

Town of Millinocket:  
**A Review of Capital Flow  
from an Urban  
Metabolism Perspective**

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## Introduction

The Town of Millinocket has gone through significant changes in recent years due to a declining tax base, a decline in employment opportunities, and an ever-changing global economy that the small rural community has struggled to position itself in. In an effort to inform potential solutions that could assist Millinocket in finding its identity and place within the global community, the municipality's current capital flow will be investigated.

Key definitions and concepts will be introduced to provide context to the data provided. An overview of Millinocket's economy, utilizing the concept of urban metabolism, will take stock of existing economic players, how economic capital flows through the municipality, and the implications to the town. Ideas, suggestions and goals will be presented, which will then be followed by concluding statements.

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# An Urban Metabolism Perspective of Millinocket's Economy

## Defining Urban Metabolism

Urban metabolism is a function within the broader field of urban ecology. Many understand that ecology is the study of living things within an ecosystem, but urban ecology may be best defined as a system studied almost exclusively from the perspective of humans within an urban setting. Urban land is often dominated by human activity--both physically and ecologically. Parallels can be drawn between *urban* ecology and ecology as cities function much like ecosystems. Nutrient cycling, for example, could be compared to the flow of economic capital through a community, and gentrification could be compared to niche construction. By looking at a city as an ecosystem one can examine and improve system functions, including both hard and soft infrastructure. Cities also function like ecosystems in the sense that outside influences can interfere with its processes and systems, yet cities are uniquely capable of responding to those threats. [1]

Within the context of urban ecology, urban metabolism is a socionatural metaphor that tracks the flow of resources with regard to the needs of the population and the natural environment. [2] The "urban metabolism framework is a form of modeling and assessing community processes, whether individually or in aggregation, to gain greater understanding of material and energy flows associated with communities." [3] By examining a community's economic flow via utilizing the perspective of urban metabolism one can track the health, efficiency, resilience and sustainability of its economy. Each of the six forms of community capital presented in "Community Capital and Urban Metabolism" could be considered resources within the urban metabolic processes.

## Millinocket's Urban Boundary

Considering Millinocket's economy is heavily tied to both the regional and global economy, it may be beneficial to first determine the urban boundary of the municipality in regard to its economic flow. "Drawing the boundary too narrowly carries the risk of insufficient recognition of the 'urban system.' Drawing it too broadly can dilute the unique elements of the urban core." [3] Determining the urban boundary starts with identifying the characteristics of the local economy.

First, there is little development beyond the physical borders of the municipality. Although there are neighboring municipalities, Millinocket's population is nearly four times greater than each. In addition, Millinocket offers services to the regional and local population, including medical care via MRH and KVHC, retail options via various stores, and job opportunities. Millinocket also sees a significant portion of tourism dollars spent throughout the region. Camps and other recreational


activities that lay outside of the municipal boundary could be considered part of the tourism economy, which represents outside dollars flowing into the local economy. Millinocket is also home to manufacturing and extraction-based industries, such as Pelletier Manufacturing, Maine Heritage Timber, and Gerald Pelletier, Inc. The existing industry attracts ‘outside’ dollars, provides local job opportunities, and are locally-owned. Given these factors, it would be safe to determine that the urban boundary for Millinocket’s economy should include the municipal boundary *and* the “lakes” region, which is home to a large recreational/tourism economy that utilizes Millinocket’s commercial services. However, given how interdependent cities are on the global economy, it's difficult to not consider influences that go beyond the physical border of a community.



The economic devastation that came from the loss of Millinocket's paper mill caused the town to be susceptible to the volatility and domination of global markets—forces that are generally beyond the influence of individual municipalities. More about this will be discussed in the “Overview of Millinocket’s Economy” section.

## Community Capital and Urban Metabolism

Just as the function of metabolism in a body is inherently interdependent upon the body’s system as a whole, so is the economic system of a community heavily dependent upon a broader set of capital, defined collectively as community capital. Dr. Mark Roseland, Director of the Centre for




Sustainable Community Development at Simon Fraser University and one of the most renowned experts on sustainability, outlines the six different types of community capital that are instrumental to the success and vitality of a local economy: social, economic, physical, natural, cultural and human. [4] Considering each type of community capital in the decision-making process means ensuring the proper use of resources, long-term viability, and the well-being of each individual and their function within a community.

Economic capital is one of the most common forms of capital municipalities aim to develop, as it is necessary in building a strong and vibrant economy. Local economies are dependent upon two different types of economic capital: financial and business. Financial economic capital refers to money that individuals and businesses exchange in order to meet needs and create wealth, which include loans and grants. Business economic capital includes locally-owned businesses and organizations that are the “suppliers and consumers within a community that generate employment and income. They transform community resources into products and services that encourage the circulation of money within the community.” [4]

Millinocket has historically seen an abundance in its physical and natural capital; the regions' generous supply of timber had sparked the birth of a hugely successful industry, and with it came a surplus of capital that the community was founded upon. Physical and natural capital are similar in that they both deal with tangible forms of capital but with clear distinctions. Natural capital refers to “any stock of natural assets that yields a flow of valuable goods and services into the future ... [it] includes non-renewable resources (such as fossil fuels and minerals), renewable resources that can provide goods and services (such as food, clean water and energy) in perpetuity if managed sustainably and the capacity of natural systems to continue providing critical goods and services.” [4]

Physical capital is any tangible resource that facilitates meeting people's needs. Physical capital can be anything that produces goods and creates a flow of income—from infrastructure, shelter, and machinery/equipment. Human capital and physical capital have an interconnected relationship; human capital can be curbed by the absence of physical capital due to the resulting limited productivity and extra effort required to satisfy basic needs. “Improving physical capital includes focusing investment, both financial and non-financial, on community assets such as public facilities (e.g. hospitals and schools); water and sanitation; efficient transportation; safe, quality housing; adequate infrastructure and telecommunication.” [4] Investment in physical capital can raise economic, social, human and natural capital, which in turn can develop Millinocket's local economy.

