FORT DRUM GROWTH MANAGEMENT STRATEGY
~ SUMMARY REPORT ~

DECEMBER 17, 2008

Prepared for the Fort Drum Regional Liaison Organization
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Overview

The goals of this project were to:

◊ Document and summarize the mutual benefits and supporting relationships between Fort Drum and the North Country; “The Fort Drum Story”
◊ Contribute to the Fort’s long-term viability by strengthening community understanding of the importance of protecting the Fort from unnecessary encroachment.
◊ Identify the kind of desirable growth patterns in the communities that would also be compatible with Fort activities.
◊ Describe specific projects and partnerships that will best leverage this growth and enhance sustainability for both the Fort and the North Country.

THE FORT DRUM-COMMUNITY PARTNERSHIP: CONTINUING THE SUCCESS

There has been a long-standing, mutually supportive relationship between Fort Drum and the North Country. The North Country communities respect the Fort’s mission and the important role the Fort plays in national security.

Over the last 20+ years, Fort Drum has transformed into the employment and economic center of the North Country. With more than 17,000 soldiers assigned to the base, and more than 3,700 civilian employees, Fort Drum has brought more than $9 billion in total spending to the region since 1988. Since the addition of a third Brigade Combat Team to the base in 2004, the number of soldiers assigned to the base has increased by 45 percent. In addition, more than $1 billion has been committed to construction projects on Fort Drum, creating opportunities for local companies to expand their scope of services.

While boundaries may officially divide Fort Drum and the surrounding communities in the region from one another, the strong ties that have been forged over the years, and the common interests and goals they share for the future, unite them. For example, the region’s excellent schools and overall high quality of life play an enormous role in maintaining the morale of its personnel and their families. And with the Army’s “Force Stabilization” policy, Fort personnel will be assigned to Fort Drum for longer periods of time – 5 to 7 years – allowing personnel and their families to become more invested in their communities.
The relationship goes both ways – just as Fort Drum benefits from the communities that surround it, so too do the communities benefit from Fort Drum. The increase in economic activity has provided more opportunities for the region’s young people to stay and build lives and careers in the region. In fact, it is hard to imagine the region without Fort Drum, so pervasive is its influence and so intertwined is it in the daily lives of residents.

For Fort Drum, one of the most important elements of “success” is to maintain its ability to train personnel so that they are prepared to carry out their missions. Good land use decisions and practices in the communities surrounding the Fort can help to ensure that the Fort will continue to be a premier training facility for many years to come. The communities can also position themselves to take full advantage of the opportunities that Fort expansion and growth presents, and to continue to provide a high quality-of-life to all residents.

By its very nature, planning in a “Fort environment” poses challenges. Fort activities are directly related to political and world events. Military technology, equipment, and practices are constantly evolving. Clear, on-going communication between Fort Drum and the communities that surround it is perhaps the most important foundation to success in this dynamic environment. The key building block of communication is accurate, up-to-date information shared between stakeholders. Flexibility and a long-term, regional perspective will help to ensure that decisions made today will stand the test of time and yield results that all can be proud of tomorrow.

**Fort-Community Involvement Process**

As important as the final product – the Growth Management Strategy – the process to get there played an equally important role in this project. Key to this process was a robust public outreach effort to share information among stakeholders, receive input and strengthen existing relationships. Key project stakeholders and their relationship to both one another and the Growth Management Strategy are illustrated conceptually in the diagram at right.

Reaching these stakeholders in various formats – sometimes individually, sometimes together at round tables where different perspectives were brought together – was the core goal of the public process. In addition to continued outreach with key stakeholders and information holders, the following public outreach efforts were conducted as part of this planning process:
Stakeholder and Local Leader Interviews

A series of stakeholder and small focus group interviews were conducted in all three counties - Jefferson, St. Lawrence and Lewis - to get an understanding of the issues and opportunities facing the region. Those interviewed represented a large and diverse cross section of viewpoints and experiences, from local business, political and community leaders, to local residents, to military and civilian Fort Drum personnel. The results of these interviews greatly informed the direction and focus of this project.

Focus Group and Roundtable Meetings

A series of focus group meetings were held in the region, to focus on specific issues or geographic areas. These meetings consisted of presentations followed by an open discussion and exchange of ideas. (It should be noted that a representative from FDRLO and the Fort Drum Community Planner attended virtually every focus group meeting held during the course of this project)

◊ January 2008 – “St Lawrence County Round Table,” Canton
◊ March 2008 – “Gate Communities Meeting,” LeRay
◊ April 2008 – “Lewis County Round Table,” Lowville
◊ April 2008 – “Preliminary Strategies and Partnerships Focus Group Meeting,” On-Post
◊ June 2008 – “WSAAF/South Post Area Focus Group Meeting,” West Carthage
◊ June 2008 – “North Post Training Area Focus Group Meeting,” Philadelphia
◊ July 2008 – “Communication Strategies Focus Group Meeting,” Watertown

Public Meetings and Workshops

A number of public meetings and workshops were also held during the course of this project. These meetings were utilized to communicate key findings and gain focused input from participants and included:

◊ February 2008 – “Kick-off” presentation, Jefferson County Community College
◊ June 2008 – “Envisioning Growth,” three county-wide meetings (Jefferson, St. Lawrence and Lewis Counties)
◊ December 2008 – FDRLO Presentation of Growth Management Strategy
◊ January 2009 – Public Presentation of Growth Management Strategy

Workshop participants in Gouverneur “envision” the potential shape of future growth in the region.
GROWTH AND CHANGE: HISTORY AND PROSPECT

Growth in the region has been influenced by the military since 1809, when a company of infantry soldiers was stationed at Sackets Harbor to control smuggling between northern New York and Canada. Since that time the region has seen the military presence grow, often in large bursts. In 1906 Pine Camp was established in the area that is now Fort Drum, and grew steadily until World War II. In 1941, 75,000 acres was purchased and the early beginnings of Fort Drum were constructed which included over 800 buildings. The first permanent garrison was assigned to Fort Drum in 1974, the same year the Fort received its current name. The 10th Mountain Division has been the primary tenant at Fort Drum since 1984, and most of the existing facilities at the post were constructed between 1986 and 1992.

