, turn the community into a ghost town. So, the community moves forward determined to make the most of whatever resources are available to make redevelopment happen. The most optimistic residents predict that their community will be better off without the military. I argue in this dissertation that they may well have been right.

There are two sections in the conclusion to this dissertation. In the first section, I summarize the principle findings of my study. In the second section, I identify the implications of my study on the development practice and literature.

Research on Community Asset Building in Rural Base Redevelopment

I found that rural base redevelopment was a fascinating topic to study because it provided me the opportunity to observe economic development in a near laboratory-like setting with a consistent set of circumstance affecting a good number of communities at pretty much the same time. Twenty-six communities faced a similar challenge during the 1990s--to redevelop closed air force bases. Six of those communities were located in nonmetropolitan counties and, although they had the same job to do as their metropolitan counterparts, they had far less development capacity to do it (as I attempted to illustrate in the introduction to this chapter). It was incumbent upon the rural host communities, therefore, to incorporate economic development strategies into their base reuse plans. Redevelopment was not going to happen as a matter of course as it might have in metropolitan settings.

Part of my interest in rural base redevelopment was that so much of what I

observed through case study was, in fact, the planning, implementation, and outcome of economic development strategies. Applying Schumpeter's definition of economic development, presented in Chapter One of this dissertation, I found it easier to observe "changes in economic life" within rural host communities because, in a sense, there were few "influences from outside" their economies. Base redevelopment in Boston would likely be the outcome of both economic development and economic life making it rather difficult to distinguish the causal factors in change. In contrast, base redevelopment in the hypothetical rural community would more likely be the outcome of economic development alone.

Another part of my interest in rural base redevelopment stems from my concern about the dilemma in rural America outlined in the first chapter to this dissertation. Glasmeier and Howland (1995) suggested that, by the 1990s, rural America "was at a crossroads" in terms of development. There has been some debate as to whether rural economies have already reversed decades of decline, but I believe they are right. According to Glasmeier and Howland, the 1990s was the time for rural communities to build their future. I argue in this dissertation that for the six rural host communities in my study, the opportunity to do so arrived, paradoxically, at the heels of yet another industry collapse. These communities were forced to face the future. Another major industry was gone. They had no choice but to plan base reuse. To do so meant there was some chance of reversing decades of economic decline. Not to do so would mean choosing the path to more rapid economic decline.

A Review of the Research Questions and Methodology:

The general question underlying this dissertation is the following: Without the traditional resources to draw upon, how do rural communities find opportunities for economic development? Then, I posed a set of three questions specifically related to the study of rural base redevelopment:

- (1) How did development resources in the rural group of host communities compare to that in the metropolitan group?
- (2) Did rural locations impede base redevelopment?
- (3) How did the rural host communities do it...how did they approach reuse planning and generally succeed at base redevelopment?

There were two parts to this study. In the first part, the first two questions above were answered based on a comparative analysis between the group of six nonmetropolitan host communities and the group of twenty metropolitan host communities of air force bases that closed during the 1990s. I looked at four types of data on all 26 communities: (1) the incidence and type of area organizations that aided base redevelopment activities; (2) county-level economic indicators, the last decennial census prior to base closures; (3) urbanization codes; and (4) milestone data on the progress of host communities in base redevelopment. Based on these data, I assessed the development capacity and progress in base redevelopment for each community in the study.

My purpose in conducting this initial analysis was to understand the differences between the two groups at the beginning and at the end of the study period. I had four expectations, one for each data source. First, I expected my survey of local redevelopment authorities to indicate fewer local organizations participating in rural base redevelopment than in metropolitan projects. Second, I expected the comparison of economic indicators to reveal a gap similar to that between nonmetropolitan and metropolitan regions nationally. Third, I expected the distribution urbanization codes (e.g., adjacent and nonadjacent nonmetropolitan counties and large and small metropolitan regions) among the host communities to be proportional to that found nation wide. And, fourth, I expected the milestone data to show the nonmetropolitan group lagging in base redevelopment.

In short, I expected that the data gathered and analyzed for the first part of my study would show that the six rural host communities in the study were, indeed, rural and, therefore, lacked development capacity at the onset of base redevelopment projects. Hypothetically, such a lack of development capacity would cause an expected lag in base redevelopment progress.

In the second part of my study, the third question above was answered based on case studies of four host communities. Three of the case-study communities are located in rural areas: (1) Blytheville, Arkansas, home of the former Eaker Air Force Base; (2) Limestone, Maine, home of the former Loring Air Force Base; (3) Oscoda, Michigan, home of the former Wurtsmith Air Force Base. The fourth case study community, Rantoul, Illinois (home of the former Chanute Air Force Base) is located in the Champaign-Urbana metropolitan region. The purpose in conducting case studies was

to identify any and all resources that factored into base redevelopment and to identify common development strategies for the access and use of those resources.

I expected to find a relative abundance of federal resources factored heavily in rural base redevelopment. Host communities, rural and metropolitan alike, benefited from federal grants and technical assistance for reuse planning, additional grants to cover the costs of infrastructure upgrades and marketing, for example. The most obvious of the federal resources, however, was the property left behind by the Air Force--e.g., housing, runways, administrative buildings, furniture, and equipment--available to rural host communities, often at no cost, to aid redevelopment.

A Review of the Principle Findings:

I have four principle findings to report based upon the analysis outlined in the previous section. I present them in order of discovery rather than order of importance.

Principle Finding #1: There were significant economic, geographic, and institutional gaps between the groups of rural and metropolitan host communities.