‘Human capital’ has become a widely used term, and for good reason: it recognizes the significance of the development, well-being and health of individuals within a community, organization, group, or the world. Human capital can be defined by the various contributions an



individual can bring to a community, such as knowledge, health, education, leadership, and skills or competencies that can raise personal, social and economic well-being. [5] Human capital is directly linked to the labor productivity of a local economy, which represents a “person’s ability to pursue and achieve individual livelihood objectives ... Increasing human capital requires a focus on areas such as health, education, nutrition, literacy and family and community cohesion. Increasing it also requires input from other forms of capital—physical (shelter, schools and medical infrastructure), economic (employment and income), social (peace and safety) and cultural (identity and belonging) capital are needed to enhance human capital. It also requires creating opportunities to build pride and freedom through realistic expectations and achievements.” [4] Human capital informs social capital in that a community's cohesion is largely influenced by the individual's ability to meet their basic needs.

Social capital is one of the most important aspects of a local economy—especially rural economies comprised of smaller populations. Social capital is the community's social health that promotes reciprocity, compassion, tolerance, honesty, discipline, ethics, commonly shared rules and laws, compassion, patience, fellowship and forbearance. “It has both an informal aspect related to social networks and a more formal aspect related to institutions and social development programs.” [4] These shared norms, networks and relationships can instigate and inspire collective action informed by shared knowledge, patterns of interaction and understandings. [6][7] Unlike other forms of capital, social capital is not a tangible resource that can be limited by issues of availability, and has no expiration date or wear from use over time. However, if unused, social capital can deteriorate quickly. It is also a non-transferable form of capital and it takes long periods of time to develop and create. In fact, attempting to create social capital in a community can be met with opposition and resistance as many feel “instrumentalized”, even for good or just reasons. [8][9] “Multiplying social capital contributes to strong community fabric, and establishes bonds of information, trust and interpersonal solidarity, whereas a loss, or deficit, results in high levels of violence and mistrust.” [4] Cultivating social capital depends on local government initiatives, collective planning, strong organizations, access to information, communication, networking and collaboration.

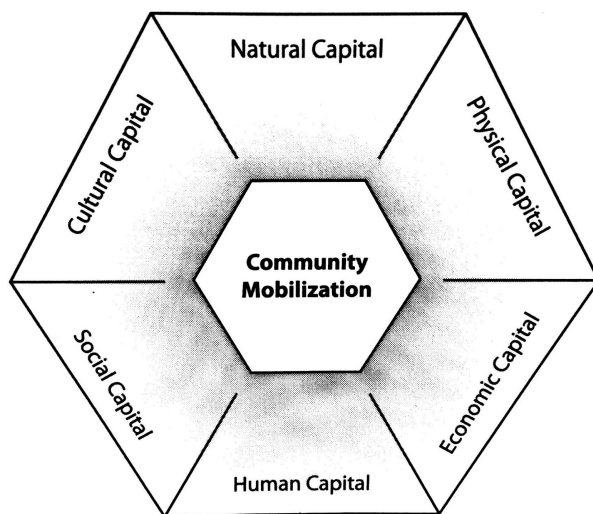
Millinocket has very strong and abundant cultural capital; it is the result of a shared understanding that comes from traditions, heritage, identity, customs and history. What sets cultural capital apart from social capital is that it includes both tangible and intangible resources that come from a strong cultural heritage. It can include anything from songs, stories, ceremonies, spirituality, heritage buildings, art, rituals, food, and more. “Cultural capital defines community, influences decision-making and shapes how people communicate with one another. It is something that a community shares both socially and across generations.” [4] Pierre Bourdieu, a French sociologist, defined cultural capital as being capable of manifesting as an embodied, objectified and/or institutionalized state as it “plays a strong role in communities with long

histories and traditions ... In communities rich with culture and natural resources, cultural capital has influence over management objectives, efficiency of process and demand for natural resources.” [10][4] Due to its implications, it is important that all community decisions pay strong attention to cultural capital as it can either restrain or encourage efforts in developing a local economy.

It is important that all municipal decisions take into consideration each type of community capital. In order to effectively and accurately consider each type of community capital in the decision-making process, members of the community must be involved in the process—a process which is often called community mobilization. **Refer to Figure 1A.** “There is no sustainability prescription that would fit all communities, because every path forward comes with opportunity costs that need to be carefully considered, and because participatory planning is critical to the sustainable development process – from visioning through to evaluation of results. For people to prosper anywhere they must participate as competent citizens in the decisions and processes

that affect their lives.” [4] Mobilizing a community towards a resilient and sustainable economy requires an active and informed citizenry that is guided by an appreciation for the six types of community capital.

Although historically Millinocket was dependent upon a primary employer for its economic vitality, much of the town's success was largely built upon its cultural, social, natural, physical and human capital that provided a means for interdependence--and therefore economic self-reliance. Although some factors have shifted in recent times, much of the community capital that inspired Millinocket's success still lives on. By recognizing the significance of each type of community capital and its role in Millinocket, the town can take major steps in promoting abundance and productivity through sustainable efforts. The following sections will offer insight and proposals into how Millinocket might develop community capital while fostering new concepts that can develop stability, resilience, and community connection.



### Community Capital Framework

The Community Capital Framework has been designed from the following principles:

- Communities need all six forms of capital to achieve well-being and sustainability. No single capital is sufficient in creating or supporting sustainability.
- It is important to understand your community's capital, including strengths and weaknesses.
- Capital interact with each other; changes in one form of capital may generate positive or negative changes in other forms of capital.

