

INTRODUCTION

Motivation. Under the “801-Housing Program” (authorized under Public Law 98-115, Section 801), housing is built under Department of Defense specifications by a private developer and then leased by the government as military family housing for up to 20 years. Within a few years, the first of the 801 housing units built to serve Ft. Drum families will be reaching the end of their 20-year period. This report is intended to help inform discussion about that issue, by examining the economic impact of the 801-Housing program on communities within the North Country.

For each of the communities where 801 housing is located—Calcium, Carthage, West Carthage, Clayton, Copenhagen, Evans Mills (LeRay Heights), Gouverneur, Lowville, and Watertown—the 801-housing and its residents have impacts on: (1) population, (2) retail business activity, (3) schools and local public services, (4) local government revenues, and (5) housing market. This memo discusses each of these impacts in a separate section. A final section then summarizes the overall economic impact which the 801 housing has on each community.

I. POPULATION

Fort Drum’s 801 housing is located at 13 sites in ten communities in the North Country. As there are a total of 2,000 801-housing units spread across these 13 sites in 10 communities. As shown in Table 1, the largest numbers of 801-housing are in Watertown (600), Calcium (300), Evans Mills area (300) and Gouverneur (171).

These 801-units housed 1,936 families as of May 31, 2001. The soldiers and their families in this housing who live in these units comprise 8,816 of the total residents in these communities -- nearly 12% of their total population. However, as shown in Table 2, the percentage varies widely. It is over half of the population in Calcium, Philadelphia and the Evans Mills area, and over one-quarter of the population in Copenhagen and West Carthage.

Table 1. Basic Characteristics of Fort Drum 801 Housing Units

Community	Total 801 Units	Resident Families	Spouses	Total Children		Total 801 Population
				Number	In School	
Calcium	300	287	276	764	465	1,327
Carthage	126	118	112	337	211	567
West Carthage	122	118	114	311	190	543
Clayton	100	96	94	237	133	427
Copenhagen	75	74	73	129	52	276
Gouverneur – Luk	75	73	73	197	121	343
Gouverneur – Baldwin	96	92	89	216	118	397
Evans Mills area (LeRay Heights)	300	294	282	741	434	1,317
Lowville	56	53	90	137	81	280
Philadelphia	150	145	141	426	265	712
Watertown – Academy	120	118	115	234	114	467
Watertown – Eastern	224	222	217	601	366	1,040
Watertown – Arsenal	256	246	236	638	373	1,120
Totals	2,000	1,936	1,912	4,968	2,923	8,816

Source: Data provided by Mr. John Repaty, Fort Drum. Residents as of 5/31/01.

Table 2. 801-Housing Residents as Percent of Community Populations

Community	Population		801 Residents as % of Total Population	Ranking Of 801 Share
	801 housing	Total		
Calcium	1,327	2,465	54 %	2
Carthage	567	4,187	14 %	6
West Carthage	543	1,992	27 %	5
Clayton	427	4,554	9 %	8
Copenhagen	276	905	31 %	4
Gouverneur	740	7,836	9 %	9
Evans Mills area (LeRay Heights)	1,317	1,942*	68 %*	1
Lowville	280	4,471	6 %	10
Philadelphia	712	1,330	53 %	3
<u>Watertown</u>	<u>2,627</u>	<u>27,440</u>	<u>10 %</u>	<u>7</u>
Total	8,816	74,196	11.9%	Not applicable

Source: (1) Number of 801 residents is calculated from data as of 5/31/01, provided by Mr. John Repaty, Fort Drum; (2) Community population is 1999 estimates, from the US Census Bureau, 2000.

* The LeRay Heights housing is in an unincorporated area near Evans Mills. This housing plus Evans Mills have a combined population of 1,942.

II. RETAIL AND CONSUMER SERVICES

Total Business Activity Supported by 801 Residents. One of the most important impacts of 801 housing is that its residents generate on sales for retail stores and consumer services in their communities. The payroll associated with the 1,936 military personnel living in 801 housing is approximately \$50 million, which is split among three categories of spending:

- (a) On-base spending (PX/Commissary) – roughly \$10 million
- (b) Off-base spending on non-durable retail (restaurants, bars, clothing, books, CDs) and consumer services (cleaners, beauty shops, car repair) – roughly \$24 million, which is likely to occur mostly in local communities
- (c) Off-base spending on durables retail (furniture, home appliances, cars), recreation (movies) and household operation (home improvement, transportation) – roughly \$16 million, which is likely to occur mostly in stores at the major regional shopping areas such as Watertown.