Communities in the Fort Drum region, especially those closest to the Fort Drum gates, have experienced substantial population growth and development since the arrival of the 10th Mountain Division. The Fort itself has undergone a significant transformation in recent years in response to the Global War on Terrorism. A substantial increase in the personnel assigned to Fort Drum has already occurred with approximately 5,500 additional personnel assigned to Fort Drum between 2004 and 2006. By 2013, it is expected that approximately 19,500 troops will be permanently assigned to the post, and nearly as many family members will accompany them. Longer-term planning for future growth and change becomes more challenging, due to greater uncertainty. Nonetheless, this project establishes recommendations that will facilitate improved planning that will result from continued strengthening of communication mechanisms between the Fort and the communities.

Over the course of a decade, from 2003 to 2013, the number of personnel assigned to Fort Drum is expected to increase by 80%.

For the purposes of this project, the Fort Drum region is the area that is currently most affected by the operations and activities at Fort Drum. The Fort Drum region is depicted in orange. It includes Fort Drum, as well as 14 towns, 15 villages and one city, for a total land and water area of 576,000 acres (900 square miles).
This Growth Management Strategy offers a “reality check” on future growth in the Fort Drum region: How will future development exhibit itself in communities and neighborhoods? Where is it most likely to locate? How can communities and the Fort be sure that growth does not encroach upon the operations at Fort Drum? How can the benefits of future growth in the communities and region be harnessed for long-term success? The Fort Drum region has avoided land use conflicts and other challenges that have jeopardized the viability of other military installations and led to safety and quality of life issues for their surrounding communities. However, if current development patterns continue, there will be increasing problems associated with growth encroachment to the Fort boundaries. Fortunately, much of the land along the Fort border remains undeveloped, wooded or in agricultural uses today. These uses are highly compatible with military/training activities and serve as de facto buffers for the Fort. (see the map below).

Today, the Fort has relatively few encroachment issues. Land use surrounding the installation is rural, with small concentrations of residential, commercial and industrial uses in the village areas. Within a two-mile envelope surrounding Fort Drum, nearly 74% of the surrounding area is either agricultural or forest land.

Source: USGS National Land Cover Database 2001, produced by the Multi-resolution Land Characteristics Consortium
Key Findings

Utilizing a combination of conceptual growth model forecasting (20-year horizon), on-the-ground knowledge of local communities and Fort Drum, and infrastructure and development patterns, a number of conclusions were drawn about current and future impacts posed by growth. The most notable of these conclusions are summarized below:

Growth Will Have a Significant Influence on the Regional Landscape and Quality of Life

The growth scenario maps illustrate that the cumulative, regional impacts of future growth, even under a low growth scenario, will be significant for the Fort Drum region. By the same token, Fort Drum and the communities, working together, have the opportunity to significantly shape the face of and attract future growth, creating great places to live and work and ensuring economic vitality for the future. Also notable – current growth trends will continue to send growth into new, undeveloped areas, and along highway corridors—in particular those at the edge of population centers and near I-81 and its connecting corridors. The older, neighborhoods and downtown areas in the villages and the City of Watertown will for the large part be bypassed for strip development and growth in open “greenfield” areas. Each community in the growth areas has an opportunity to prepare for this growth.

The map at left depicts the locations of single-family homes in the Fort Drum region at the end of 2007. As can be seen the majority of development is clustered around hamlets and villages and along road corridors. In the range areas the locations of homes are more dispersed, which is to be expected as this area possesses fewer development nodes, and fewer major roads. The map at right depicts the model results for a high intensity growth scenario where the growth spreads out across the landscape. Development is noticeably intense across the region, especially in the gate communities. This scenario is of course an extreme example, but not unlikely. Even if it were not to occur in the 20 year window of the model, it could still be reality given a longer timeline. The “dots” representing homes are approximately 3 acres in size, as to best illustrate not just a building, but the property associated with the home. This size was also chosen so as to best visualize the pattern of growth - smaller dots would be difficult to see, larger dots would overlap too much and mask the development patterns.
Rural gate-communities like LeRay that are feeling growth pressure, are challenged to have the appropriate zoning and other growth management tools in place prior to/as growth occurs, rather than after the proverbial cow is out of the barn. For the historic centers, like the Village of Black River or downtown Watertown, planning for growth will mean updating master plans (for example as the city has done along the Black River corridor) and implementing those plans with upgraded zoning, development design guidelines, and working with the private sector and non-profits in creating site-specific development plans to clearly depict the kind of investment opportunities available for existing buildings, and infill development.

Due to the industrial history of many of these communities, an added challenge is presented—that potential development sites may have pollution concerns. These “brownfields” cannot be readily developed—hence additional funding support will be needed to prepare these strategically located properties for new uses.

**If Current Development Patterns Continue, Future Growth Will Likely Lead to Encroachment Conflicts**

There are a number of areas along the Fort-Community border where encroachment impacts, such as noise and safety, are of particular concern. The growth modeling exercise clearly indicates that 20 years of growth in the Fort Drum region will increase the chances for encroachment conflicts between Fort Drum activities and land uses on the community side. The following areas are most likely to see increased chances for encroachment conflicts in the future:

**Route 3 Corridor south of Fort Drum**

The growth models present concerns for encroachment within the Route 3 corridor, particularly near the Wheeler-Sack Army Airfield and the Noise Zones and Accident Potential Zones associated with it. Under both centered and dispersed growth models, there are concerns related to development close to the airfield. Continued communication between Fort Drum and the Route 3 communities will be needed. Working together, land use tools can be put in place to help reduce the impacts of encroachment on Fort Drum as well as to reduce the noise and safety concerns.