I found the differences in capacity between the two groups of host communities to be more significant than I expected. The nonmetropolitan/metropolitan economic and geographic gaps in the study were wider, sometimes much wider, than found nationally. Most notably, the rural host communities, in aggregate, had lost population during the 1980s, while the metropolitan host communities made enormous gains. Furthermore, the metropolitan host communities were disproportionately located in high-population regions, while the rural host communities were disproportionately remote.

Principle Finding #2. Base redevelopment progress was comparable between the groups of nonmetropolitan and metropolitan host communities.

If anything, the rural group performed slightly better than their metropolitan counterparts. By the end of the study period, the group of rural host communities had replaced a higher percentage of the federal civilian jobs lost due to base closure through base redevelopment. On its own, this finding is interesting in that it was unexpected. Given the previous finding on the wider-than-expected gap in development capacity between the two groups, rural successes are more impressive. I also found that rural host communities produced base reuse plans and initiated facility leasing at about the same pace as metropolitan host communities. This is a surprising track record given

that the rural communities had to establish local leadership and organize residents to participate in reuse planning before they could begin to produce a reuse plan. They also had to create new organizations to manage base redevelopment and hire development professionals from outside the region before they could attract reuse and negotiate leases with new tenants.

Principle Finding #3. The host communities capitalized upon much-needed development assets they derived from federal resources--grants, technical assistance, and the surplus property on base.

As expected, I found that the availability of federal resources explained at least part of the relative success among rural host communities in base redevelopment. Unlike plant closures in the private sector, military base closures were announced years before operations were actually shut down allowing host communities time to plan reuse. Throughout reuse planning, the OEA provided grants as well as technical assistance to help host communities, both rural and metropolitan, prepare for the time when the Air Force would move out of its facilities. Those facilities--the land, structures, and equipment on base--comprised the most obvious and, potentially, the most valuable of the federal resources available for base redevelopment.

The mere availability of federal resources, however, did not make base redevelopment happen. In Chapter Two, I introduced a model of community asset building to illustrate how the host communities in the study strategized base redevelopment by creating development assets from resources such as those provided by the federal government. I proposed four steps to the process of community asset building in military base redevelopment: (1) resource identification; (2) resource acquisition; (3) asset accumulation; and (4) asset capitalization.

The case study of Oscoda, Michigan (Wurtsmith AFB), illustrates well the proposed model of community asset building. The Wurtsmith local redevelopment authority (LRA) identified the approximately 1,000 units of single- and multi-family housing as a valuable resource for base redevelopment. They knew, from observing housing reuse at other closed military bases, that they would need to be strategic in redeveloping the residential property. They decided to delay acquisition for two reasons. First, the delay would allow time for the local housing market to absorb the flood of off-base units left vacant when federal civilian workers transferred outside the region to new jobs. Second, the delay enabled the LRA to focus on their priority of job-

generating reuses. In 1996, three years after Wurtsmith shut down operations, the LRA gained control of all base housing. The host community retained control of the housing until it had the opportunity to capitalize upon this valuable asset. By the end of the study period in 2000, Oscoda had generated a number of financial and social returns from the housing. The financial returns included: public capital from unit sales to private developers; and public revenues from annual property taxes paid by homeowners. The social returns generated from the capitalization of former Wurtsmith housing included: the addition of affordable housing units to the region when a nonprofit developer purchased and moved approximately 100 units of pre-fabricated housing off base; the in-migration of new residents, most of whom were retirees from downstate; and a vibrant neighborhood as evidence of the possibilities of base reuse.

Principle Finding #4. In the near absence of public-sector organizations or officials with experience in development, the host communities relied on area residents as the primary local resource for base redevelopment.

The importance of federal resources was expected, however, even the existence of local resources in rural host communities was not. Nonetheless, I discovered two ways in which residents, the only significant local resource available in rural host communities, contributed to base redevelopment. First, residents aided reuse planning. They rallied when base closures were announced in their communities. Many felt they had a stake in the outcome of base redevelopment and wanted to help--reuse planning was the first step but some residents remained committed to projects even after reuse plans were produced. Redevelopment benefited from the expertise that residents gained from years of project participation. Second, one resident in each rural host community stepped into the role of project leader to guide their communities through the unknown, but quite long, process of closure and redevelopment. These individuals, in effect, staked their reputations on the successful outcome of base redevelopment, despite the informal nature of the early leadership and despite their lack of development experience.

Once again, the case study of Oscoda, Michigan (Wurtsmith AFB), provides an illustration of asset building--this time drawing on local resources. The local chamber of commerce working in concert with Oscoda's local government accurately identified area residents as a critical resource for brainstorming reuse ideas and for transmitting information about the project to their neighbors. Residents were accessed for

participation in reuse planning through published announcements of meeting times. Reuse planning was centralized for several months as residents learned together about the process of base closures and redevelopment. Later, residents started to evolve into community assets for development when the centralized reuse-planning committee broke down into substantive subcommittees enabling members to gain expertise in specific base-related issues, such as environmental impacts, finance, airport reuse, etc. The Wurtsmith LRA was able to capitalize on the expertise of resident reuse planners in order to generate economic and social returns. Economic returns included: production of the base reuse plan which facilitated the eventual transfer of federal property into local control; and an appropriate mix (per resident review) of new tenants to move into former base facilities. The social return generated by the continued participation of residents in Wurtsmith redevelopment was last community support for the project. In contrast to Oscoda, I found that, in two other host communities I studied, conflict arose between project participants and/or residents when reuse planning was less than inclusive. Public participation appears to have fostered a trust for base redevelopment activities that allayed conflict and, therefore, helped the project progress.

