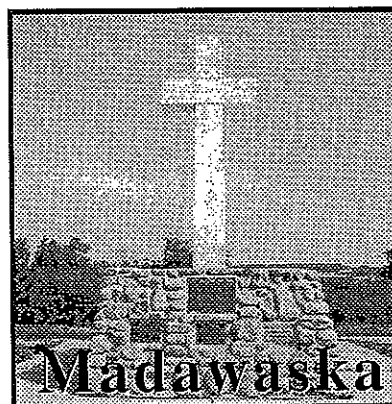


Transportation



Madawaska

Section 3 Transportation

An inventory and analysis of Madawaska's transportation system is important because without roads, sidewalks, parking and maintenance it would be impossible to enter or exit the community. The intent of this section is to provide road inventories, accident reports, and annual traffic counts and to use these statistic as tools to determine what transportation issues the Town will need to address in the next five to ten years.

Roads and Mileage

Roads are typically classified into three categories: arterials, collectors and local roads. Arterials are defined as roads intending to provide a high and quick degree of mobility. They link communities together and provide access into and out of various communities. Collectors act as conduits between arterials and local roads. Traffic is collected from a local residential road and delivered to the nearest arterial. Finally, local roads are designed to provide direct access to abutting properties.

The following table lists Madawaska's roads by categories and indicates the length of each road. The Town consists of 85.35 miles of roads; 8.75 arterial miles, 12.22 collector miles and 64.70 local miles.

Table 3-1
Road Category and Mileage, 1993

Arterials		Local Roads	
Bridge Street	.27	Fourth Avenue	.11
Route 1	8.48	Fox Street	.77
Collectors		French Street	.32
Beaulieu Road	6.37	Gagnon Road	11.61
Birch Point Road (part)	3.60	Gateway Street	.03
Fongemie Road (part)	.01	Gerard Street	.14
Lavertu Road (part)	2.24	Gendreau Road	2.71
Local Roads		Golf Course Road	3.56
Acadia Street	.20	Grandview	.31
Albert Street	.26	Green Acres Road	.76
Alder Street	.08	Green Point Road (part)	.46
Beaulieu Street	.15	High Street	.04
Birch Street	.22	Highland	.10
Birch Point Road (part)	1.13	Hillcrest	.07
Bresett Farm Road	.69	Jos Joachim Farm Road	2.23
Brookwood Street	.07	Lavertu Road (part)	5.43
Cannan Street	.05	Lavoie Street	.28
Caron Road	.40	Legion Street	.10
Cedar Street	.08	Levesque Street	.12
Chapel Road	.27	Levesque Farm Road	1.02
Clover Street	.13	Maple Road	.42
Cote Farm Road	.23	Maple Street	.12
Country Lane	.10	Martin Street	.06
Crestwood Avenue	.07	Michaud Farm Road	.62
Cyr Road	1.49	Mill Street	.31
Dionne Road	1.21	Morin Lumber	.07
Dionne Drive		Mountain View	.32
Dufour Road	2.15	Nineteenth Avenue	.84
Eighteenth Avenue	.19	N Eighteenth Avenue	.08
Eleventh Avenue	2.43	N Fifth Avenue	.05
Endico Farm Road	.66	N Fifteenth Avenue	.09
Evangeline Street	.11	N Fourteenth Avenue	.08
Fifth Avenue	.26	N Fourth Avenue	.05
Fifteenth Avenue	.13	N Seventh Avenue	.13
First Avenue	.05	N Sixteenth Avenue	.09
First Avenue Extension	.37	N Sixth Avenue	.20
Fongemie Farm Road (part)	1.94	N Third Avenue	.07
Fournier Road	2.80	N Thirteenth Avenue	.08
Fourteenth Avenue	.27	Old Post Office Road	.65
Parkwood	.06	Park Street	.08
Petite Montagne	1.46	Summer Street	.55
Pine Street	.09	Talbot Drive	.17
Pleasant Street	.50	Tenth Avenue	.08
Pumping Station Road	.18	Terre Des Soeurs	1.10
Riverview Street	.72	Third Avenue	.51
		Third Avenue Annex	.17

(continued)