**Villages and Hamlets along the Fort Border**

The growth models also identify the villages and hamlets along the Route 3 corridor, as well as the Village of Antwerp along Route 11 on the northwest side of the Fort as areas of concern for encroachment. Although this Growth Management Strategy documents some of the benefits of a more centered growth pattern, the villages and hamlets along the Fort borders will need to work closely together to arrive at solutions that are in keeping with local goals and aspirations while minimizing the potential for Fort-Community land use conflicts. A receptive and available partner from the Fort that is attuned to
community planning will be needed for this effort as well as a continued framework built around shared goals.

**Incremental, Parcel-by-Parcel Development Along the Fort Border**

Growth rarely transforms a region overnight. Most often, growth is incremental. In the Fort Drum region, although there are certainly exceptions, much recent growth has taken the form of small subdivisions which accumulate over time. If this pattern continues over the long term, the region will be increasingly transformed from one with compact villages surrounded by rural landscapes to a more homogeneously developed and sprawling landscape. From an encroachment standpoint, while widely scattered and low density residential development may be acceptable in any one area, the cumulative effect of surrounding the Fort with such development can pose significant problems. It will be far easier and more cost-effective to address and avoid these problems now, before they occur, rather than after the fact.

The images below and to the right illustrate in conceptual terms two contrasting approaches to growth. The image below is of existing conditions for a village along a river setting, similar to many communities in the Fort Drum region. The images at right illustrate two possible development scenarios. The top image illustrates one end of the spectrum, a decentralized development pattern of homes on large lots. As shown in the image, while each individual home is situated on a large lot, the cumulative impact on the landscape and character of the community can be significant. The other end of the spectrum is illustrated in the image below where a “clustered” or neighborhood based development approach concentrates development in some areas, especially at the village edge, while conserving character, farms and natural habitat areas in others. The goal of any community should be to find the balance between these patterns that affords the choices that individual residents want, while achieving the shared long-term goals that all residents wish to achieve for the community. Images on these two pages were created by Dodson Associates for the Saratoga County Green Infrastructure Plan.

One potential conflict area around Fort Drum is development south of Wheeler-Sack Army Airfield, such as along Route 3 and around the Hamlet of Great Bend.
Saratoga County Green Infrastructure Plan: Visualizing Conservation Development

Conventional Development Scenario

This drawing shows the same village area after development under existing zoning, which allows half-acre lots within the village boundary and from one to five acre lots outside. This scenario shows how growth will continue to expand out from the village core using roadway frontage lots and subdivisions that sprawl across large tracts of farmland and forest. This approach to development fragments the existing natural and cultural corridors created by the farms and wetland systems and compromises the open space network. The development of the larger single-family lots outside of the village boundary results in the loss of the unique setting for the village.

Conservation Development Scenario

This drawing illustrates the growth of the Village using the Conservation Development design process. Within the Village area, the grid street pattern was extended and lots are smaller, matching the historic pattern. At the edge of the Village, commercial growth has been concentrated into a compact, walkable neighborhood with shared parking and a variety of mixed-use buildings. To attain the same number of dwelling units allowed by current zoning, an existing small hamlet was expanded to create a satellite neighborhood area. With this approach, the existing open space network was preserved and significant natural and cultural corridors protected.
Focusing Growth in Population Centers Can Help to Minimize Encroachment and Maintain Quality of Life

Focusing some of the region’s future growth into areas already serviced by infrastructure - such as the City of Watertown and the many villages and hamlets in the region - is economically beneficial to the region. Cities, villages and hamlets can also benefit from growth in terms of rehabilitated and new housing stock and revitalized downtowns. The Fort relies on successful, attractive and prosperous communities to provide places for its military personnel and their families in which to live, shop and work.

Focusing growth in existing centers and in appropriately-established growth centers also helps to take pressure off of the Fort Drum border areas, by pulling development away from the largely undeveloped, rural buffer. This allows the Fort to continue its operations with little worry of encroachment. It also takes development pressure off the rural landscape, where new residential development can be costly to service for the many small communities in the Fort Drum region. Carefully planned new centers, such as part of the Route 11 corridor in LeRay, for example, can also be designed in a way that creates long-term value and sense of place.

The Buckley Building, under renovation in Carthage, is an example of reinvesting in an existing population center.

The map at left depicts the locations of single-family homes in the Fort Drum region at the end of 2007. The map at right depicts the model results for the moderate growth in centers scenario. The results look similar to the existing conditions map, but with a larger amount of development near the hamlets and villages, and a negligible increase in the dispersed style of development.
It should be noted that there are a few villages and hamlets at the southern border of Fort Drum where focused growth may not be appropriate due to noise and safety concerns associated with their proximity to Wheeler-Sack Army Airfield (WSAAF).

**It Will Take a Sustained Effort Among Many Partners to Successfully Harness and Manage the Benefits of Growth**

Many different organizations and governments have been working together for years to prepare for and sustain Fort Drum’s growth. Fort Drum continues to evolve and grow, and the surrounding communities do the same. To take full advantage of the growth associated with Fort Drum, and to avoid encroachment so that Fort Drum can remain a presence in the region, these relatively informal efforts and activities of the many partners in the region must be formalized to sustain the type of ongoing communication, information sharing and planning that is needed. Fort Drum itself recognizes the need to plan ahead to avoid land use conflicts and to ensure a high quality of life in the surrounding communities in which many of its personnel and their families live.