Table 6.1 illustrates the model I propose for community asset building as it applied in each of the four case-study communities. Along with the case of Oscoda's capitalization of its acquired housing asset, there are examples of community asset building in Blytheville, Arkansas, Limestone, Maine, and metropolitan Rantoul, Illinois. The Limestone and Rantoul examples were referred to earlier in Chapter Four on local resources and the Oscoda and Blytheville examples were referred to earlier in Chapter Five on federal resources.

Research Implications

My study on rural base redevelopment has implications for practitioners and analysts alike. For practitioners, particularly for those in the field of rural development but also for those working in communities that lack development capacity, lessons can be drawn from the host communities' experiences in responding to economic crises by organizing and managing what amounted to large-scale public development projects. For analysts, the study corroborates the findings of past studies on rural base redevelopment and federal involvement in rural development. It also contributes to

Table 6.1: Examples of Community Asset Building from Different Resources

Blytheville, Arkansas <i>Decommissioned runways</i>	Limestone, Maine <i>A partner at AFBCA</i>	Oscoda, Michigan <i>Former Air Force housing</i>	Rantoul, Illinois <i>Local businesses</i>
<p>The LRA identified aviation-related activities as the "pre-ferred reuse" in the Eaker reuse plan. It based its decision on the recommendations of the planning consultant and the community's approval at two public hearings.</p>	<p>Dave Belyea, a civilian engineer when Loring AFB was still in operation, requested the position of AFBCA site manager after base closure. A life-long resident of the area, the job enabled him to stay.</p>	<p>The LRA realized the value in Wurtsmith housing but delayed reuse for two reasons: (1) to allow housing market to absorb vacancies off base; and (2) to focus on job-generating reuse. Two private developers proposed reuse.</p>	<p>The LRA welcomed virtually any businesses, small or large, to reuse former Chanute facilities.</p>
<p>Resource Identification: Identifying any person, place, or thing that might be a resource for development.</p>			
<p>Resource Acquisition: Gaining local control over identified resources.</p>			
<p>Frustrated by its attempts to set up interim leasing, the LRA delayed reuse until it acquired 1,700 acres through an airport public benefit transfer in 1995. The deal hinged on the LRA's trade of 925 acres of non-aviation property for 200 city-owned runway acres.</p>	<p>Once in his new role as AFBCA site manager (required a recommendation from the Chief Engineer on base), Belyea recognized the opportunities for helping the host community recover from base closure.</p>	<p>The LRA accessed 550 acres of residential property through a no-cost economic development conveyance negotiated in 1996.</p>	<p>The LRA accessed local industry through long-standing monthly meetings of Rantoul businesses and local government. He suggested that they consider moving on base where rents would be below the market rate.</p>
<p>Asset Accumulation: Retaining local control over acquired resources until they can be capitalized as assets.</p>			
<p>The LRA began leasing one hangar for the annual, 2-week C-NEI operation in 1992 through an interim leasing agreement with the Air Force and the tenant. The airport PUT gave the LRA more control over leasing.</p>	<p>Belyea continued to find ways of tailoring AFBCA tasks to meeting Air Force requirements while creating development opportunities for the community.</p>	<p>The LRA negotiated a process of staged development with a private developer for most of the units. In 1997, the Air Force began to transfer title to residential parcels enabling housing sales to private homeowners.</p>	<p>One local manufacturer expanded their operations into base facilities two months before the Air Force fully shut down operations. Another moved on soon after closure. Entrepreneurs moved into base facilities.</p>
<p>Asset Capitalization: Employing accumulated assets to generate social, economic, or financial returns for development.</p>			
<ul style="list-style-type: none"> • Temporary, but substantial, job generation every Christmas. • Rental income. • Visible aviation reuse. • Additional aviation reuse moved on base in late 1990s. 	<ul style="list-style-type: none"> • Local businesses awarded some environmental clean-up contracts. • Cost savings to AF, LRA, and new tenants for heating systems. • Cost savings in property maintenance under extended caretaker agreement. 	<ul style="list-style-type: none"> • Sales revenues. • Affordable housing on- and off-base. • Annual property tax revenues. • In-migration of new residents. • A vibrant neighborhood. 	<ul style="list-style-type: none"> • Early job generation. • Rental income. • Facility reuse and property maintenance by tenants. • Visible base reuse. • Entrepreneurial opportunities.

the growing body of work on asset-building strategies in the field of community development.

Implications for Development Practitioners:

The closures of rural air force bases during the 1990s enabled me to examine how communities respond to economic crises through asset-building development strategies. The study certainly has implications for rural base redevelopment and rural development practitioners as well. Limited development capacity is not restricted to rural communities, however. Many urban and suburban communities suffer from weak market demand for development, minimal planning processes, or lack development institutions to steer and public capital to invest in development projects. Furthermore, the need for redevelopment is not restricted to the host communities of closed military bases. Downtown redevelopment has been necessary in virtually all the nation's older cities since suburban sprawl began forty years ago (e.g., Sagalyn, 2001, and Frieden and Sagalyn, 1988). Redevelopment of brownfields or former industrial property has grown in popularity over the last decade or so (e.g., Dennison, 1998, and Ross and Green Leigh, 2000).

The implications for practitioners stem from the last two principle findings discussed in the previous section--that development happens when communities capitalize upon much-needed assets they derived from federal and local resources.