**FIGURE 1A**  
CREDIT: (Roseland, 2012)

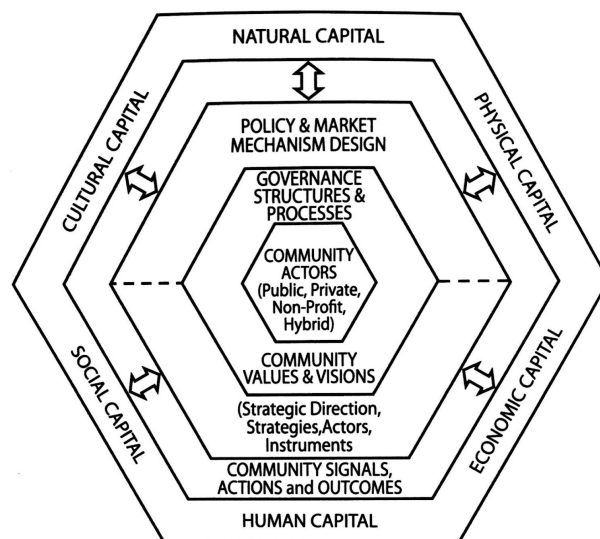


## Overview of Millinocket's Economy

Millinocket's current economy is not unique; many rural communities throughout the United States have been faced with similar challenges in recent history, including declining industry, a declining tax base, declining population, and loss of employment opportunities. Urban migration has exploded since the industrial revolution and is projected to continue, with over two thirds of the world population expected to reside in urban areas by 2050. [11]

The continuing strain that urban migration has placed on rural communities is largely due to globalization. With such a large workforce that can no longer depend on manufacturing jobs, much of the United States' current economic growth is found in the service industry. Imports from China, for example, rose tenfold between 1991 and 2007, and over one million US jobs were lost as a result. [12] "Forced to restructure their economies away from manufacturing, large cities evolved into important locations of finance, specialized service firms (advertising, corporate management, information processing), and innovation sources." [11]

Consequently, large cities tied to the global marketplace are where much of the current economic focus exists; "governments and industry have been withdrawing their commitments to rural community development just as the nature of competitiveness in the global economy has changed." [4] Similar to many other rural communities throughout the United States, Millinocket finds itself in transition: exiting a manufacturing-based economy and re-emerging as a small town in a new global economy.



According to Immanuel Wallerstein's World-Systems Theory, countries within the global economy can be categorized within a hierarchy of economic significance, constituting the "core", the "semi-periphery" and the "periphery". A city's position within that framework can greatly affect potential opportunities and outcomes, as well as predict its growth patterns. [13] "Core countries" such as Australia and the United States are defined by being a developed country that houses corporations that influence and decide the fate of the global economy; "Semi-periphery" countries such as Israel and Croatia are defined by their close relationships with core countries,


but “play a secondary role in global economic matters.” [14] “Periphery” countries, sometimes described as ‘third-world countries’, are those that are less developed, depend on imports and foreign aid, and are in a perpetual state of vulnerability to the global economy. Periphery countries are often rich in natural resources but have weak positioning in the global economy, resulting in the extraction of local resources by foreign entities who show little regard to the disastrous human, environmental or economic consequences.

Although Millinocket exists within the United States, considered to be a “core” country in the global hierarchy, its economic influence and dependency on global markets forces it to behave more as a “periphery” economy, which is heavily dependent upon imports, contains a large population of people on the lower-end of the socioeconomic scale—a population “denied the few social amenities that are reserved for tourists or the local elite, ... serious erosion of wages and employment conditions,” and a vulnerability to poverty. [14] Like many periphery countries, Millinocket’s vulnerability can attract outside influences that seek to exploit the suffering workforce and natural resources while in a constant state of economic leakage—a side effect of dependence on resource extraction, imports, and foreign capital investments that takes the community’s only remaining capital out of its local economy.

An example of economic leakage is a reliance upon chain stores to provide basic needs at a low cost, where individual financial capital is exported to foreign corporate headquarters rather than being reinvested into the local community. Another example is the inability for local residents to purchase commercial property or equipment to start a business or renovate residential homes, which results in a dependence on foreign actors to provide services—actors that may not be invested in other areas of a community’s health and well-being. Both economic and human capital are consequently drained from Millinocket, which would otherwise stimulate business economic capital by generating and circulating economic capital. As human and economic capital erode, so does social and cultural capital, resulting in a loss of identity and a search for educational and employment opportunities elsewhere.

## **Taking Stock**

If the goal of Millinocket is to slow or end economic leakage, one must first take stock of the economic drivers of the community. Until the creation of this report, no complete list of local businesses and organizations existed. The following list of organizations will undoubtedly need constant updates. Each is categorized/defined by the following: business type/primary NAICS description; whether the organization is locally-owned, hybrid, or foreign-owned—including whether the organization is a non-profit (NP) or governmental organization (GVT); the number of employees; and the estimated percentage of local products consumed and/or produced by the organization.



A locally-owned organization is defined by the ownership taking primary residence within the urban boundary. Hybrid organizations are defined by ownership being regional yet still play an active role in developing the local economy OR locally-owned chain stores/franchises. While a franchise such as Subway may be an international brand, the franchise itself could still be owned locally, which determines the flow of profits. Foreign-owned organizations are defined by the ownership residing outside the urban boundary, resulting in a majority of profits leave the community. Although foreign-owned organizations may hire locally, an overwhelming amount of generated revenue is not re-invested in the local economy, while local and/or outside dollars being spent at the establishment, even though residing within the community, leaves the community. Dollars spent at foreign-owned businesses is the largest and most extreme contributors to a community's economic leakage.

Determining the percentage of locally-produced and/or consumed products is complicated. A locally-consumed product by an organization could involve any purchase of products or services from an establishment residing within the urban boundary, including locally-owned, hybrid and foreign-owned organizations. Purchases could range from office supplies to cleaning services, food/grocery items to hardware, heating oil to lawn care and more. Depending on the business, the percentage is not defined by overall dollar amount spent, but rather the tangible volume. Taking stock of local spending is to inquire as to how much demand may already exist in the local business community for certain products. This recognition allows for opportunities to meet local demand with local products and services. The percentages associated with each organization does not include implied costs such as payroll, taxes, vehicle registration, licenses, or other similar spending. It's important to keep in mind that the percentages are meant to represent current and specific characteristics of Millinock's business economy; certain products or services may not be available locally to meet current demand of businesses.

Aside from the availability barrier of local products/services, an impediment to many organizations and businesses could include a higher cost of a local service or product. Many organizations that are financially accountable to those they serve, such as municipalities and non-profits, may struggle in sourcing local products with higher costs; despite being local, it may be viewed as irresponsible spending for taxpayers, for example, if cheaper options exist. Just the same, businesses are defined by their bottom-line and may not have the financial capacity to support local businesses if the cost gap is too large compared with foreign products/competitors.