For some, particularly in the range communities in St, Lawrence and Lewis Counties, Fort-related growth effects will be small; but even these very rural communities have seen changes from chain-type, highway-oriented businesses. “Rural sprawl” is a very real concern that can creep up on our smaller towns, as the effect is not as evident due to the long time period this growth can take. Communities can look to manage this growth to protect their historic and landscape character while fostering change that is appropriate and meets each community’s vision and goals.

*The Village of Gouverneur as seen in this 1885 illustration is an example of one of the many historic centers in the Fort Drum region. Source: Library of Congress, Geography and Map Division*
The Fort Drum region is distinguished among military communities for its unique Fort-Community partnership approach to solving problems and leveraging opportunities. Regional entities, most notably FDRLO, have played a significant role in facilitating and strengthening this partnership for nearly twenty years. This partnership approach is woven through the Growth Management Strategy and informs many of the key recommendations it contains.

There are two major goals established through this plan - managing growth and land uses to avoid encroachment and maintaining a high quality of life in the region.

**General Implementation Strategy**

The development of this growth management strategy required a serious commitment of financial and staff resources from each of the project leaders. The work needed to implement this strategy is ten-fold the effort required for the creation of this strategy. Community comprehensive plans need to be updated, zoning laws and special codes need to be put into place that are responsive to the issues of encroachment and Fort sustainability.

A more formal growth management mechanism is needed to share information and coordinate this work among the partners. This should be done through intermunicipal/interagency agreement. The agreement should outline participants, responsibilities, consultation processes, and funding sources and commitments.

Local infrastructure improvement plans in the growth areas need to be updated for many communities. Specific growth plans and design concepts are needed in established community centers to direct and encourage enhanced private investment. For the outlying communities, enhanced transportation and other services will help connect residents with employment opportunities in the region. Much has been done. Much remains to be done to prepare the region for the opportunities presented.

The following is a select list of recommendations – refer to Chapter 4 of the Growth Management Strategy for a complete list and more thorough discussion.

**I - Strengthened Communication Between Fort Drum and Communities**

Communication and sharing of information is critical to the Fort-Community partnership, particularly when it comes to avoiding encroachment and land use conflicts. There are many existing examples of successful collaboration and partnerships between stakeholders in the Fort Drum region. However, there are many opportunities to strengthen the information sharing and communications process to enhance both Fort Drum and community goals. Timely sharing of information is critical.
I.A - Expand the Fort Drum-Community Partnership to Identify Dedicated Staff Support

The recommendations within this plan call for a dedicated planning staff person at Fort Drum to work with county and local planning staff on a regular basis towards implementation. Significant funding support from the DoD should also be secured to implement the recommendations of the growth management strategy.

I.B - Establish Schedule to Share and Update Fort-Community Mapping

Using maps to depict the locations of potential encroachment conflicts (such as noise and safety zones associated with the Fort) helps to inform land use decisions so that encroachment can be avoided in a proactive way. Such maps are provided in Chapter 2 of the Growth Management Strategy. It is imperative that a mutual commitment be made between the Fort and the community partners to provide each other with maps and other data regarding current activities and future plans. Maps need to be continuously updated and shared. It will up to the Fort to help make this happen.

I.C - Designate Information “Gatekeepers”

Designating an individual(s) from both the Fort and community side (such as County staff), who are responsible for compiling and transmitting a unified and regularly updated set of information will help to ensure that all involved parties (communities, Fort, counties, etc.) are on the same page when it comes to avoiding land use conflicts.

I.D - Develop a Publicly-Accessible Informational Website

A centralized website makes it easier to view information, and can provide a convenient way for both Fort personnel and community leaders to access the same set of information. Such a website can also be periodically updated, something that is difficult to do with hard copy reports and documents. The existing website for Fort Drum could be enhanced to provide additional information to the public.
I.E - Regularly Issue a Newsletter Briefing Communities on Fort Drum Activities/Changes

While there is sometimes little the Fort can do to mitigate the impacts of its activities, sometimes just communicating anticipated changes goes a long way. A newsletter communicating such information could be issued several times a year. When flight patterns change, new equipment is put into use or other significant changes occur that could affect communities, Fort Drum can inform the surrounding communities through the newsletter.

I.F - Hold Periodic Fort-Community Meetings

Periodic Fort-Community meetings should continue in the Fort Drum region to reinforce relationships, convey information, and discuss issues. Throughout the course of this project, local community members have indicated their appreciation when Fort personnel have joined them at the table. Continuing these meetings would help to ensure continued dialogue and solidify the interpersonal relationships that are critical to partnering on solutions.

II - Avoid Encroachment

Tools for addressing encroachment include local regulations such as sound attenuation measures or lighting ordinances, as well as planning efforts to ensure that surrounding land uses are compatible with Fort Drum’s existing and planned operations. Ultimately, the decision on which tools to use will rest with individual communities.

II.A - Pursue Land Conservation

Working with willing landowners to conserve land can be a useful tool for preventing encroachment. The map at right conceptually depicts areas where conservation might be beneficial from a broad, regional perspective. Areas outlined in green represent regionally significant areas for natural and habitat conservation; areas outlined in yellow represent regionally significant areas for agricultural conservation. Communities should also identify their own unique land conservation goals in their comprehensive plans, secure funding partnerships and maximize the use of grant programs, and identify a program coordinator.
II.B - Local Communities Should Undertake Comprehensive Planning and Zoning

Because New York State is a “home rule” state, in which individual municipalities are empowered to make land use decisions, any growth management plan must occur from the “ground up.” Comprehensive planning provides the best foundation for a community to take action, such as implementing new regulations or pursuing projects that may have relevance to Fort encroachment concerns. For instance, in the Draft Town of LeRay Comprehensive Plan, a greenway park system is envisioned, in conjunction with a developing area of town. This concept has been shared with Fort Drum, who is interested in habitat preservation. Working together, the town can establish this greenway and the Fort can protect habitat—everybody wins.