Overall, it is estimated that residents of the 801 housing are responsible for approximately \$40 million of sales to businesses in the region, supporting nearly 300 jobs¹. Of this amount, approximately \$24 million of it is most likely to occur in local communities, supporting approximately 180 jobs.

¹ This number is also consistent with the report *Ft. Drum Regional Economic Impacts* (Nutter Associates and Economic Development Research Group, prepared for Fort Drum Regional Liaison Organization, 1999). That study found that consumer spending by workers at Ft. Drum generates 1,673 off-base jobs, and military personnel account for 83% of the Ft. Drum jobs. In addition, 801 residents account for 18.3% of the military jobs, though they would be expected to account for a larger (at least 22%) share of off-base spending by military personnel, due to their location off-base. Together, these figures imply that spending by 801 residents would generate approximately 305 additional off-base jobs.

Regional Importance of Retail & Services. These retail and service jobs are particularly important to local economies in the North Country, as the region is characterized by relatively high dependence on retail employment. The proportion of total employment found in the retail sector is high in each of the three counties in which 801 housing is located. In Jefferson County, 31% of total employment is in the retail sector, Lewis County, 22%, and in St. Lawrence County, 27%. These proportions compare to an average of just 18% across New York State.

Retail dependence is even greater in the specific communities in which 801 housing are located, ranging from 26% to 48% of all business establishments, as shown in Table 3. Retail establishments together with service establishments generally account for half or more of all business establishments in these communities.

Table 3. Retail and Services as Percent of Total Establishments

Community	Total Establishments	Retail Establishments		Retail and Service Establishments	
		Number	% of Total	Number	% of Total
Calcium	10	4	40%	5	50%
Carthage/West Carthage	171	44	26%	103	60%
Clayton	147	39	27%	85	58%
Copenhagen	28	9	32%	13	46%
Gouverneur	187	55	29%	110	59%
Lowville	231	63	27%	150	65%
Philadelphia	18	6	33%	11	61%
Watertown/Fort Drum	1238	417	34%	853	69%
<u>Evans Mills area (LeRay Heights)</u>	<u>31</u>	<u>15</u>	<u>48%</u>	<u>21</u>	<u>68%</u>
Total	2061	652	32%	1351	66%

Source: *Zip Code Business Patterns, US Census Bureau.*

Local Impacts of 801 Residents. There is no way to know the exact locations of where the 801 residents in each community spend their money, short of surveying all of them. Table 4 provides numbers representing two ways to view these impacts. First, the table shows the number of retail and service jobs generated in the region by 801 residents in each community. Second, the table shows the number of those retail and service jobs of the types typically concentrated in the same local areas as where the people live. Together, these two measures provide a basis for assessing the likely range of retail business impacts on communities.

Overall, just 1% of total employment in the three counties is estimated to be dependent on retail spending by residents of 801 housing. However, the dependence is substantially higher in specific 801 communities. In Calcium, Copenhagen, Evans Mills (LeRay Heights) and Philadelphia, the proportion is in the range of 8% to 34% of all stores, and potentially even higher.

Table 4. Dependence of Local Communities on Retail Spending of 801 Residents

Community	Total employment	Retail & Service Jobs Supported by 801 Residents		Retail & Service Jobs Most Likely to Occur Locally		Rank of 801 Dependence
		number	% of Total Emp	number	% of Total Emp	
Calcium	80	45	56%	27	34%	1
Carthage and West Carthage	2,062	37	2%	22	1%	6
Clayton	726	15	2%	9	1%	5
Copenhagen	76	11	15%	7	9%	3
Gouverneur	2,347	26	1%	16	1%	7
Evans Mills area (LeRay Heights)	168	45	27%	27	16%	2
Lowville	2,742	8	0.3%	5	0.2%	9
Philadelphia	174	23	13%	14	8%	4
<u>Watertown</u>	<u>18,079</u>	<u>90</u>	1%	54	0.3%	<u>8</u>
TOTALS	26,454	300	1%	180	1%	Not applicable

Sources: (1) Compiled from data from Mr. John Repaty, Fort Drum; (2) US Census Bureau: Economic Census; and (3) Ft. Drum Regional Economic Impacts, Nutter Associates and Economic Development Research Group, prepared for Fort Drum Regional Liaison Organization, 1999.