Local Roads		Local Roads	
Romain Farm Road	.25	Thirteenth Avenue	.38
St. Catherine Street	.15	Three Barn Road	.51
St. David Siding	.35	Town Garage Road	.05
St. Thomas Street	.41	Twelfth Avenue	.40
School Street	.18	Twentieth Avenue	.15
School Cross Road	.12	Twenty-Fifth Avenue	.43
Second Avenue	.06	Twenty-First Avenue	.26
Seventeenth Avenue	.13	Twenty-Second Avenue	.40
Seventh Avenue	.50	Twenty-Third Avenue	.18
Sixteenth Avenue	.22	Twenty-Sixth Avenue	.34
Sixth Avenue	.22	Windsor Avenue	.11
S First Avenue	.04	Winter Street	.17
S Seventh Avenue	.01	"Y" Road	.04
Spring Street	.15	"Z" Road	.05
Spruce Street	.04		

Source: Maine Department of Transportation

Annual Average Daily Traffic (AADT)

In an attempt to monitor traffic on roads and streets, the Department of Transportation measures the Annual Average Daily Traffic Volumes for Maine communities. Volumes are determined by placing an automatic traffic recorder at a given location for 24 or 48 hours. Table 3-2 compares 1978 and 1989 AADT counts for selected sections of roads in Madawaska. As indicated in the table, the volume of traffic has increased in all selected areas, especially in and around Bridge Street.

Table 3-2
Annual Average Daily Traffic 1978 and 1989

Street/Location	AADT 1978	AADT 1989
Main Street		
Between 11th Ave. and Bridge St.	10,721	15,910
Between Bridge St. and 12th Ave	10,100	16,690
Madawaska/Frenchville Townline	3,690	4,480
Grand Isle/Madawaska Townline	1,490	1,890
Bridge Street - International Bridge	4,240	7,230
4th Avenue - Between Alder and Levesque St.	520	950

Source: 1978 and 1989 AADT

Accident Data

The Maine Department of Transportation collects and analyzes the conditions involved in vehicular accidents. The Critical Rate Factor (CRF), a comparison of the actual accident rate to the expected accident based on road type, vehicle miles traveled and the statewide coverage accident ratio, is computed for all accidents. Table 3-3 provides accident information on Madawaska's potential "trouble" areas. Trouble areas were defined as: 1) accidents with a CRF greater than 1.00 and 2) locations with eight or more reported accidents.

Table 3-3
Selected Accident Locations

Location	Number of Accidents	CRF
Main Street and 19th Avenue	8	1.02
Main Street and Mill Street	13	1.05
Mill Street and 16th Avenue	10	1.41
On Main Street between 10th and 11th	9	1.07
On Main Street between Legion and 10th	11	1.02
On Main Street between N. 7th and Legion	15	1.29

Source: Department of Transportation: Accident Summary Input

Road Inventory and Repairs

The following tables provide information about Madawaska's roads and repair schedule. Table 3-4 divides the road inventory by type, surface and condition. The type of road is determined by location and use. The condition of the road is an overall rating of the road's drainage, base and alignment. Table 3-5 outlines the public works department road projects for the next five years.