Each community should include a Fort Drum-related element in its comprehensive plan. For both gate and range communities, land use compatibility and Fort Drum buffer areas should be part of their respective land use plans. Gate communities should also have a focused element on growth management and economic development opportunities associated with proximity to the gates and associated highway corridors.

II.C - Fort Drum Should Continue to Pursue Strategies to Minimize Impacts to Communities

Fort Drum can continue to play a role in reducing the chances for land use conflicts between Fort operations and adjoining communities. There are numerous instances where the Fort has altered its activities to reduce impacts. For instance, the Air National Guard, when it has been able to, has rescheduled bombing runs from cloudy to clear days to reduce noise. While it is certainly not always feasible for the Fort to make changes to its operations, an attempt should always be made to find an equally viable option that reduces impacts to the surrounding communities.

II.D - Develop Notification Procedures

The Fort has formal or informal protocols in place with several municipalities that notify the Fort about proposed development projects near the Fort border. However, the Fort, Counties and communities should work together to establish a formal referral mechanism that gives the Counties and the Fort an opportunity to know about and comment on projects adjacent to the Fort and/or in noise and safety zones. Currently, there is not automatic referral mechanism in place that is tied to Fort Drum for county review. A sensible distance in which referrals could be required/requested would be 3,000 feet from the Fort border, as well as noise and safety zones, some of which extend further than 3,000 feet.
III - Enhanced Reinvestment in “Centers” and Areas with Existing Infrastructure

“Centered growth” – guiding a portion of new growth to areas already serviced by sewer and water, as well as the established villages in the Fort Drum region and the City of Watertown – can help to avoid encroachment on Fort Drum borders. It can also strengthen the region’s quality of life by revitalizing its historic downtowns and housing stock, and taking development pressure off of the rural landscape. In the long-term, compact growth results in lower costs for providing community services and infrastructure, and makes the most of the region’s current investments.

III.A - Develop Appropriate Land Use Tools

Throughout the region during this process, the planning team heard a unanimous voice of support for sustaining Fort Drum and its mission. Yet, there is a gap between that sentiment and the existing “on the books” land use and development regulations in the region’s communities. Many communities in the region do not have up-to-date comprehensive plans (though several are working on these). A few do not possess zoning regulations. For those that do, there is little consideration of encroachment, noise considerations, military flight patterns, light pollution or other similar concerns in these regulations.

Communities that want to see focused growth, and particularly those that want to revitalize existing historic centers and downtowns, will need to develop tools that facilitate such development. The City of Watertown, for example, has recognized this need and is working toward securing funding to upgrade all of its outdated zoning along the river to accommodate the reuse of old industrial sites and other infill development opportunities.

III.B - Infrastructure Improvements

The region should continue to take a coordinated, regional approach to infrastructure policies and decisions working along with local communities to accommodate their respective land use plans. Careful consideration should be given to any contemplated extensions of sewer and water into undeveloped areas, and/or Fort Drum noise and safety zones. Assistance and support with system upgrades should be provided to villages that wish to encourage more growth – as well as the City of Watertown and other regional growth centers. Water and sewer infrastructure projects should be prioritized for investment on the regional level. Each community contemplating growth needs to ensure its water and sewer facility improvement plans are updated and enrolled for funding support with the New York State Environmental Facilities Corporation.

III.C - Encourage the Re-use and Rehabilitation of Historic Structures

The Fort Drum region’s historic villages, hamlets, neighborhoods and City of Watertown contain a wealth and variety of living and work environments with unique qualities that are difficult to reproduce today. Unfortunately, the condition of some older structures, many of which have been vacant for years, can be a barrier to their reuse. Historic communities should evaluate opportunities for the reuse and rehabilitation of older structures for a new lease on life and seek partnerships with the Fort.
Infill development like this is challenging. Older communities that have succeeded in growing in upstate New York such as Saratoga Springs, have had substantial planning and zoning initiatives that recognize and build upon their historic buildings and downtowns—revitalizing as “walkable communities”. This includes extensive community support for historic preservation, adaptive reuse, infill development and downtown revitalization.

**IV - Take a Regional Approach to Transportation**

Transportation is the lifeblood of the Fort Drum region and coupled with the land use patterns sets the tone and character of the places where people live and work. The report contains a number of recommendations for enhancing mobility and for anticipating future transportation needs in the Fort Drum region. It is recommended that the region explore the creation of a federally designated transportation planning entity: i.e., a Metropolitan Planning Organization (MPO) or Rural Planning Organization (RPO). This would provide a venue where local governments in the region could come together to plan for regional transportation needs; and in the case of an MPO, allocate federal transportation dollars toward the study and implementation of transportation solutions.

The highlighted areas represent transportation corridors that are expected to see significant growth pressure in the coming years. A regional transportation planning process would provide a mechanism for identifying and implementing thoughtful solutions for these and other transportation "hot spots."
The plan also recommends expanding the availability of public transportation between the Fort and area communities, building from work underway in Jefferson and St. Lawrence Counties; addressing gate access issues and opportunities in a manner that considers Fort security and community development concerns; and improving the safety and attractiveness of bicycle and pedestrian travel within and between the region’s communities. Finally, two specific locations in the region are identified as places where transportation and transportation-related land use issues will need to be addressed in the near term. They are:

**The Route 3 Corridor** – this corridor is expected to see continued development pressure in the future. A concerted effort should be made to address the future of this important transportation corridor, not only with respect to traffic and safety, but with respect to community character and quality of life issues. The Route 3 Design Guidelines project provides a solid foundation for creation of local tools to protect and enhance the character and function of the corridor.