Determining the estimated percentage of products produced locally varies by primary NAICS description. A retail store, for example, does not produce a product but instead resells it. In this scenario, the percentages are broken down by volume of local products sold. Foreign-owned stores may not have the ability to source products locally, and may be challenging to source local services such as cleaning services or energy. Many restaurants, on the other hand, produce a

large portion of food products, which requires local labor, while many foreign-owned restaurants are heavily automated (McDonalds and Dunkin’ Donuts), which cuts down on production (and therefore labor) needs. In this scenario, the percentages are broken down by volume of sold products produced in the restaurant. Pre-packaged drinks, condiments, and other pre-made products, for example, would not qualify as being locally produced. A locally-owned restaurant may have equally as limited options in sourcing food products locally, however, but has the flexibility that chain stores do not if the product(s) becomes available.

<b>ORGANIZATION</b>	<b>PRIMARY NAICS DESCRIPTION</b>	<b>LOCAL/ FOREIGN/ HYBRID</b>	<b>NUMBER OF EMPLOYEES</b>	<b>ESTIMATED % OF LOCAL PRODUCT PRODUCED/CONS.</b>
Millinocket Regional Hospital	General Medical & Surgical Hospitals	Local NP	100 to 249	PROD CON: 0%
Baxter State Park	Nature Parks	Local GVT	50 to 99	PROD CON: ___%
Gerald Pelletier Inc	Freight, Trucking	Local	50 to 99	PROD PRO: 100% PROD CON: ___%
Granite St. School	Public Schools	Local GVT	50 to 99	PROD CON: ___%
Hannaford Supermarket	Supermarkets/ Grocery	Foreign	50 to 99	PROD CON: 0% PROD PRO: 0%
Jump & Raft	B&B / Inns	Foreign	50 to 99	PROD CON: 0% PROD PRO: 0%
Katahdin Health Care	Nursing Care Facilities	Foreign	50 to 99	PROD CON: 5%
KFI	Vocational Rehab	Local NP	50 to 99	PROD CON: ___%
Big Moose Inn	B&B / Inns	Local	20 to 49	PROD CON:
Fredericka’s Restaurant	Full-Service Restaurant	Local	20 to 49	PROD CON: PROD PRO:
Katahdin Federal Credit Union	Credit Unions	Local	20 to 49	PROD CON: CALL TINA

Loose Moose Bar & Grille	Full-Service Restaurants	Local	20 to 49	PROD CON:
McDonald's	Limited-Service Restaurants	Foreign	20 to 49	PROD CON: 0% PROD PRO: ____%
Millinocket Fabrication & Mach	Machine Shops	Local	20 to 49	PROD CON: PROD PRO: 100%
Millinocket Irving Mainway	Convenience Stores	Foreign	20 to 49	PROD CON: 0% PROD PRO: 0%
Millinocket Middle School	Public Schools	Local GOVT	20 to 49	PROD CON:
New England Outdoor Center	Travel Accommodation	Local	20 to 49	PROD CON: PROD PRO:
River Drivers Restaurant & Pub	Full-Service Restaurants	Local	20 to 49	PROD CON: PROD PRO:
Stearns High School	Public Schools	Local GOVT	20 to 49	PROD CON:
Three River White Water	Sports & Recreation Inst.	Foreign	20 to 49	PROD CON: 0%
University of Phoenix	Colleges, Universities & Prof. Schools	Foreign	20 to 49	PROD CON: 0%
5 Lakes Lodge	B&B / Inns	Local		PROD CON: PROD PRO:
100 Mile Wilderness Inn	B&B / Inns	Local		PROD CON: PROD PRO:
Advanced Auto Parts	Auto Retail	Foreign		PROD CON:
Angelo's Pizza Grille	Full-Service Restaurants	Local		PROD CON: PROD PRO:
Appalachian Trail Lodge & Cafe	B&B / Inns	Local		PROD CON: PROD PRO:
Arcadia Designworks	Architecture and Design	Hybrid		PROD CON: PROD PRO:

Bangor Savings Bank	Banking	Hybrid		PROD CON:
Barbeque House	Full-Service Restaurants	Local	Under 20	PROD CON: 0% PROD PRO: 85%
Baxter Park Inn	B&B / Inns	Hybrid		PROD CON: PROD PRO:
Blue Ox	Bar	Local		PROD CON: PROD PRO: 0%
Bragdon's Energy	Fuel Services	Local		PROD CON:
Brookfield Renewable	Energy	Foreign		PROD CON: PROD PRO: 100%
Campbell's Service Center	Auto Repair & Service			PROD CON: PROD PRO:
Central Street Market Redemption Center	Redemption Center			PROD CON: PROD PRO:
Chester's Chicken		Hybrid		PROD CON: PROD PRO:
Chewonki's Big Eddy Campground	Campgrounds	Hybrid		
Computer Rehab	Electronic Services	Local		PROD CON: PROD PRO:
Daigle Soft Serve	Food Trucks			PROD CON: PROD PRO:
Dead River Company	Utility / Fuel Services	Foreign		PROD CON: PROD PRO:
Designlab	Design Services	Hybrid		PROD CON: PROD PRO: 100%
Dollar Tree	Convenience & Grocery Stores	Foreign		PROD CON: 0% PROD PRO: 0%
Dunkin' Donuts	Limited-Service Restaurants	Foreign		PROD CON: 0% PROD PRO: 70%
Edible Wilds LLC	Food	Local	Under 20	PROD CON: 15%

	Manufacturing			PROD PRO: 100%
Elks Club		Local NP		PROD CON: PROD PRO:
Emery Lee	Construction	Local		PROD CON:
Faith Baptist Church	Religious Organization	Local NP		PROD CON:
Ferland Jewelers	Retail			PROD CON: PROD PRO:
Financial Management Serv.	Financial MGMT	Local	Under 20	PROD CON:
First Congressional Church	Religious Organizations	Local NP		PROD CON:
God's Country Inn and Shuttle	B&B / Inns	Local	Under 20	PROD CON: PROD PRO:
Good Samaritan Thrift Shop	Thrift Stores	Local	Under 20	PROD CON: PROD PRO:
Gracie's Aunt's Emporium	Consignment Shops	Local	Under 20	PROD CON: PROD PRO:
Hair Razor	Beauty Salons	Local	Under 20	PROD CON: PROD PRO:
Hang Wong	Full-Service Restaurants	Local	Under 20	PROD CON: 0% PROD PRO: 85%
Highlands Tavern	Bars	Local	Under 20	PROD CON: PROD PRO:
Hillcrest Golf Club	Golf Courses	Local NP	Under 20	PROD CON: PROD PRO:
Hotel Terrace	B&B / Inns	Local		PROD CON: PROD PRO:
House of Pizza	Limited-Service Restaurants			PROD CON: PROD PRO:
John's Auto	Auto Repair / Services			PROD CON: PROD PRO:

Katahdin Forest Management		Local	Under 20	PROD CON:
Katahdin Forest Cabins & Timber.		Local	Under 20	PROD CON:
Katahdin Gateway Insurance	Insurance Broker	Local	Under 20	PROD CON:
Katahdin General Store	Convenience Stores	Local		PROD CON: PROD PRO:
Katahdin Inn & Suites	B&B / Inns	Local		PROD CON: PROD PRO:
Katahdin Institute	Education	Local NP	Under 20	PROD CON: 20%
Katahdin Motors	Auto Sales & Services	Local		PROD CON: PROD PRO:
Katahdin Outfitters		Local		PROD CON: PROD PRO:
Katahdin Valley Health Center	Healthcare	Foreign		PROD CON:
Katahdin View Storage	Storage Facilities			PROD CON:
Katahdin Woods and Waters Natl. M	Public Parks	Hybrid GOVT		PROD CON:
Knife's Edge Trading Post	Retail	Local		PROD CON: PROD PRO:
Knights of Columbus				PROD CON: PROD PRO:
Lamson Funeral Home	Funeral Homes			
Lankhorst Chiropractic	Medical Services	Local		PROD CON:
Larry's Wood Products		Local		PROD CON: PROD PRO:
Law Offices of Bloomer, Russell &	Legal Services	Hybrid		PROD CON:



Beaupain				
Living Innovations		Foreign		PROD CON:
Maine Heritage Timber		Local		PROD CON: PROD PRO:
Maine Rafting Expeditions				PROD CON:
Maine Water Company	Utility	Foreign		
Mainely Coffee	Food Manufacturing	Local	Under 20	PROD CON: PROD PRO:
Memories of Maine Art Gallery		Local	Under 20	PROD CON: PROD PRO:
Millinocket Fabrication & Mach		Local		PROD CON: PROD PRO:
Millinocket Floral		Local	Under 20	PROD CON: PROD PRO:
Millinocket Historical Society		Local NP	Under 20	PROD CON: PROD PRO:
Millinocket Insurance Agency		Local	Under 20	PRO CON: PROD PRO:
Millinocket Memorial Library	Library	Local GVT	Under 20	PROD CON: PROD PRO:
Millinocket Variety	Convenience Stores	Local	Under 20	PROD CON: PROD PRO:
Moose Drop In	Retail	Local	Under 20	PROD CON: PROD PRO:
Moose Prints Gallery & Gifts		Local	Under 20	PROD CON: PROD PRO:
Moose Shed Lodge		Local	Under 20	PROD CON: PROD PRO:
Moose Woods Guide Service		Local	Under 20	PROD CON:

Mountainsong of Millinocket	Thrift Stores	Local	Under 20	PROD CON: PROD PRO:
Mountain View Apartments		Foreign		PROD CON:
New Level Carpentry	General Contractor	Local	Under 20	PROD CON:
Nesowadnehunk Wilderness Campground	Campgrounds	Local	Under 20	PROD CON: PROD PRO:
North Country Rivers		Foreign		PROD CON:
North Light Gallery		Local	Under 20	PROD CON: PROD PRO:
North Woods Real Estate	Real Estate Services	Local		PROD CON:
North Woods Trading Post		Local		PROD CON: PROD PRO:
Northern Timber Cruises		Local		PROD CON: PROD PRO:
Our Katahdin		Local NP		PROD CON:
Pamola Motor Lodge	B&B / Inns	Local	Under 20	PROD CON:
Pelletier Manufacturing		Local		PROD CON: PROD PRO:
Photography by Mike		Local	Under 20	PROD CON: PROD PRO:
Plourde's Rubbish & Recycle		Local	Under 20	PROD CON:
Portland Glass		Foreign		PROD CON: PROD PRO:
Preble Oil		Local		PROD CON:
Read Agency		Local		PROD CON:

Rideouts	Convenience Stores	Local		PROD CON: PROD PRO:
Robert Adams Accountant	Professional Services	Local		PROD CON: PROD PRO:
Roots 2 Remedies		Local	Under 20	PROD CON: PROD PRO:
Russ' Barber Shop		Local	Under 20	PROD CON:
Ruthie's Diner	Full-Service Restaurants	Local		PROD CON:
Save-a-Lot		Hybrid		PROD CON: PROD PRO:
Scootic In	Full-Service Restaurants	Local		PROD CON:
Spoiled Hair Salon		Local		PROD CON:
St. Andrew's Episcopal Church	Religious Organization	Local NP		PROD CON:
St. Martin's Thrift Store	Thrift Stores	Local		PROD CON: PROD PRO:
Sterns Lumber		Local		PROD CON: PROD PRO:
Steve's Auto Body	Auto Repair Services	Local		PROD CON: PROD PRO:
Subway	Limited-Service Restaurants	Hybrid		PROD CON: PROD PRO:
Thrive Penobscot		Local NP		PROD CON: PROD PRO:
Town of Millinocket	Governmental Organization	Local GVT		PROD CON:
Tractor Supply	Retail	Foreign		PROD CON: PROD PRO:
True Value		Hybrid		PROD CON: PROD PRO:

Walgreens	Retail	Foreign		PROD CON: PROD PRO:
West Branch Aviation		Local		PROD CON:
Whitehouse Landing Camps		Local		PROD CON:
Wilderness Edge Campground	Campgrounds	Hybrid		PROD CON:
Worry Free Maintenance		Local		PROD CON:
WSYY Radio		Foreign		PROD CON:
Young House B&B	B&B / Inns	Hybrid		PROD CON:

Another crucial element to take stock of is infrastructure, both soft and hard. Infrastructure dictates the channels in which capital is able to flow, much like roads provide autos access. Hard infrastructure is a physical/tangible resource that can support business development and growth, such as utility connection, available stock of industrial or office space, railways for imports/exports, and more. Soft infrastructure includes institutions, human capital, social capital and cultural capital that supports economic growth and development; it can influence how and where economic capital flows through hard infrastructure and the local economy via policies, incentives, regulations, subsidies, local buy-in, and more. Soft infrastructure is “required to maintain the economic, health, and cultural and social standards” of a community. [15]

**STOCK OF HARD INFRASTRUCTURE:**

1. LAND/FACILITIES
  - a. Downtown Commercial (DC) - define zoning
    - i. \_\_\_ acres, \_\_\_ lots, % vacant/non-operational
  - b. Neighborhood Commercial (NC) - define zoning
    - i. \_\_\_ acres, \_\_\_ lots, % vacant/non-operational
  - c. Industrial (IN) - define zoning
    - i. \_\_\_ acres, \_\_\_ lots, % vacant/non-operational
  - d. Residential (R1) - define zoning
    - i. \_\_\_ acres, \_\_\_ lots, % vacant/non-operational
  - e. Public/Municipal - within the various zones, ...

- i. \_\_\_ acres, \_\_\_ lots, % vacant/non-operational
- ii. \_\_\_ tax-acquired lots , \_\_\_ residential \_\_\_ com./ind.
- iii. \_\_\_ parks, schools, other public spaces

## 2. TRANSPORTATION

- a. Roads
- b. Railway
- c. Airport
- d. Public transportation
  - i. Bus service
  - ii. Taxi Service
  - iii. Non-profit services (Penquis, etc)

## 3. UTILITIES

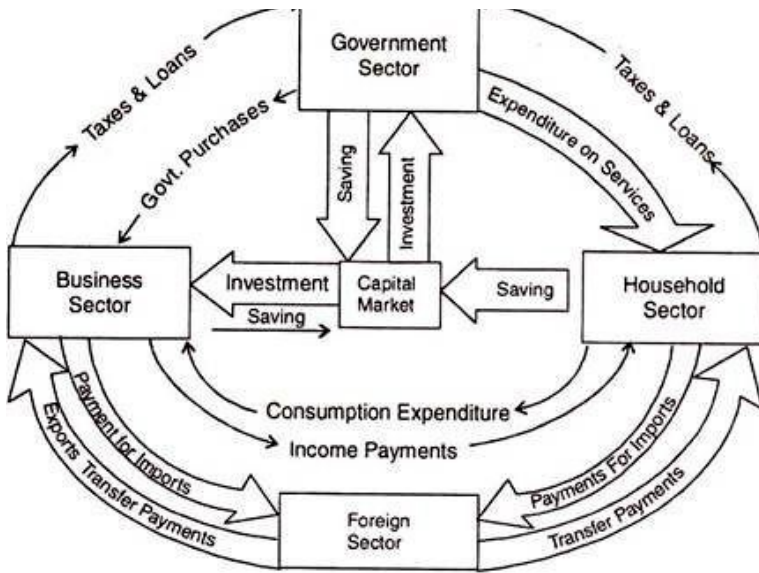
- a. Maine Water Company - Foreign-owned for-profit organization based in \_\_\_\_\_. Sources water from \_\_\_\_\_. Serves (and/or has the ability to serve) all commercial, industrial, public, and residential lots via pipeline throughout town boundary, not in lakes region.
- b. Emera - Foreign-owned for-profit organization based in Canada. Sources majority of its power from Canada. Power availability throughout the urban boundary. Serves (and/or has the ability to serve) all commercial, industrial, public, and residential lots throughout the urban boundary, with some limitations in lakes region.
- c. Broadband/Cable/Phone - Foreign-owned entities, which include Dish, BeeLine Cable, Fairpoint/Consolidated Communications, DirectTV, and various cell service companies. Verizon, ConsumerCellular and StraightTalk are currently best providers. Serves (and/or has the ability to serve) all commercial, industrial, public, and residential lots in urban boundary via satellite, service towers and/or cable lines.
- d. Brookfield - Foreign-owned for-profit organization with offices in Millinocket. Hydro dam. Currently serves the grid (export) with the ability to serve the former mill site.
- e. Town of Millinocket - municipal organization. Wastewater treatment facility and sewage pipes throughout town boundary, not in lakes region.

## **STOCK OF SOFT INFRASTRUCTURE:**

- 1. Chamber of Commerce
- 2. Municipality

- a. Town policies/incentives - TIFs, sustainable procurement policy, zoning changes
  - b. Committees
    - i. Economic Development Subcommittee
    - ii. Municipal Sustainability Subcommittee
  - c. Initiatives
    - i. Aging in place
    - ii. Transfer station changes
    - iii. Street lights to LED
    - iv. Solar farm
  - d. Departments: Police, Fire & Ambulance, Wastewater, Public Works, Airport, Assessor, Code Enforcement, etc.
3. Our Katahdin
  4. Education
    - a. (KRECH)
    - b. University of Maine System
    - c. Katahdin Institute
    - d. Local School System
  5. Katahdin Gazetteer
  6. Millinocket Regional Hospital
  7. Fin and Feathers Club
  8. Library
  9. Medical
    - a. Millinocket Regional Hospital
    - b. KVHC
    - c. Langhorst Chiropractic
  10. Millinocket Historical Society
  11. Religious Organizations