(1) Implication for Practitioners Regarding Federal Resources. Federal resources improved the opportunities of host communities, particularly those in rural locations, for planning and implementing base redevelopment strategies. These projects would likely have been slower and smaller in scale had it not been for the availability of technical assistance, grants and, perhaps most important, the real estate left behind by the Air Force. The direct applicability of my study, therefore, is limited because the abundance and type of federal resources available to base-closure communities during the 1990s was unusual. I offer six implications from the study, the first three of which are generally applicable to both rural base redevelopment and rural development.

- Base-closure communities should take advantage of every opportunity to learn about the experiences of base redevelopment in other communities. Likewise, rural communities could do much the same thing--seeking out

information on the development experiences of others in similar circumstances. Identifying federal resources is an important goal of such information gathering.

- The technical assistance and planning grants provided by the Office of Economic Adjustment help rural host communities compensate for their lack of development capacity at the onset of base reuse planning so that they are better able to organize for and plan base reuse. Likewise, all federal agencies involved in rural development should provide technical assistance, in the form of project managers (not manuals), in conjunction with grants.
- Host communities should invest federal planning grants in ways that generate development returns both on- and off-base, e.g., hiring economic development professionals and creating development organizations in the public sector. Likewise, federal subsidies to cover the salaries of professional economic developers in local government would greatly enhance the much-needed development capacity of rural communities.
- Access to federal resources is not automatic and, therefore, communities must be strategic when attempting to gain control over identified resources. The most effective resource acquisition strategies are incremental and involve multiple and creative attempts at access. Strategies failed when host communities stopped trying.
- Rural host communities must evaluate the market when capitalizing on surplus property. Opportunities available to metropolitan communities are not always feasible in rural areas, e.g., airport conversions.
- The federal screening process is an important resource for job-generating reuses in base redevelopment. Access to this resource may require political clout at the national level.

(2) Implication for Practitioners Regarding Local Resources. Area residents emerged as the primary, and often the only, local resource available in rural base redevelopment. Their contribution can not be overstated. Resident participation, much like OEA involvement in base reuse planning, helped host communities compensate for their lack of development capacity when base closures were announced. In time, the

expertise that resident reuse planners acquired as a result of their participation evolved into an important community asset that benefited base redevelopment well beyond the planning stage. Furthermore, residents stepped into the role of project leadership in the absence of local elected officials willing to take on the responsibility of base redevelopment.

Residents rallied in the case study communities in response to the crisis of base closures. Their mobilization and subsequent organization have implications beyond the narrow scope of rural base redevelopment, however. I suggest five implications from the study, therefore, that apply to rural development or to any communities in which more formal local resources are scarce.

- Times of crisis offer windows of opportunity during which some residents may be interested in helping their communities in the recovery process. Strategies for accessing residents must, therefore, be timely and inclusive. It is important to invite public participation as early as possible following the news of a crisis.
- Retaining the participation of residents throughout the life of local development projects can help sustain community support for, and minimize the amount of conflict concerning, project activities.
- Local leadership is vital to rural development projects for two reasons: (1) informal leaders can make up for the lack of development capacity among public officials at the onset of projects; and (2) informal leaders "put a face" on the recovery process.
- Eventually, the initially informal role of local leaders should be formalized in order for communities to secure continuity in project leadership.
- Residents and local leaders gain expertise in issues relating to development as they continue to participate on a project. Whenever possible, that expertise should be applied on the project and on others.

Implications for Development Analysts:

My study corroborates the findings of analysts in all three of the development-literature subfields previously introduced in Chapter Two: (1) rural base redevelopment; (2) rural development; and (3) asset-based development. My study also contributes to the growing discussion on asset-building strategies.

(1) Implications for Rural Base Redevelopment Analysts. My study corroborates some of the findings of past studies on rural base redevelopment. However, I draw somewhat different conclusions. The principle finding regarding the ability of rural host communities to replace lost federal civilian jobs through base redevelopment activities confirms similar findings published by Rowley and Stenberg (1993) based on their comparison between metropolitan and nonmetropolitan redevelopment stemming from 1960s and 1970s base closures. In addition, the principle finding regarding the asset potential of federal resources in base redevelopment, such as the property on base, validates Rowley and Stenberg (1993) and Isserman and Stenberg (1994) who both suggested as much in their reports on rural base redevelopment.

I focused on the process of asset building in this study rather than the long-term impact of closures on regional economies. Because of their different focus, the other two teams of analysts and I drew different conclusions regarding the outcome of rural base redevelopment. I agree with their findings that closures will reduce the already small scale of rural economies, but I suggest that rural host communities may be better off when military bases close in their jurisdictions. The crisis draws resources that the host communities ultimately capitalize upon to aid base redevelopment and to enhance local capacity for local economic development in the future. I would further suggest that rural host communities would be better served by gaining access to the federal resources available to them for base redevelopment than they would be by the "priority consideration" (for remaining open) when the armed services recommend sites for closure as recommended by Isserman and Stenberg (1994). The case studies showed how much stronger the public sectors in the host communities were by the end of the study period, strengthened by the addition of assets that would not have been available but for the base closures. The assets derived from federal resources, ranging from commercial airports to redeveloped neighborhoods to staff economic developers, will help buffer the communities against future economic crises by providing them tools to redevelop.