III. SCHOOLS AND OTHER LOCAL SERVICES

School Students. Changes in 801 housing could also affect the financing and operations of local schools, as well as demand for other local services, such as police and fire protection. Fort Drum contributes approximately \$6.8 million dollars to local schools to compensate for the children of military personnel enrolled in these schools, and state impact aid for these students totaled another \$2.3 million. Although payments to individual school districts might vary year-to-year based on the number and types of students enrolled, we can get an estimate of the financial and operational dependence of districts on Fort Drum in general, and 801 students in particular, by estimating the proportion of each school district’s student population that is accounted for by students living in 801 housing.

Students from families living in 801 housing make up between 2% and 31% of the total student population in the school districts of the affected 801 communities (as shown in Table 5). Across the seven school districts in which 801 students are enrolled, students who reside in 801 housing account for an average of 15% of the student population. Almost all of the local school districts are greatly dependent on students who live in 801 housing. In four districts —Carthage, Gouverneur, Indian River, and Watertown— 801 students account for more than 10% of the student body. In the Indian River school district, 801 students account for nearly 1/3 of all students. Only in the Lowville school district do 801 students account for less than 10% of the student body.

School Budgets and Staff. To educate these 801 students, there are approximately 213 additional staff in the local schools, with approximately \$26.6 million of total school spending (as shown in Table 6). In the Carthage, Gouverneur, Indian River and Watertown school districts, the additional staff range from 16 – 88, which can potentially be large enough to affect school openings and closings.

Table 5. Fort Drum-related Students as Percent of Total Student Population

School District	TOTAL Students in District	801-related Students		On-post and 801-related Students		Rank of 801 Dependence
		Number	% of Total	Number	% of Total	
Carthage	3,153	401	13%	1,015	32%	3
Copenhagen	625	52	8%	52	8%	6
Gouverneur	1,967	239	12%	239	12%	4
Lowville	4,081	81	2%	81	2%	7
Indian River	3,717	1,164	31%	3,260	88%	1
Thousand Island	1,367	133	10%	133	10%	5
<u>Watertown</u>	<u>4,804</u>	<u>853</u>	<u>18%</u>	<u>853</u>	<u>18%</u>	<u>2</u>
TOTAL	19,714	2,923	15%	5,633	29%	Not applicable

Sources: Calculated from data from Mr. John Repaty, Fort Drum; and *Municipal Reference Guide: New York--Northern Edition, 1999*.

Table 6. School Spending and Employment Attributable to 801 Students

School District	# 801 Students	Teachers & prof staff per 1000 students	Total 801-related professionals	Spending per Student	Total 801-related Spending
Carthage	401	75.8	30	\$ 9,143	\$ 3,666,343
Copenhagen	52	75.2	4	\$ 8,728	\$ 453,856
Gouverneur	239	66.6	16	\$ 9,189	\$ 2,196,171
Lowville	81	74.3	6	\$ 8,013	\$ 649,053
Indian River	1,164	75.9	88	\$10,189	\$11,859,996
Thousand Island	133	79.0	11	\$ 7,887	\$ 1,048,971
<u>Watertown</u>	<u>853</u>	<u>68.1</u>	<u>58</u>	<u>\$ 7,926</u>	<u>\$ 6,760,878</u>
TOTAL	2,923	72.9	213	\$ 9,112	\$26,635,268

Sources: (1) Data on 801 students per district from Mr. John Repaty, Fort Drum. (2) Data on staffing ratios are for 1995, from "Economic and Demographic Profiles of Sixteen New York Counties"; website <http://www2.plattsburgh.edu/centers/tac/edtac/profiles>. (3) Data on spending per student from *Municipal Reference Guide: New York—Northern Edition, 1999*.

Other Local Public Services. The number of 801 residents also affects demand in each community for other (non-school) local services, such as police and fire protection, public safety and parks. As shown in Table 7, residents of 801 housing account for almost 12% of the total populations of the affected communities. They are estimated to generate a proportional need for these local services – totaling approximately \$4.8 million in the local communities. The effect of 801 residents on local services in specific communities varies depending on the proportion of 801 residents relative to the total population of these communities. That portion is over one-half of the local budget in Calcium, Philadelphia and Evans Mills, and over one-quarter in Copenhagen and West Carthage. It is important to note that these expenditures cover costs of administration, buildings and other fixed facilities, as well as staff. For that reason, any incremental loss of population in these communities would not necessarily translate into a corresponding incremental savings in expenditures.