Table 3-4
Road Inventory

Name	Type	Surface	Condition	Name	Type	Surface	Condition
Acadia Street	Urban	Paved	Good	Albert Street	Urban	Paved	Good
Alder Street	Urban	Paved	Good	Beaulieu Road	Economic	Paved	Good
Beaulieu Street	Urban	Paved	Good	Birch Street	Urban	Paved	Good
Birch Point Road	Rural Col	Paved	Good	Bresett Farm Road	Rural	Gravel	Good
Bridge Street	Economic	Paved	Good	Brookwood Street	Urban	Paved	Good
Cannan Street	Urban	Paved	Good	Caron Road	Rural	Paved	Good
Cedar Street	Urban	Paved	Good	Chapel Road	Limited	Paved	Good
Clover Street	Urban	Paved	Good	Cote Farm Road	Rural	Gravel	Fair
Country Lane	Rural	Gravel	Good	Crestwood Avenue	Urban	Paved	Good
Cyr Road	Limited	Gravel	Fair	Dionne Road	Economic	Paved	Good
Dionne Drive	Urban	Gravel	Good	Dufour Road	Rural	Sand-seal	Fair
Eighteenth Avenue	Urban	Paved	Good	Eleventh Avenue	Collector	Paved	Good
Endico Farm Road	Rural	Gravel	Good	Evangeline Street	Urban	Gravel	Good
Fifth Avenue	Urban	Paved	Good	Fifteenth Avenue	Urban	Paved	Good
First Avenue	Urban	Paved	Good	First Avenue Ext.	Urban	Paved	Good
Fongemie Farm Road	Rural	Sand-seal	Fair	Fournier Road	Rural	Gravel	Good
Fourteenth Avenue	Urban	Paved	Good	Fourth Avenue	Urban	Paved	Good
Fox Street	Collector	Paved	Good	French Street	Urban	Paved	Good
Gagnon Road	Economic	Paved	Good	Gerard Street	Urban	Paved	Good
Gendreau Road	Rural Col	Paved	Good	Golf Course Road	Rural Col	Paved	Good
Grandview	Urban	Paved	Good	Green Acres Road	Rural	Gravel	Good
Green Point Road	Rural	Gravel	Good	High Street	Urban	Paved	Good
Highland	Urban	Paved	Good	Hillcrest	Urban	Paved	Good
Jos Joachim Farm Road	Rural	Gravel	Fair	Lavertu Road	Rural	Paved	Good
Lavoie Street	Urban	Paved	Good	Legion Street	Urban	Paved	Good
Levesque Street	Urban	Sand-seal	Fair	Levesque Farm Road	Rural	Gravel	Good
Maple Road	Limited	Gravel	Good	Maple Street	Urban	Paved	Good
Martin Street	Urban	Paved	Good	Michaud Farm Road	Rural	Gravel	Fair
Mill Street	Economic	Paved	Good	Morin Lumber	Limited	Paved	Good
Mountain View	Urban	Paved	Fair	Nineteenth Avenue	Collector	Paved	Good
N Eighteenth Avenue	Urban	Paved	Good	N Fifth Avenue	Urban	Paved	Good
N Fifteenth Avenue	Urban	Paved	Good	N Fourteenth Avenue	Urban	Paved	Good
N Fourth Avenue	Urban	Paved	Good	N Seventh Avenue	Urban	Paved	Good
N Sixteenth Avenue	Urban	Paved	Good	N Sixth Avenue	Urban	Paved	Good
N Third Avenue	Urban	Paved	Good	N Thirteenth Avenue	Urban	Paved	Good
Old Post Office Road	Rural	Paved	Good	Park Street	Urban	Paved	Good
Parkwood	Urban	Paved	Good	Pelletier Siding	Limited	Gravel	Good
Petite Montagne	Rural	Paved	Good	Pine Street	Urban	Paved	Good
Pleasant Street	Urban	Paved	Poor	Pumping Station Rd	Limited	Paved	Good
Riverview Street	Urban	Paved	Good	Romain Farm Road	Rural	Gravel	Fair
St. Catherine Street	Urban	Paved	Good	St. David Siding	Limited	Gravel	Good
St. Thomas Street	Urban	Paved	Good	School Street	Urban	Paved	Good
Second Avenue	Urban	Paved	Good	Seventeenth Avenue	Urban	Paved	Good
Seventh Avenue	Urban	Paved	Good	Sixteenth Avenue	Urban	Paved	Good
Sixth Avenue	Urban	Paved	Good	S First Avenue	Urban	Paved	Good

(continued)

Name	Type	Surface	Condition	Name	Type	Surface	Condition
S Seventh Avenue	Urban	Paved	Good	Spring Street	Urban	Paved	Good
Spruce Street	Urban	Paved	Good	Summer Street	Urban	Paved	Good
Talbot Drive	Rural	Paved	Good	Tenth Avenue	Urban	Paved	Good
Terre Des Soeurs	Rural	Gravel	Poor	Third Avenue	Urban	Paved	Good
Third Avenue Annex	Urban	Paved	Good	Thirteenth Avenue	Urban	Paved	Good
Three Barn Road	Rural	Sand-seal	Fair	Town Garage Road	Limited	Paved	Fair
Twelfth Avenue	Urban	Paved	Good	Twentieth Avenue	Urban	Paved	Good
Twenty-Fifth Avenue	Urban	Paved	Good	Twenty-First Avenue	Collector	Paved	Good
Twenty-Second Avenue	Urban	Paved	Good	Twenty-Third Avenue	Urban	Paved	Good
Twenty-Sixth Avenue	Collector	Paved	Good	US Route 1	State Route	Paved	Good
Windsor Avenue	Urban	Paved	Good	Winter Street	Urban	Paved	Good