(2) Implications for Rural Development Analysts. My study also corroborates the findings of past studies on the critical importance of federal involvement in rural development (Honadle, 1987, Howland and Miller, 1988, and Isserman, 1995). These analysts showed in different studies of federal grants programs that federal investment in rural projects helps stimulate development. Honadle (1987) further demonstrated

the impact of federal investment is greater when rural communities have the capacity to manage their resources. My study bears out these past findings. Perhaps, the single most important federal resource in rural base redevelopment was the early technical assistance provided by the Office of Economic Adjustment (OEA) that, in effect, helped the host communities learn to identify, access, and capitalize upon the variety of federal resources that would come their way in base redevelopment. By the time OEA's participation ended more than five years after projects started, the host communities had accumulated numerous assets to help them in future development projects. In other words, they no longer needed to "borrow" OEA's expertise to compensate for what had been a lack of capacity.

(3) Implications for Asset-based Development Analysts. My study applies the concept of asset building for local economic development discussed in the literature from various fields including regional development, community development, and sociology. The implications are two-fold. First, it confirms the components to asset-building strategies previously suggested in the literature: resource identification, resource acquisition, and asset accumulation. Second, I introduced a fourth component to the process of asset building.

Kretzmann and McKnight (1993) suggested that the process begins with identifying resources, which I found to be true. In most cases, resources may seem obvious, but, occasionally, they may not. When communities "left no stone unturned" at the start of asset building, they improved their opportunities to create assets derived from identified resources.

Polenske (2001) suggested that access to resources was as important as their availability to communities. My study bore her assertion out time and again, the implications of which apply to other communities that lack the knowledge or capital or simply the tenacity to access necessary resources for economic development. In my study, access to federal resources, for example, could be very complicated for any number of reasons. The transfer from federal surplus property into local control involved several steps in a process that was, at times, as new to Air Force personnel as it was to community participants. Therefore, successful asset building often started with flexible access strategies during which host communities tried various approaches until one worked.

Finally, Sherraden (1991) linked the accumulation of assets to the ability of

individuals (in his theory on asset based welfare) to resolve future problems. Likewise, as the communities gain development expertise, they grow more sophisticated in their approach to base redevelopment. In fact, the crux of my argument that host communities survived base closure crises hinges on Sherraden's asset accumulation theory. Enhanced development capacity in the form of development institutions, professionals, public capital, and publicly-owned property provided evidence of the communities' success.

In my study, I introduced a fourth, and equally important, component to asset-building strategies: asset capitalization. The capitalization of development assets must be thought of as an explicit part of asset-building strategies. Just as the doctoral degree yields no returns unless its holder applies her training in the world, the development assets of a community yield no returns unless they are put to use. Some communities may be able to stockpile their public capital and land holdings, but others, like the rural host communities in the study, need to take advantage of whatever assets they accumulate in order to make up for the lack of place-based stimuli for development.

In fact, there should be something of a snowball effect for capacity development through repeated asset capitalization. As disadvantaged communities make use of their increasing capacity for development, they are able to accumulate more assets and, therefore, develop even more capacity. In this way, crises like base closures are as much opportunities as they are problems. The host communities may have "learned by fire" in order to make redevelopment happen but, in doing so, they became experienced at large-scale public development. Fortunately, by organizing first, they have been able to capture that experience as well as the profits of redevelopment. I can imagine some of the communities offering reuse advice during the next round of base closings to both rural and metropolitan host communities.

Appendix A
Host Communities of Air Force Base Closures (n=26)

County, State	Community	Region	Air Force Base	BRAC
Nonmetropolitan Host Communities (n=6)				
Aroostook, ME	Limestone	Aroostook County	Loring AFB	1991
Clinton, NY	Plattsburgh	Clinton County	Plattsburgh AFB	1993
Iosco, MI	Oscoda	Iosco County	Wurtsmith AFB	1991
Marquette, MI	Gwynn	Marquette County	K.I. Sawyer AFB	1993
Miami, IL	Peru	Miami County	Grissom AFB	1991
Mississippi, AR	Blytheville	Mississippi County	Eaker AFB	1991
Nonmetropolitan Host Communities (n=26)				
Bexar, TX	San Antonio	San Antonio MSA	Kelly AFB/ ALC	1995
Champaign, IL	Rantoul	Champaign-Urbana MSA	Chanute AFB	1988
Dade, FL	Dade	Miami PMSA	Homestead AFB	1993
Denver, CO	Denver	Denver PMSA	Lowry AFB	1991
Franklin, OH	Columbus	Columbus MSA	Rickenbacker ANGB	1991
Horry, OH	Myrtle Beach	Myrtle Beach MSA	Myrtle Beach AFB	1991
Jackson, MO	Kansas City	Kansas City MSA	Richards-Gebaur ARS	1991
Licking, OH	Heath	Columbus MSA	Newark AFB	1993
Lubbock, TX	Lubbock	Lubbock MSA	Reese AFB	1995
Maricopa, AZ	Mesa	Phoenix-Mesa MSA	Williams AFB	1991
Merced, CA	Merced	Merced MSA	Castle AFB	1991
Montgomery, OH	Kettering	Dayton-Springfield MSA	Gentile AFS	1993
Oneida, NY	Rom	Utica-Rome MSA	Griffiss AGS	1993
Rapides Parish, LA	Alexandria	Alexandria MSA	England AFB	1991
Riverside, CA	Riverside	Riverside-San Bernardino PMSA	March AFB	1991
Rockingham, NH	Newington	Portsmouth-Rochester NECMA	Pease AFB	1988
Sacramento, CA	Sacramento	Sacramento PMSA	McClellan AFB/ ALC	1995
	Sacramento		Mather AFB	1988
San Bernardino, CA	San Bernardino	Riverside-San Bernardino PMSA	Norton AFB	1988
	Victorville		George AFB	1988
Tarrant, TX	Ft. Wort	Ft. Worth-Arlington PMSA	Carswell AFB	1991
Travis, TX	Austin	Austin-San Marcus MSA	Bergstrom AFB	1991