Table 7. Non-School Local Expenditures on Public Services for 801 Residents

Community	Total Expenditures (1997)	% of Population in 801 housing	Estimated Expenditures on 801 residents	Estimated Local Govt. Jobs
Calcium	not avail	54 %	not avail	--
Carthage	\$ 3,687,000	14 %	\$ 499,000	5
West Carthage	\$ 1,819,000	27 %	\$ 496,000	5
Clayton	\$ 1,797,000	9 %	\$ 168,000	2
Copenhagen	\$ 210,000	31 %	\$ 64,000	1
Gouverneur	\$ 2,864,000	9 %	\$ 198,000	3
Evans Mills area (LeRay Hgts)	\$ 1,630,000	68 %*	\$ 154,000	11
Lowville	\$ 1,758,000	6 %	\$ 110,000	1
Philadelphia	\$ 433,000	53 %	\$ 232,000	2
<u>Watertown</u>	<u>\$30,282,000</u>	<u>10 %</u>	<u>\$2,899,000</u>	<u>30</u>
Total	\$44,480,000	12%	\$4,821,000	52

Source: (1) Total local expenditures include all ongoing expenses but exclude debt principal and interest costs; data from *Municipal Reference Guide: New York—Northern Edition, 1999*; (2) Employment estimate based on statewide average of local government jobs per million dollars of local budget.

* see Table 2 and footnote explanation

IV. LOCAL GOVERNMENT REVENUE

Local Property Tax and PILOT. Although 801 housing is not subject to local property taxes, the military makes “payments in lieu of taxes” (PILOTs) to compensate local governments. In 1998, PILOT payments to local communities with 801 housing totaled \$1.3 million dollars. These payments accounted for over ¼ of expenditures in Copenhagen and Philadelphia (Table 8).

Table 8. PILOT Payments as Percent of Local Government Revenues

	Total Local Government Revenue	Annual PILOT Payments	PILOT as % of total revenue	Rank of 801 Dependence
Calcium	na	na	na	na
Carthage	\$ 2,572,000	\$ 147,200	5.7%	4
West Carthage	\$ 1,577,000	na	na	na
Clayton	\$ 1,892,000	\$ 97,000	5.1%	5
Copenhagen	\$ 262,000	\$ 72,800	27.8%	2
Gouverneur	\$ 2,899,000	\$ 183,800*	6.3%	3
Evans Mills area (LeRay Heights)	\$ 2,272,000	na	na	na
Lowville	\$ 2,639,000	\$ 63,000	2.4%	6
Philadelphia	\$ 473,000	\$ 145,500	30.8%	1
<u>Watertown</u>	<u>\$33,570,000</u>	<u>\$ 582,000</u>	<u>1.7%</u>	<u>7</u>
Total	\$44,307,000	\$1,291,000	2.9%	Not applicable

Sources: (1) PILOT payments based on data from Fort Drum Real Estate Office. (2) Total revenue from *Municipal Reference Guide: New York—Northern Edition, 1999*. All data are for 1997.

* Numbers for Gouverneur are authors' estimate.

Other Sources of Local Government Revenue. In general, local government revenues and expenditures balance. However, the PILOT receipts alone do not cover all of the costs of local services. The difference is made up by additional local government revenues from a variety of federal and state sources, as well as local fees.

County Sales Tax. At the county level, retail spending by 801 residents generates sales tax revenues. These revenues accrue to the county in which the spending occurs. The 801 residents make approximately \$24 million in local purchases and another \$16 million in broader regional purchases that together generate approximately \$1.3 million in county sales tax revenues. Assuming that the retail taxes collected from 801 residents in each county is proportional to the county’s share of total retail activity, we would expect that 50% of these tax receipts accrue to Jefferson County, 45% to St. Lawrence County, and 5% to Lewis County.

V. HOUSING MARKET IMPACTS

As shown in Table 9, the 801 housing accounts for 4.8% of total housing units across the 10 communities. In five communities —Calcium, West Carthage, Copenhagen, Evans Mills area (LeRay Heights) and Philadelphia— 801 housing accounts for well over 10% of the community’s total housing stock. In four others – Carthage, Gouverneur and Watertown-- 801 housing accounts for over 5% of the community’s total housing stock. The highest percentage is in Calcium, where 37% of all housing units are 801 housing. The 801 portions in all of these communities are sufficiently high that it is unlikely for them to be naturally absorbed by (non-military) local housing market demand.