Source: Road Commissioner

Table 3-5
Repairs: 1994-2000

Road	Location	Date	Repair
ox Street	25th Ave and Lavoie Brook	1994	General
Spruce Street	---	1994	General
22nd Avenue	Spruce to end of 22nd Ave	1994	General
18th Avenue	---	1994	General
Mill Street	Main St. to N. 16th Ave.	1994	Storm drain
Main Street	18th Ave and 16th Ave.	1994	Sidewalks
Bridge Street	---	1994	Overlay
Gerard Street	---	1994	Overlay
Three Barn Rd	---	1994	Overlay
Green Acres	---	1994	Overlay
26th Avenue	Fox St and Main St.	1994-1995	General
19th Avenue	Dionne Drive and Fox St	1994-1995	General
14th Avenue	---	1994-1995	Rehabilitate
Acadia	---	1994-1995	Rehabilitate
13th Avenue	Main St. and Fox St.	1994-1995	Rehabilitate
Pleasant St.	---	1994-1995	Rehabilitate
Country Lane	---	1994-1995	400 ft. road
Dufour Road	---	1994-1995	Overlay
16th Avenue	---	1995-1996	General
N. 15th Avenue	---	1995-1996	Rehabilitate
East Main St	23rd Ave. to Gagnon Road	1996	Water and Sewer
Mountain View	---	1996-1997	General
7th Avenue	---	1998-1999	General
Summer Street	---	1998-2000	General
Winter Street	---	1998-2000	General
Spring Street	---	1998-2000	General

Source: Road Commissioner

Road Standards

Madawaska's road construction standards are outlined in the 1977 Land Use and Development Code. The following are excerpts detailing standards for local residential, collector and arterial streets.

Local Residential Streets. All local residential streets shall have a minimum street right-of-way width of 50 feet: a 28-foot roadway consisting of two ten foot lanes for traffic and 8' of space on one side of the roadway for curb side parking. The street shall be graded to a subgrade of not less than 12 inches in the roadway location. The roadway shall be built to a minimum thickness of 12 inches with heavy road gravel which meets the approval of the Road Commissioner.

Collector Streets. All collector streets shall be designed and constructed in accordance with the specifications for the local residential streets except the paved traveled surface shall be at least 32 feet in width.

Arterial Streets. All arterial streets shall have minimum right-of-way width of 68 feet and a roadway of 40 feet in width. The street shall be graded to a subgrade of not less than 12 inches in the roadway location. The subgrade shall be carefully shaped and thoroughly compacted before gravel is set in place. The roadway shall be built to a minimum thickness of 12 inches with heavy road gravel which meets the approval of the Road Commissioner.

Parking

The Town's major parking issues have centered around the downtown area; 10th Avenue to 14th Avenue. During the downtown revitalization project the angle parking was replaced with parallel parking and therefore reduced the number of available spaces. Although this change has caused some minor inconveniences, the Town has compensated by providing a free public parking lot on the corner of 11th Avenue and Main St., and by limiting on-street parking to two hour increments. There are approximately seventy parking spaces (22 spaced public parking lot and 48 on-street spaces) within walking distance to the center of the downtown.