**The Planned Route 11-Fort Drum Connector Interchange** - The planned interchange is likely to create increased development pressures further north along Route 11 in the Town of LeRay, and perhaps in the Towns of Antwerp and Philadelphia. These communities should examine their zoning and development regulations to ensure that future development in this corridor makes the most of likely growth pressures and that it avoids encroachment conflicts with Fort Drum. Limits to commercial growth should be explored by the local governments to avoid diluting the limited real estate potential/success for the commercially developed corridors nearby. The area near the Route 11-Fort Drum interchange could be an appropriate setting for office and research and development activity that benefits from proximity to the Fort and to a highway interchange. Attention to site design and access management now will help prevent problems in the future.

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The Northern Alternative (and most likely alternative) for the Fort Drum Connector.  
V - Sustainability and “Green Planning”

Sustainability is a way of thinking and acting that reduces our impacts on the environment to ensure a healthy world for future generations. Some of the sustainability goals for the Fort Drum region include:

◊ Minimize the impacts of human development/land use on the environment
◊ Consume fewer resources and produce less waste
◊ Reduce energy consumption
◊ Reduce pollution and emissions

Many of the goals of sustainability can be achieved through good land use planning practices. For example, avoiding greenfield development (i.e., building on previously undeveloped land—farm or forest) in favor of infill and downtown investment is a sustainable policy that also makes economic sense. It consumes less land and resources and requires no extension of infrastructure. Where greenfield development is appropriate, growth should be concentrated to reduce sprawl and to protect natural resources.

New infrastructure projects such as roads and water systems should be built with sustainable, multi-purpose “green infrastructure” components. For example, roadways should be built in tangent with natural storm water systems which might also function as greenways or trail systems. Many communities have created multi-purpose trail systems and there are regional plans (e.g., the Route 3/Black River trail) that are important to complete to make the region more of a livable community.

With national priorities increasingly focused on sustainability and energy efficiency, those regions that are ahead of the curve and that demonstrate regional level collaboration are most likely to tap into support from both the private and public sectors.

V.A - Implement Sustainability Pilot Projects

The three Fort Drum region counties should work with Fort Drum to identify and secure funding for sustainability “pilot projects” which can be collaboratively implemented. Three such pilot projects are identified below:

◊ Low-impact development guidelines and planning board training: secure funding to develop regional-based guidelines for low impact development that can be adopted by local municipalities and provide training for planning boards in reviewing developments with respect to the guidelines.
Identify a pilot “sustainable” residential development project in one of the region’s communities and work jointly to finance and implement the project. This project might work towards achieving a Leadership in Energy and Environmental Design (LEED) rating for neighborhood development. (LEED rating is a recognition/achievement program administered by the U.S. Green Building Council)

Seek funds and develop plans for the “greening” of a planned infrastructure project, such as planned upgrades to Route 11. This pilot project would evaluate the roadway from a material and energy perspective, as well as an ecological perspective, and develop a “green infrastructure” alternative/upgrade to the project which might include, for example, the use of recycled construction materials or naturalized stormwater treatment systems.

V.B - Address Sustainability at the Local Level

Municipalities in the Fort Drum region should address sustainability at the local level through the following:

- Develop or update comprehensive plans to include a sustainability element, which supports infill development and promotes growth in areas with existing infrastructure. Plans should also address waste disposal, recycling, composting and transportation from a sustainability perspective.

- Zoning codes should be evaluated and revised to promote sustainability goals. For example, they should allow for small-scale wind power systems for farms and solar panels on residential and commercial buildings. Zoning codes should also provide incentives for green building and low impact development practices.

- Conduct an energy audit for municipal buildings and systems and identify areas where improvements are warranted. These improvements should be considered as long-term investments in municipal budgeting. Grants and incentives are also available to implement energy efficiency improvements.

- Identify areas suitable for more intensive community/regional sustainable energy systems (hydro power, wind, solar farms, etc.) and ensure that local plans and zoning regulations support such systems.

The Army Strategy for the Environment supports and ties into many of the concepts and goals of the Fort Drum Growth Management Strategy. As such, efforts should be made to coordinate the two efforts.
AREA SPECIFIC RECOMMENDATIONS

These recommendations are organized into five major areas in the Fort Drum region that share similar conditions related to encroachment, land use and growth. These recommendations are focused on municipal actions - primarily land use planning and zoning - which can be taken to address the growth management plan’s two primary goals of preventing encroachment and maintaining quality of life.

The five major areas are listed below, and detailed recommendations follow.

1. Route 3 Corridor South of WSAAF
2. Route 11 Growth Corridor
3. Villages/Hamlets and City of Watertown
4. Range Areas – Agricultural
5. Range Areas – Forest

Route 3 Corridor South of WSAAF

Village of Black River, Town of Rutland, Town of Champion, Village of Herrings, Village of Deferiet, Town of Wilna

Main Issues and Opportunities:

◊ Higher growth potential area
◊ Convenient access to Fort
◊ Area of significant safety/noise concerns
◊ Future growth will lead to encroachment conflicts
◊ Future growth presents opportunities to increase quality-of-life, as well as challenges
◊ Communities affected by significant safety and noise zones: Town of Rutland, Town of Champion, Village of Deferiet

Recommendations:

Addressing Encroachment

◊ The Following Communities Should Update or Undertake a Comprehensive Plan.
  • Town of Rutland
  • Village of Deferiet (update 2000 plan)
  • Village of Black River (build on 2008 Community Visioning and Strategic Development Plan)
  • Village of Herrings (update 1967 plan)
River Area Council of Governments (RACOG) communities are currently engaged in a planning process (*Champion, Wilna and the Villages of Carthage and West Carthage*).