Acronyms: AFB--Air Force Base; AFS--Air Force Station; AGS--Air Guard Station; ALC--Air Logistics Center; ANGB--Air National Guard Base; ARS--Air Reserve Station; BRAC--Base Realignment and Closure round; MSA--Metropolitan Statistical Area; NECMA--New England Consolidated Metropolitan Area PMSA--Primary Metropolitan Statistical Area

Appendix B

Economic Histories of the Rural Case-Study Communities

In this appendix, I briefly outline the regional economies of each of the three rural case-study communities: Blytheville, Arkansas; Limestone, Maine; and Oscoda, Michigan. The data presented and most of the discussion, therefore, refer to the regions, i.e., the counties, within which the host communities are located: Mississippi County, Arkansas; Aroostook County, Maine; and Iosco County, Michigan.

Blytheville, Arkansas

All but one-hundred acres of the former Eaker Air Force Base is located within the jurisdiction of Blytheville, the county seat for Mississippi County, Arkansas. The rest of Eaker is located in neighboring Gosnell. Mississippi County covers 921 square miles of flat plains in the northeast corner of the state along the Mississippi River. The county abuts the Memphis metropolitan region, but its economy is more characteristic of the traditionally poor Mississippi Delta region than those of adjacent nonmetropolitan counties (Butler, 1990). More than one quarter of its residents lived in poverty in 1990 making Mississippi County the poorest region to surround the case-study communities. Its residents were also the least educated, only 60 percent were high school graduates, and the least employed with 10.7 unemployment.

Farming Losses

Fifty years ago, agriculture dominated Mississippi County, Arkansas, with over one-half of the civilian labor force employed in farming. Cotton was, and still is, the most common crop. During the 1950s, the onset of mechanization in farming processes reduced the need for farm labor, however, and by 1960 only one-third of the county labor force worked on farms. Thirty years later, the agriculture industry claimed a relatively small fraction, six percent, of county-wide employment. Nonetheless, a farming culture prevails in Mississippi County. Route 55, the highway connecting Memphis to Blytheville is lined with fields of cotton, soy, wheat, milo, and even rice. The seed store and farming supply outlet continue to operate in the downtown district along side the more contemporary bookstore, bank, and dry cleaners. And, each year, the City of Gosnell celebrates its farming history with a cotton-picking contest.

Table B.1
Mississippi County, Arkansas: Economic Indicators, 1950-90

Economic Indicators	1950	1960	1970	1980	1990
Population	82,375	70,174	62,060	59,517	57,525
Military Employment (1)	(2)	(2)	3,272	3,762	3,320
Civilian Labor Force	27,011	20,924	19,431	21,374	23403
Agriculture Employment (3)	12,852	6,283	5,064	2,969	1,682
Manufacturing Employment	1,423	2,136	4,566	6,324	6,356
Federal Civilian Employment (1)	(2)	(2)	578	776	801

Source: City and County Data Books, 1952, 1962, 1972, 1982, 1994.

Notes: (1) No military or federal civilian workers are listed, per se, in either the 1950 or 1960 censuses. Military employment was induced as the difference between the total and civilian labor forces in 1970-90 censuses.

(2) Data unavailable.

(3) 1950-60 data are people employed in agriculture. 1970-90 data are total of full- and part-time jobs in farming and, therefore, are inflated in comparison with the earlier data.

Growth in Regional Manufacturing

While the agriculture industry slowly fell out of the Mississippi County industry mix over the course of the last half century, manufacturing steadily grew. Only six percent of the civilian labor force worked in production in 1950. Eventually, manufacturing would become the county's dominant industry. For a long time, nondurable manufacturers outnumbered durable manufacturers by as much as three to one. Food processing plants and textile mills relied on regional resources such as cotton. Despite the decline in these resources, nondurable manufacturing remained stable but durable manufacturing, primarily metal working companies and more recently a steel producer, accounted for growth in the industry.

Population Decline Despite Military Build Up

Mississippi County population lost 30 percent of its population between 1950

and 1990.¹⁰⁴ Neither the military build-up during the 1950s and 1960s nor growth in the manufacturing industry during the 1970s and 1980s offset the economic decline set in motion by the exodus of farm labor. In 1955, Blytheville Air Force Base¹⁰⁵ reopened after ten years of dormancy with an expanded runway to serve as part of the Strategic Air Command. The influx of Air Force families did not ameliorate the loss of farm families as it had in the other rural case-study communities. The rural rebound in population during the 1970s (see Chapter One) due to the deindustrialization of American manufacturing delivered jobs to Mississippi County but not new residents.

One explanation for the long-term decline in the Mississippi County population despite employment gains in two industries is location. Despite its close proximity to a major metropolitan region, the county is also within a short commuting distance of three states: Missouri, Tennessee, and Kentucky. Two other states, Mississippi, Indiana, are within an hour's drive. On one hand, the county's accessibility serves to increase its supply of labor, which can be a problem for rural areas. On the other hand, workers can easily live outside the county. Ironically, the civilian labor force has increased steadily since 1960 but the excessive poverty rate, double-digit unemployment, and population losses have continued.

Nucor Steel Moved In as the Air Force Moved Out

The year 1991 was bittersweet for Mississippi County. In January, Nucor Steel, headquartered in North Carolina, and its Japanese partner, Yamato, formally opened a mini-steel mill just a few miles east of Blytheville along the banks of the Mississippi River. The manufacturer of steel beams required thousands of production workers whom it paid well. But, six months after the Nucor opening, Congress announced Eaker's closure resulting in the loss of 3,000+ jobs the following year.