## Economic Flow & Implications



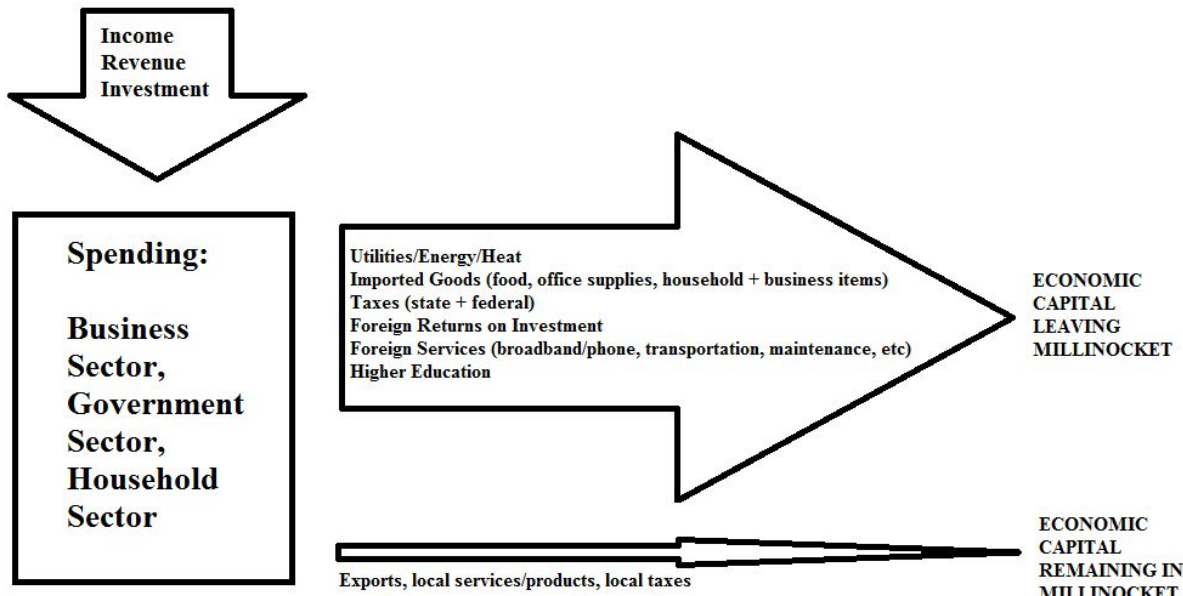
**Figure 3**

As seen in **Figure 3** [16], the major drivers of a local economy include the business sector, household sector, government sector, and foreign sector. What the diagram does not provide, however, is the appropriate scale in which Millinocket’s economic capital flows; the foreign sector and its imports heavily outpaces local exports in terms of dollars, while the government sector is far less prevalent due to a limited tax base.

Although Millinocket is home to many locally- and hybrid-owned businesses,

the lack of available local products and services significantly increases demand for imports, resembling a periphery economy. In addition, the volume of dollars spent by the household sector, business sector and government sector are overwhelmingly aimed towards foreign-owned businesses such as Hannaford and Irving/Circle K, and/or aimed at heavily

**ECONOMIC LEAKAGE IN MILLINOCKET**

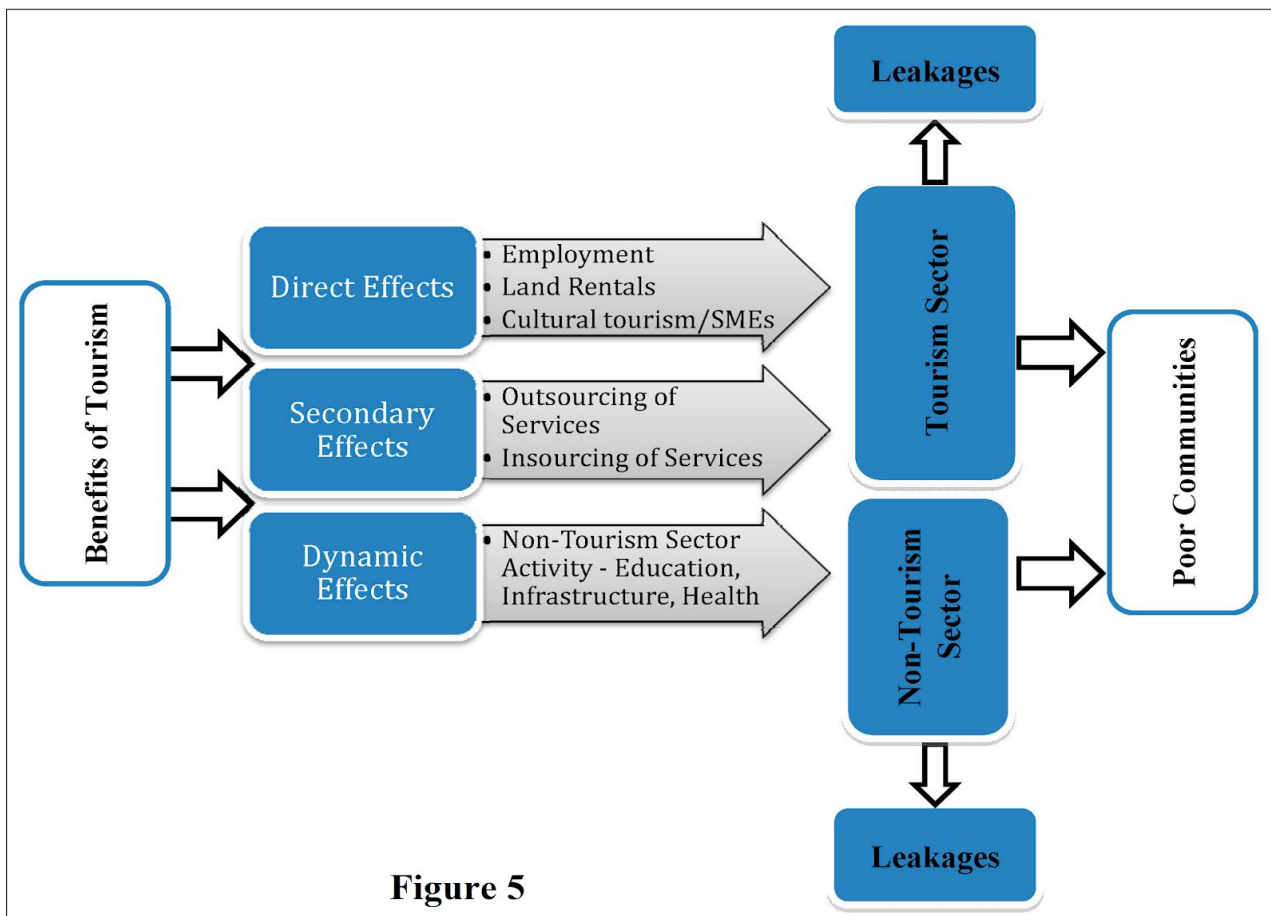


**FIGURE 4**

import-based locally-owned businesses such as Bragdon Energy and Preble Oil. As seen in

**Figure 4**, Millinocket’s reliance on foreign products and services takes economic capital out of local circulation, thereby limiting re-investment in the local economy.