- Comprehensive Plans should address land use compatibility and growth of the area near the Fort.
- Fort Drum should continue to participate in comprehensive planning processes to support and ensure that land use compatibility issues are addressed.
- Communities should identify opportunities for conservation and other compatible uses in encroachment concern areas.
- Communities should ensure that Fort Drum has copy of the plan.

- Adopt Zoning for Wheeler Sack Army Airfield safety and noise zones to ensure that land uses in these zones are compatible.

- Prioritize safety and noise zones associated with the airfield for conservation efforts (such as through the ACUB (Army Compatible Use Buffer) program).

- In less severe noise zones, explore options for passive recreation and other compatible land uses such as commercial development. More stringent restrictions will need to be put in place in more severe noise zones and safety zones.

- Enact sensible sound attenuation practices in high priority sound zones (building code).

- Address light pollution through zoning/site plan regulations.

**Leveraging Growth**

- Identify appropriate growth areas (through Comprehensive Planning process).

- Develop plans for growth areas.

- Develop innovative tools to encourage desired growth patterns:
  - Design Guidelines
  - Conservation Subdivision Regulations
  - Incentive Zoning

- Concentrate Growth in Serviced (water/sewer) Areas.

**Address Transportation Issues**

- Address Gate Access Issues at the Following Gates:
  - Deferiet
  - Black River

- Address Traffic and Safety Issues Leading into southern Fort Gates.

- Have a long-range plan for improvements to Route 3 – should address access management; aesthetics; bike/pedestrian access; and functionality for automobiles.
**Route 11 Growth Corridor**


**Main Issues and Opportunities:**

- High growth potential area
- Convenient access to Fort
- Noise concerns north of LeRay
- Route 81 Connector
- Future growth presents opportunities to increase quality-of-life, as well as challenges

**Recommendations:**

**Addressing Encroachment**

- Communities Affected by Noise Zones: *Town of LeRay, Town of Philadelphia, Town and Village of Antwerp*

- The following communities should develop/update Comprehensive Plans:
  - Town of Antwerp and Town of Pamelia
  - Plans underway or recently completed:
    - Town of LeRay (nearing completion)
    - Town and Village of Philadelphia (underway)
  - Comprehensive Plans should address land use compatibility and growth
  - Fort Drum should continue to participate in comprehensive planning processes to support and ensure that land use compatibility issues are addressed
  - Communities should identify opportunities for conservation and other compatible uses in encroachment concern areas
  - Communities should ensure that Fort Drum has copy of the plan

- Adopt Zoning to address land use compatibility within noise zones.
  - Priority areas: Town of LeRay, Philadelphia, Town/Village of Antwerp

- Conservation efforts should focus on farming, address landowner needs.
  - Northern LeRay and Town of Philadelphia are the best candidates because they have a combination of existing farms and higher growth pressures

*Rounds fired from mortars like this one contribute to the noise heard around Fort Drum. - Photo by Spc. Timothy J. Belt*
Explore habitat conservation in LeRay, in conjunction with developing areas. Partnerships with the ACUB program should be explored.

The Town of LeRay should amend town-wide zoning upon completion of the comprehensive plan. These zoning amendments could be developed as a model for other communities.

Address light pollution through zoning regulations.

**Leveraging Growth**

- Identify appropriate growth areas (through Comprehensive Planning process).
- Develop plans for growth areas.
- Develop innovative tools to encourage desired growth patterns:
  - Design Guidelines
  - Conservation Subdivision Regulations
  - Incentive Zoning
- Concentrate Growth in Serviced (water/sewer) Areas.

**Address Transportation Issues**

- Develop office/technology park area near Fort Drum Connector/Route 11 interchange.
- Limit migration of strip highway commercial north of Town of LeRay.
- Address aesthetics, access management, and bike/pedestrian access along Route 11.
- Address Fort thru-traffic in Antwerp.

**Villages/Hamlets and City of Watertown**

**Main Issues and Opportunities:**

- Growth has bypassed/not fully realizing potential
- Unique assets to region: historic cultural, natural (river/waterfalls), housing stock, downtowns
- Capitalizes on prior infrastructure investments
- In many cases, will take pressure off sensitive Fort border areas
- Will take dedicated, concerted effort to revitalize
- Commercial highway growth management
Recommendations:

Addressing Encroachment

◊ Hamlets/Villages Along Fort Border with Significant Encroachment Concerns:
  • Village of Antwerp, Village Deferiet, Hamlets including Felt Mills, Great Bend, Natural Bridge, and Lake Bonaparte

◊ Collaborate on mutual Fort-community solutions to noise and safety. Sound attenuation can help.

◊ Address light pollution through zoning regulations.

Leveraging Growth

◊ The following villages near Fort Drum will see the most growth pressures:
  • Black River
  • Evans Mills
  • Deferiet
  • Philadelphia
  • The Villages of Carthage and West Carthage

◊ Prepare to Accommodate Growth.
  • Create or Update Comprehensive Plan
    ◦ Black River (build on 2008 Community Visioning and Strategic Development Plan)
    ◦ Evans Mills
    ◦ Deferiet (update 2000 plan)
    ◦ Philadelphia and “Carthages” underway
    ◦ Watertown: Black River Corridor Plan—Expand to City-wide/city-towns cooperative comprehensive plan
  • Identify Infill Properties and Types of Growth Desired
  • Develop Zoning to Encourage Development
  • Leverage Village/Historic City Qualities
  • Strengthen housing stock investments/connections to military housing needs
  • Fill Infrastructure Needs (for example, the Village of Evans Mills is in the process of replacing its water tower to increase capacity for development in the village as well as nearby areas of LeRay)
  • Develop “shovel-ready/historic reuse-ready” sites
  • Strengthen recreation/downtown offerings as an amenity

◊ Partner with Regional Entities and Fort to Locate Important Community Institutions and Facilities.
Range Areas – Agricultural
Town of Rossie, Town of Gouverneur, Town of Fowler

Main Issues and Opportunities:
◊ Low Growth Area
◊ Incremental lot-by-lot development
◊ Avoiding Encroachment in the Long-term
◊ Supporting and Maintaining Farming and Forestry Uses
◊ Creative use of Natural Resources (energy, tourism, etc.)