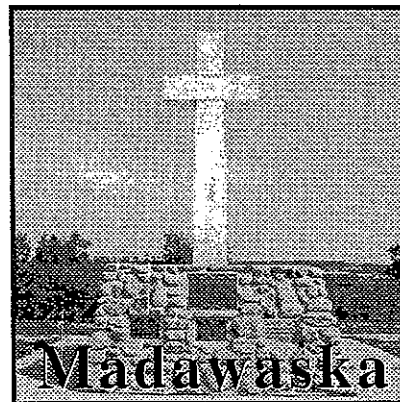
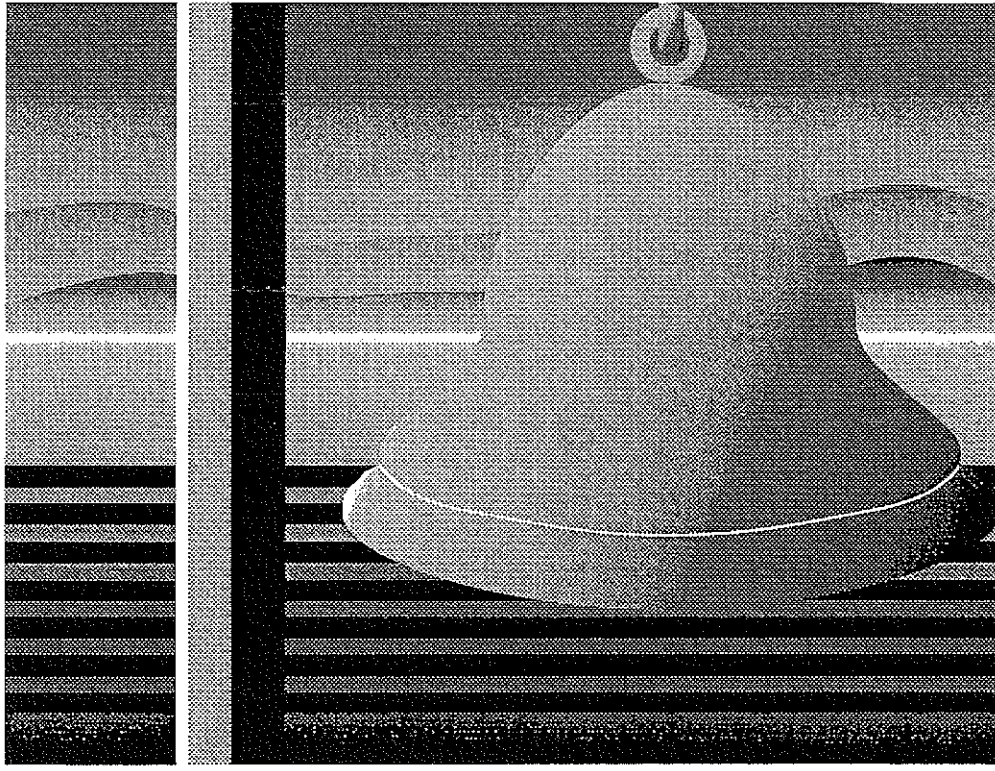
Sidewalks

In 1987, Madawaska received a two-year Community Development Block Grant (CDBG) to initiate the revitalization of the downtown area. The grant provided funds to address serious problems, one which was the deterioration of the sidewalks. The Town used funds to rebuild sidewalks in conjunction with the Maine Department of Transportation's reconstruction of Main Street. Since the completion of the project, ongoing maintenance, upkeep and repairs have kept the sidewalks in excellent condition.

Alternative Modes of Transportation

Although most of this section has focused on transportation by private automobile, the Town through appropriated funds supports two other modes of transportation. A portion of the funds made available to the Aroostook Area Agency on Aging are used on bus services necessary to transport people to medical appointments, meal sites, grocery shopping and other locations. The Town also appropriates funds to the Regional Airport, located in Frenchville.

Public Facilities And Services



Section 4 Public Facilities and Services

Municipal Administration

Personnel and Equipment

The Town of Madawaska operates on a selectmen-manager form of government. The Board of Selectmen consists of five elected people responsible for the proper functioning of the Town. Since these responsibilities are extensive, the Board must appoint people to the following municipal officials: town manager, road commissioner, treasurer, deputy treasurer, town clerk, deputy town clerk, tax collector, deputy tax collector, code enforcement officer, general assistance administrator, bookkeeper, accounts payable/payroll clerk, executive secretary, code enforcement executive secretary, and department heads and directors. The Planning Board and Board of Appeals are responsible for land use issues.

The daily operations of the administration are aided by the Gemini software package that includes; budgeting, payroll, utility billing, tax billing, cash receipting and word processing programs. The system enables the administration to serve the public by operating quickly and efficiently.

Past Trends

In the last decade the administration has seen an increased need for training in the field of economic development and a demand for financial assistance to small businesses. Individuals or groups interested in developing businesses are increasingly relying on the Town for technical as well as financial assistance. The last decade has seen the municipal administration change from a hierarchical service industry to a community outreach service.

The 1980's have also illustrated the need for well-educated and trained employees. New technologies and changing laws have made ongoing education and training an integral part of general administrative duties.

Present Needs

In order to understand the future needs of the community, an analysis of past trends, current needs and citizens' demands is essential. Administrators must be ready to provide the necessary services for the proper functioning of the community. The following issues need to be addressed and changes made to enable the municipality to function internally as well as externally:

1. Computerization of maps;
2. Capital improvement projects around the office
3. Staff participation in continued education and workshops;
4. Revision of policy associated with rural development;
5. Small business assistance; and
6. An increase in citizen participation especially in the areas of public works and recreation.