Table 9. 801 Housing as a Proportion of Total Housing Stock

Community	801 Housing Units	Total Housing units	801 Portion of Total Housing Units	Rank Of 801 Dependence
Calcium	300	814	37%	1
Carthage	126	1,626	8%	6
West Carthage	122	915	13%	5
Clayton	100	3,337	3%	9
Copenhagen	75	383	20%	2
Gouverneur	171	2,724	6%	7
Le Ray Heights	300	4,651	15%	4
Lowville	56	2,033	3%	10
Philadelphia	150	823	18%	3
<u>Watertown</u>	<u>600</u>	<u>12,450</u>	<u>5%</u>	<u>8</u>
Total	2,000	29,756	5%	Not applicable

Source: (1) 801 housing data provided by Mr. John Repaty, Fort Drum; (2) total housing units from US Census Bureau.

V. SUMMARY OF LOCAL DEPENDENCE ON 801-RELATED ACTIVITIES

Total Economic Impact. The total impact of 801 housing includes local quality of life (affected by the provision of local public services and use of the housing stock), local wealth (associated with property values and market rent levels), and employment. It is difficult to speculate about the local quality of life impacts or the property value impacts. This report has thus focused on the employment and fiscal issues affecting the private and public sectors at community level. Table 10 summarizes the various types of employment impacts which were previously discussed. Altogether, it is estimated that approximately 445 local community jobs are supported by residents of 801 housing.

Table 10. Summary of Local Employment Impacts of 801 Residents

Community	Estimated Number of Local Jobs			
	Business: Retail & Service	Schools: Teachers & Staff	Local Govt. Employment	Total
Calcium	27	(A)	--	27
Carthage and West Carthage	22	30	10	62
Clayton	9	(B)	2	11
Copenhagen	7	4	1	12
Gouverneur	16	16	3	35
Evans Mills area (LeRay Hghts)	27	(A)	11	38
Lowville	5	6	1	12
Philadelphia	14	(A)	2	16
Watertown	54	58	30	142
Indian River School District	--	88	--	88
<u>Thousand Island School District</u>	<u>--</u>	<u>11</u>	<u>--</u>	<u>11</u>
TOTALS	180	213	52	445

Sources: Tables 4, 6 and 7

(A) included in Indian River school district

(B) included in Thousand Island school district

Ranking of Local Community Dependence. The overall impact of 801 populations and spending to local fiscal and economic base differ by community. It is possible to rank the degree of impact which 801 housing has on each community in terms of effects on: (1) the retail sector, (2) school operations, (3) population and public services demand, and (4) housing and taxable housing base. Since these are rankings, a value of 1 represents the greatest degree of dependence and a value of 9 or 10 represents the lowest degree of dependence among the communities. Table 11 summarizes these findings, and also presents a measure of average dependence on these four categories.

The overall results provide a basis for classifying the 801 communities into three general groups:

- (1) high dependence (<4.0 rating) – Calcium, Evans Mills, Philadelphia and Copenhagen
- (2) mid-range dependence (4.0 –6.0 rating) – Carthage and West Carthage
- (3) lower dependence (>6.0 rating) –Watertown, Gouverneur, Clayton, and Lowville.

Table 11. Summary of Community Dependence on 801 Housing
(where 1=most dependent and 10=least dependent)

Community	School District	Retail Dependence	School Dependence	Population Dependence*	Housing Dependence	Average of Ratings "
Calcium	Indian River	1	1	2	1	1.25
Carthage	Carthage	6	3	6	6	5.25
West Carthage	Carthage	6	3	5	5	4.75
Clayton	Thousand Island	5	5	8	9	6.75
Copenhagen	Copenhagen	3	6	4	2	3.75
Gouverneur	Gouverneur	7	4	9	7	6.75
Evans Mills	Indian River	2	1	1	4	2.00
Lowville	Lowville	9	7	10	10	9.00
Philadelphia	Indian River	4	1	3	3	2.75
Watertown	Watertown	8	2	7	8	6.25

Source: Tables 2, 4, 5 and 9

* also reflects local public services dependence