Limestone, Maine

The former Loring Air Force Base is located entirely within the jurisdiction of Limestone, Maine--a very small town in the vast Aroostook County. Aroostook is

¹⁰⁴ The last decade of growth was 1940-50 when Mississippi County population grew by 2.7 percent.

¹⁰⁵ The base was renamed in the late 1980s as Eaker to commemorate General Ira C. Eaker, first commander of the Eighth Air Force during WWII. Mississippi County public officials believed that permitting the name change would decrease the risk of base closure.

enormous. Encompassing 6,672 square miles of open high hills makes it larger than the states of Rhode Island and Connecticut combined. Yet, with only 87,050 residents (1990) before the 1991 Loring closure announcement, it is smaller in population than Cambridge, Massachusetts. Approximately 88 percent of county land is covered in dense forest, much of it in the massive Baxter State Park. Another eight percent is farm land. There are few population centers in Aroostook. More than 50 of the county's 70-odd municipalities have less than 1,000 residents each. Only four have more than 5,000 residents, including Presque Isle, Caribou, and Limestone, all located near the former Loring Air Force Base, and Houlton at the northern end of U.S. Interstate 95.

Table B.2
Aroostook County, Maine: Economic Indicators, 1950-90

Economic Indicators	1950	1960	1970	1980	1990
Population	96,039	106,064	94,078	91,331	86,936
Military Employment (1)	(2)	(2)	3,619	3,478	3,676
Civilian Labor Force	30,167	29,690	29,901	35,522	37,366
Agriculture Employment (3)	8,085	5,077	5,980	3,582	2,356
Manufacturing Employment	3,061	4,073	6,053	6,429	5,907
Federal Civilian Employment (1)	(2)	(2)	1,172	1,525	1,715

Source: City and County Data Books, 1952, 1962, 1972, 1982, 1994.

Notes: (1) No military or federal civilian workers are listed, per se, in either the 1950 or 1960 censuses. Military employment was induced as the difference between the total and civilian labor forces in 1970-90 censuses.

(2) Data unavailable.

(3) 1950-60 data are people employed in agriculture. 1970-90 data are total of full- and part-time jobs in farming and, therefore, are inflated in comparison with the earlier data.

Potatoes, Lumber, and then Clover

Potatoes and lumber have been the mainstays of the Aroostook regional economy for most of the last century. In 1950, there were over 4,000 farms, mostly growing potatoes, the equivalent of one farm per 24 residents. By 1960, there were just over 3,000 farms and the number of farm workers had decreased by 37 percent due to a

decrease in labor demand facilitated by increasingly mechanized farming processes.¹⁰⁶ During the 1980s, Mother Nature took over where technology left off in perpetuating the decline of Aroostook's farming sector. Many of the remaining farms succumbed to a series of potato crop failures in 1980, 1983, and 1986. By 1990, there were only 1,000 operating farms in the county, the equivalent of one farm per 86 residents. "Clover farms," the local reference to former potato farms grown over in clover, line Routes 1 and 165, the only major, albeit two-lane, highways in the county.

Aroostook's forests, a vast resource of soft wood mixtures such as spruce-balsam-fir and aspen-birch, suffered devastating losses in the 1970s and early 1980s following outbreaks of spruce budworm. At the time, landowners expanded operations to salvage affected trees but, ultimately, millions of trees were lost. A decade later, much of the remaining spruce-fir was still far too immature for harvest. (Loring Readjustment Committee, 1980).

Manufacturing in Aroostook

The manufacturing industry in Aroostook consists, for the most part, of lumber yards and potato processing plants, reflecting the county's reliance upon its resource base in farm and forest land. In 1950, just 11 percent of the employed civilian labor force worked in manufacturing compared to 30 percent in agriculture. While demand for farm workers dropped off, demand for production workers increased so that by 1970, more Aroostook residents worked in manufacturing than in farming, 22 versus approximately 17 percent.¹⁰⁷ Growth in manufacturing ended in the 1980s, however, when the county's sawmills began to have difficulty competing with competitors in neighboring Canada. A recession at the end of the decade also reduced demand for lumber and paper. Nonetheless, manufacturing still accounted for 17 percent of those employed Aroostook in 1990.

The Rise of the Military in the Midst of Regional Decline

The military became the region's third major industry during the 1950s when

¹⁰⁶ Nationally, farm labor decreased by 39 percent between 1950 and 1960.

¹⁰⁷ Agriculture's share of the civilian labor force in 1970 was imputed from BEA data measured in terms of full- and part-time employment rather than workers. If anything, the value is overstated.

construction of the Limestone Air Force Base¹⁰⁸ was finally completed after seven years. It would be one of the first of many state-side Strategic Air Command (SAC) facilities designed to accommodate high-speed, heavy aircraft--typically bombers. The 1950s military build-up generated significant population gains. By 1960, the Aroostook population had grown ten percent over the previous decade despite the serious losses in the agriculture sector described earlier. By 1970, federal civilian workers made up four percent of the civilian labor force and there were over 3,600 military personnel in the county, the vast majority of whom were assigned to Loring Air Force Base. In fact, the federal government sector employed more workers than did farms by this time. And, by 1990, the federal government sector employed more workers than even manufacturing.