Police Protection

Personnel and Equipment

The Madawaska Police Department is staffed by the chief of police, assistant police chief, four full-time constables, six part-time constables, and one secretary. The Department currently has two police cruisers, a 1990 and 1992 Ford Queen Victoria. Cars are purchased every other year and financed through a Police Car Reserve Fund.

Crime

As recorded by the Department of Public Safety, Madawaska's 1991 crime rate was 27.70, and clearance rate 80.3. The following table provides a comparison among Aroostook County towns. Although Madawaska's total crimes were one of the highest, Madawaska had the highest clearance rate.

Table 4-1
1991 Crime Statistics

	Total Crimes	Clearance Rate	Crime Rate per 1,000 Population
Madawaska	137	80.3	27.70
Caribou	257	55.3	28.79
Fort Fairfield	60	45.3	14.55
Fort Kent	108	47.2	23.02
Presque Isle	248	44.8	23.48
Van Buren	50	36.0	16.95

Source: Maine Department of Public Safety: Crime in Maine 1991

Future Needs

During the day the current dispatching system is run by the secretary or on-duty officers. In the evening, Fraser Paper LTD takes on the responsibility for receiving and dispatching calls from their radio post located at the mill. Although this service is convenient, it is not efficient. Evening dispatchers change with the mill shifts and are not aware or updated on the happenings of the Police Department. In order for the station to run at full capacity a twenty-four hour dispatching system would need to be purchased.

Another future need of the police department is not a physical need, but a change of ideology. The Madawaska Police Department is currently operating as a pro-active force. The department supports many activities (i.e. D.A.R.E. at the elementary and middle schools, and bicycle safety programs) geared toward the prevention of crime. The department is realizing that this approach is not 100% effective and is looking toward community policing. The community and the police

department would unite and share the responsibility of providing citizens a safe environment to live and work.

Lastly, the Madawaska Police Department is interested in the computerization of their daily operations. Through computerization, driving and criminal records could be obtained instantly, and monthly reports compiled in minutes. Time spent waiting for records and manually preparing reports could be spent on providing services to the community.

Fire Protection

Personnel and Equipment

In order to protect the 72 square miles of Madawaska's urban and rural areas, two stations are in operation. Station 1 is housed in the Safety Complex Building and Station 2 is located on Lavertu Settlement Road near Long Lake. Each station is staffed by the same call employees; 12 part-time officers, 1 electrician, 45 firemen, 2 mechanics, and 1 clerk.

The Maine Forest Service, Forest Fire Control, located in Portage, provides equipment and manpower as a secondary response fire protection service to the Town for brush and forest fires at no cost. The primary response for brush and forest fires is provided by the Town, with any additional assistance provided by the Forest Service, upon request.

Table 4-2
1992 Equipment

Class	Year	Make	Type	Station Location
E1	1960	International	1000 Gal. Pump and Tank	2
E2	1964	Ford	1000 Gal. Pump and Tank	1
E3	1976	Pierce Arrow	1250 Gal. Pump and 1000 Gal. Tank	1
E4	1984	Pierce Arrow	1250 Gal. Pump and 1000 Gal. Tank	1
T1	1969	Chevrolet	1000 Gal. Tank	2
T2	1971	International	1250 Gal. Tank	1
T3	1969	International	2600 Gal. Tank	2
T4	1979	GMC	2600 Gal. Tank	2
T5	1982	GMC	Street Washer	1
R1	1973	Chevrolet	Pick-up	1

Key: E-Engine, T-Tank, R-Rescue Source: Madawaska Fire Chief

The Fire Department also owns two portable generators, two stationary generators, the Jaws of Life, and an OSHA required industrial clothes washer.

Equipment Changes

In an effort to decrease insurance costs, Station 2 underwent the following equipment changes:

1. Purchased two 3000 gallon drop tanks;
2. Purchased a deck-gun;
3. Purchased a 250 gallon/minute of water flow portable pump;
4. Installed a water hydrant into long lake with the ability to pump 1130 gallon/minute of water flow; and
5. Upgraded the 1969 international 2600 gallon tank and t4 1979 GMC 2600 gallon tank.

General equipment and facility changes included:

1. Purchasing a 4.5 15 cfm air compressor;
2. Two stationary generators;
3. Eliminating telephone system and replaced it with rf link; and
4. Moving the base station from Cyr mountain and town office to the 11TH Ave. radio tower.