Recommendations:

Addressing Encroachment

◊ Comprehensive Planning:
  • Town of Fowler Comprehensive Plan Underway
  • The Town of Pitcairn and Town of Rossie should undertake Comprehensive Plans

◊ Revise zoning to reflect existing lower development densities, lack of infrastructure.

◊ The Towns of Rossie and Fowler should consider zoning regulations.

◊ Address light pollution through zoning regulations.

◊ Explore farmland/forestland protection opportunities.

Develop Land Use Tools to Address Incremental Growth

◊ Large lots still have an impact on landscape.

◊ Creative solutions are needed to customize tools (modified conservation subdivisions for incremental growth).

Range Areas – Forest
Town of Pitcairn, Town of Diana

Main Issues and Opportunities:
◊ Low Growth Area
◊ Incremental lot-by-lot development
◊ Avoiding Encroachment in the Long-term
◊ Supporting and Maintaining Forest lands
◊ Key noise conflict areas: Natural Bridge and Lake Bonaparte
Recommendations:

Addressing Encroachment

◊ Revise zoning regulations to reflect existing lower development densities, lack of infrastructure in the Town of Diana.

◊ Develop zoning regulations to reflect existing lower development densities, lack of infrastructure in the Town of Pitcairn.

◊ Address light pollution through zoning regulations.

◊ Explore habitat protection opportunities.

◊ Further collaboration in Lake Bonaparte and Natural Bridge Areas.

While Lake Bonaparte is an idyllic setting for cottages and vacation homes, the area is periodically subjected to high noise levels associated with training at Fort Drum.

Develop Land Use Tools to Address Incremental Growth

◊ Large lots still have impact on landscape.

◊ Creative solutions are needed to customize tools (modified conservation subdivisions for incremental growth).

Lighting that intrudes into the sky (left) can interfere with night-training missions at Fort Drum, as well as unnecessarily illuminating the night sky. Designing lighting to filter down towards the ground (rather than up towards the sky) can help to ameliorate the interference. Images courtesy of the International Dark-Sky Association.
One thing is clear as a result of this project: the Fort and the communities continue to improve communication and are working together to solve problems. In terms of managing growth, the issues are complex and varied. The stakeholders and perspectives are diverse, and both the Fort and the communities will continue to evolve and present new challenges and opportunities as the future unfolds. While the local governments are doing all that they can given current resources, the need for a more coordinated effort has been thoroughly demonstrated in this analysis.

**Key Next Steps**

**Develop a Fully Supported Community Planning Arm of Fort Drum**

There are many success stories and examples of collaboration between the Fort and the communities. The current Community Planner at Fort Drum has established many relationships and protocols for information sharing and collaboration. However, to play a more proactive role, more resources and people-power are needed. Key expanded functions of this role would be:

- On-going and Sustained Partner for Community Planning.
- Ensure Quality and Timeliness of Important Information.
- Work with Fort Drum on Addressing Community Opportunities and Issues (e.g., enhanced connections for housing needs and housing markets in villages/city).
- Assist in Developing Shared Vision for Growth that is Communicated “Inward” to Entire Fort Hierarchy.

**Create a Working Group to Implement Plan**

This working group should consist of representatives from both the Fort and community side. Meetings should be held only to make progress on tangible projects as recommended herein. The size of this group should be large enough to get important stakeholders to the table, but small enough to function as a bona-fide working group. Smaller sub-groups may potentially be useful for working on particular projects. Without such a group, many of the recommendations of this plan will fall through the cracks. The most important function the group can play is to assist local communities in implementing projects and tools set forth in this plan, and finding the resources to help them do so.

**Pursue Priority Projects**

While there are many action steps to be taken, the following is a list of priority projects for the working group:

- Pursue Planning and Fort-Friendly Zoning in Highest Priority Area (Route 3 and Route 11 Corridor).
~ SUMMARY REPORT ~

◊ Develop Notification Requirements for all Development within +/- 3,000 feet of the Fort boundary, and within Noise and Safety zones.

◊ Work with Villages and City of Watertown to Accommodate Future Growth.

◊ Maintain and Update List of Priority Projects.

◊ Develop a 5 Year Plan to Include:
  • Comprehensive Plans for all Gate Communities (Towns and Villages)
  • Updated zoning for:
    ◊ LeRay
    ◊ RACOG Communities
    ◊ Town and Village of Philadelphia
    ◊ Black River
    ◊ Evans Mills
    ◊ City of Watertown

◊ Create a Fort Drum-Community structure to share and maintain GIS coverage layers to facilitate effective long term planning with regard to development and operational impacts.

◊ Complete ACUB and Farmland Protection Projects in Gate Communities.

◊ Address Light Pollution Regionally.

**Empower Communities**

Through the course of this project, the amount of community support and positive feeling for Fort Drum has truly stood out. This characteristic sets the community apart from many of its peers across the nation. It is clear that individual citizens and communities around Fort Drum are ready to take action through a meaningful partnership. Working with communities in groups with similar themes, and then individually, is the best way forward.

**Invest in the Plan—Implement the Plan**

Implementation of the plan will require a significant investment by the region and stakeholders. Current staffing alone is inadequate to execute this strategy. Sustained action on the ideas contained in this plan and the people-power to see them through will take not only time, but funding. A lot of hard work has gone into this plan—including significant county, community, and Fort staff and stakeholder time and resources. This effort will not be wasted if this strategy is executed. The result will be a sustainable and successful future for the Fort and the communities—the people of the region.