In 1991, Congress announced that Loring would close within four years resulting in the loss of 4,000+ federal civilian and military jobs on base. At the time, the military was the only regional industry that was not in decline. The Aroostook farming and lumber, once major contributors to the economy, were relatively minor industries in terms of employment share. The manufacturing industry was still a significant regional employer but had declined from its peak in the 1970s. Finally, the retail industry had suffered set backs in Aroostook when Canada imposed its Provincial Sales Tax on all goods purchased by its citizens in the U.S. As a result, Aroostook merchants lost what had been a large part of their customer base for several years.

Iosco County, Michigan

The former Wurtsmith Air Force Base is located entirely within the jurisdiction of Oscoda, Michigan--a small township in Iosco County. Iosco County covers 547 square miles of irregular plains in northeast Michigan approximately four hours by car from Detroit, most of which is on the two lanes of U.S. Highway 25. Remote but beautiful, the sun rises over Lake Huron and sets behind the Au Sable National Forest. "Down staters" travel to Iosco year-round for fishing, sailing, hunting, and snow mobiling. Some even retire there.

¹⁰⁸ The name of base was changed in 1954 to honor Congressional Medal of Honor winner Major Charles J. Loring, Jr., born in Portland, ME, and died in North Korea.

Farming Declines and Military Build Up

Constructed as an aerial gunnery range during the 1920s, Oscoda Airfield,¹⁰⁹ expanded during the 1950s to become a bombardment wing in the Strategic Air Command. County population, small to begin with, more than doubled between 1950 and 1970 due, in large part, to the in-migration of air force families. This enormous growth was particularly significant given the simultaneous decline in the county's agriculture industry. Farm workers made up less than five percent of the employed civilian labor force in 1970, down from 20 percent in 1950 when agriculture and manufacturing were the two major regional industries. In fact, Iosco was the least farming dependent region of the case-study communities and its agriculture employment declined far more rapidly. By 1990, there were only farm-related jobs comprised 2.5 percent of county employment.

Table B.3
Iosco County, Michigan: Economic Indicators, 1950-90

Economic Indicators	1950	1960	1970	1980	1990
Population	10,906	16,505	24,905	28,494	30,209
Military Employment (1)	(2)	(2)	3,124	2,739	3,290
Civilian Labor Force	3,762	4,875	6,070	8,892	10,824
Agriculture Employment (3)	696	507	346	344	281
Manufacturing Employment	679	751	868	1,043	1,518
Federal Civilian Employment (1)	(2)	(2)	466	823	1,230

Source: City and County Data Books, 1952, 1962, 1972, 1982, 1994.

Notes: (1) No military or federal civilian workers are listed, per se, in either the 1950 or 1960 censuses. Military employment was induced as the difference between the total and civilian labor forces in 1970-90 censuses.

(2) Data unavailable.

(3) 1950-60 data are people employed in agriculture. 1970-90 data are total of full- and part-time jobs in farming and, therefore, are inflated in comparison with the earlier data.

¹⁰⁹ Wurtsmith AFB was so named in 1953 to commemorate Gen. Paul B. Wurtsmith, a Michigan native who was killed when his B-25 crashed into a North Carolina mountain during training.

Growth in Manufacturing, but Largely South of Oscoda

Agriculture dropped out of the industry mix for Iosco County while the military expanded and manufacturing, more or less, maintained its share of the labor force. In absolute terms, the industry sector has actually grown steadily since the 1950s. At the same time, however, the total labor force grew even more due to the expansion of Wurtsmith AFB. Consequently, manufacturing's share has stayed relatively steady at 14-15 percent. Like Miami, IN, another of the rural closure counties in the study, Iosco's manufacturers, most of whom produce fabricated steel goods and industrial machinery, serve the Detroit automotive industry.

Dominance of the Government Sector

Since 1970, the government sector has dominated the regional economy. At that time, government workers made up 23 percent of the civilian labor force in Iosco; one in three of whom were federal civilians. In addition, there were over 3,600 military personnel; a huge number given that the entire employed civilian labor force was only 5,600. By 1990, federal civilians made up 13 percent of the labor force, not much less than the entire manufacturing work force. When local and state government workers were considered as well, the government sector comprised 38 percent of the civilian labor force. Nationally, the government employs closer to 15 percent of all workers.

A Retirement Community

Iosco County grew in population every decade since 1950, an exceptional feat for a rural area. Its 1990 population of 30,821 was nearly three times its 1950 population of 10,906. Wurtsmith Air Force Base contributed to the growth in the 1950s and 1960s as the facility expanded operations. Base-related employment peaked in 1970, however. Population growth during the 1970s and 1980s may be explained by the influx of retirees from the military as well as from downstate. The Economic Research Service of the U.S. Department of Agriculture (1994) classified Iosco as a "retirement-destination" county following the 1990 decennial census meaning that the age 60+ population increased by 15+ percent during the prior decade due to in migration. One in four Iosco households collected retirement income in 1989 compared to one in seven households nationally. For further comparison, one in five Florida households collected retirement income in 1989.

Congress announced in 1991 that the 4,626-acre Wurtsmith Air Force Base would close two years later. Iosco County lost its largest employer, on-base employment was around 3,600, as well as a large part of its government sector, the county's dominant industry for decades. Manufacturing, though not as significant an employer, had maintained its share of the county labor force for decades. It also had maintained an important link to the automotive industry down state. Finally, its growing reputation as a retirement community yielded a ready market for on-base housing that was unavailable to the other rural closure counties in the study. Nonetheless, Iosco County, with a population of 30,209 (1990), lost a significant share of its residents due to the base closure. It is likely that the 2000 census will show the first population decline for the county in decades.

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