An important element of Millinocket’s emerging economy not represented in Figure 3 is tourism. Although many locals have recognized, embraced and participated in the emerging tourism economy, many remain opposed. [17] A large push is underway to make Millinocket a premier 4-season destination for outdoor recreation due to Millinocket’s positioning within abundant natural/recreational opportunities. A lack of participation in the tourism economy from locals may create a gap to be filled by foreign investments that could further economic leakage and suppress local influence. In addition, if the tourism economy is not supported by local products/services, the cycle of economic leakage will continue while cultural and social capital further degrades. As seen in other extraction-based periphery economies, tourism could largely impact local economies (refer to **Figure 5**). [18]



**Figure 5**



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## Suggestions

United Cities and Local Governments (UCLG) sums up the sentiment that municipalities are uniquely positioned to tackle global issues: "local and regional governments are best placed to lead, since every community, settlement and territory must 'co-produce' a response that is context-specific." [19] The spirit of that notion implies that, in comparison to local and regional governments, national governments are quite incapable of solving the issues that face humanity more directly. Municipalities hold great significance and capacity in determining the fate of its own citizens, and collectively the world, in ensuring long-term survival. Remaining connected, open and mindful of the direction local governments lead is crucial to achieving long-term viability and ensuring quality of life for all of earth's inhabitants.

The following are suggestions created with input from the Sustainability Subcommittee, Economic Development Subcommittee, and members of the public.

### **Promoting Entrepreneurship**

Taking an entrepreneurial approach can be an effective economic development strategy. "Entrepreneurship offers potential in both community and economic development but must be community-wide with an integrated delivery system aimed at building a sustainable initiative." [20] Building a community-wide integrated delivery system can be maintained by creating economic diversification, developing strong local production in order to avoid economic leakage and requires recognizing and growing other types of community capital. Although economic capital is critical to the vibrancy of a local economy, it heavily relies on the health of all other forms of community capital.

There are three kinds of entrepreneurship: filling a hole/niche in a market (opening a store in a neighborhood that has a demand for its products), recreating/branding an existing product or service (Starbucks reinventing a coffee shop or Maine Heritage Timber creating Timber Chic), and inventing a totally new product or service (AOL and Facebook). Supporting entrepreneurial ventures can prevent economic leakage and bring diversity to strengthen a local economy. "For many communities and regions, traditional approaches to economic development do not seem to be working, even though substantial resources continue to be devoted to or set aside for recruiting corporations interested in relocating or expanding. Increasingly, the conversation is about how local assets can be engaged to create homegrown economic opportunities as opposed to importing them from elsewhere. Thus, the role of entrepreneurs as the catalyst that transforms assets into opportunity has become a topic of intense practical interest." [20]

Communities can become mobilized and grown as a whole, not exclusively economically, through interweaving and developing community capital.

Developing physical capital within a community is essential to its growth. Companies like Monsanto, a large international corporation focused heavily on agriculture-related products, recognized the significant human need for food and saw that monopolizing the food industry was a strong business plan. Millinocket has an incredible amount of local assets/capital that can be utilized to develop physical capital and therefore economic capital. With its own school system, hospital, restaurants and supermarkets, Millinocket has the ability to produce and supply goods and services to local and outside populations to prevent economic leakage while simultaneously generating/enriching human, social, cultural, economic, physical and natural capital. Through taking an entrepreneurial approach, Millinocket can develop its local assets and provide pathways towards a sustainable and self-reliant future.

#### **What can be done:**

- Policies, initiatives and programs implemented by the Town of Millinocket (more on this in “Municipal Policy/Programs”)
- Strengthen and make effective the Katahdin Chamber of Commerce to identify and engage with entrepreneurs
- Connecting resources to entrepreneurs and prospective businesses. Creating an inventory of local assets and resources can be a valuable tool.
- Filling local demand with local producers (more on this in “Filling Local Demand with Local Producers”)
- Creating space in the mill site for testing entrepreneurial ideas

#### **Currently available/in the works:**

- Our Katahdin’s co-working space in downtown Millinocket
- Katahdin Region Higher Education Center’s resources and events for local businesses and entrepreneurs
- Economic Development Committee as a platform for addressing matters of the local economy

### **Filling Local Demand with Local Producers**

The demand for many products and services are fixed/constant, such as heating oil, office supplies, electricity, and food. Stopping or slowing economic leakage starts by identifying ways local demand can be met and supported via Millinocket’s assets and resources. For example, it would not be feasible for tropical food products such as bananas and grapefruit to be supplied locally, nor does Millinocket have the land mass to economically grow crops such as wheat.

Despite limitations, in the case of food demand, Millinocket *does* have the capacity to produce value-added products. Value-added products can be defined as “a change in the physical state or form of the product (such as milling wheat into flour or making strawberries into jam), the production of a product in a manner that enhances its value, as demonstrated through a business plan (such as organically produced products), [and/or] the physical segregation of an agricultural commodity or product in a manner that results in the enhancement of the value of that commodity or product (such as an identity preserved marketing system).” [21]

Products such as heating oil, for example, are imported from foreign sources, thereby limiting profits made by local delivery companies such as Preble Oil and Bragdon Energy. However, there may be opportunities to produce biofuels locally that can be blended with oil, which would create new industry and divert a percentage economic capital from leaving the local economy. This type of thinking can apply to many other products and/or services that are already in high (and constant) demand.

## **Municipal Policy/Programs**

[THIS SECTION TO BE COMPLETED AFTER INPUT FROM PUBLIC AND SUBCOMMITTEES]

- Soft and hard infrastructure investment.
- Sustainable procurement policy -- not only renews municipal appreciation of local purchasing, but through press releases and working with Chamber of Commerce can let businesses and entrepreneurs know of opportunities to supply town...
- Food sovereignty policy
- Scale at transfer station
- Public-private partnerships with land/structures owned by municipality




## Conclusion

[THIS SECTION TO BE COMPLETED AFTER INPUT FROM PUBLIC AND SUBCOMMITTEES]

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