Future Needs

In order for the department to continue to protect the citizens of Madawaska, the computerization of records, expensive equipment changes, upgrades, and modernization efforts must take place periodically. The Department is interested in establishing a capital investment plan to purchase a new fire truck every ten years. The purchase would ensure that the Department's oldest truck would be forty years old at all times.

Ambulance Service

Personnel and Equipment

The Madawaska Ambulance Department is staffed by six full-time and three part-time Emergency Medical Technicians (EMTs). The Department owns and operates two fully-equipped ambulances and is located at the Safety Complex Building. The Ambulance Department is involved in an internship program offering in-class training and is looking to expand the program to included training on actual calls.

Future Needs

The Department's immediate need is a new ambulance to replace the 1978 unit which has 105,280 miles. The Department is also starting a Capital Improvement Fund to replace the 1982 unit in 1997. Other needs include the computerization. If billing procedures were to be computerized, less time would be spent on accounting procedures, and record keeping accuracy would be increased. The Department is also interested in advanced training for their EMTs. This training would enable EMTs to become paramedics and have the authorization the administer medications, as well as provide basic services for the community.

Public Works Department

Personnel and Equipment

The public works department is located in the Town Garage and run by a highway foreman, six full-time employees, three part-time employees, and an office clerk. The following table lists the department's equipment by year, make and type.

Past Trends/Future Needs

In 1992, the Madawaska Public Works Department underwent a down-sizing measure which cut the staff from thirteen full-time employees to six full-time employees. This cut caused the Department's quality of work to decrease from 100% to 90%.

Within the next ten years, the Department anticipates an increase in difficult demands. Jobs and projects will require skilled, qualified and an increase in the number of employees. It is feared that overworked, trained employees will leave their jobs, and the department will need to work with a new group of untrained employees.

Table 4-4
1994 Equipment

Year	Make	Type	Year	Make	Type
1988	Chevy	4WD Pickup	1993	CAT	Loader
1989	Ford	LTD	1993	John Deere	Backhoe
1983	Ford	Crew Cab Pickup	1988	GMC	Pickup
1979	Dodge	Cab Pickup	1948	Ford	Conveyor Screen
1986	Ford	Plowtruck	1988	Chevy	Crewcab
1983	Ford	Plowtruck	1977	Frink	Snowblower
1975	Ford	Plowtruck	1952	Worthington	Compressor
1978	GMC	Snowtrack	1984	Bombardier	Sidewalk Tractor
1989	IHC	Plowtruck	1974	Bombardier	Sidewalk Tractor
1990	INTL	Plowtruck	1991	Blanchette	Snowblower
1981	GMC	Tanker Truck	1988	FMC	Sweeper
1976	Ford	Snow Rack	1986	Waldon	Tow-Behind Sweeper
1968	CAT	Grader	1974	Chevy	Step-van
1976	CAT	Grader	1965	Homemade	Steamer
1969	CAT	Loader	1984	Tamper	Wacker
1983	CAT	Loader	1975	-	Paint Striper

Source: Madawaska Public Works

Education

The Town of Madawaska operates its own school system and enrolls students from Grand Isle and Edmundston on a tuition basis. Table 4-5 illustrates the number of students enrolled by grade for school years 1984-1993. Enrollment figures for students in elementary special education class (Elm. Spec.) and high school special education classes (Sec. Spec.) are also included. In the past ten years enrollment figures have dropped by 20%.

Table 4-5
Enrollment Figures, 1983-1993

Grade	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Elm. Spec.	20	34	32	43	25	48	51	78	61	49
K	70	69	77	79	67	48	59	48	69	43
1st	64	65	67	85	82	65	47	56	50	48
2nd	63	60	60	59	82	74	67	45	60	61
3rd	60	63	56	59	60	75	74	64	46	44
4th	70	67	59	56	61	62	74	68	69	62
5th	67	69	62	64	58	63	64	71	73	44
6th	79	68	71	57	63	56	55	62	72	73
7th	01	76	63	67	66	65	67	61	65	84
8th	96	94	73	63	82	62	65	68	61	93
9th	07	99	92	77	72	84	67	65	70	70
10th	96	102	94	85	79	67	84	63	63	64
11th	92	95	99	91	94	74	69	82	60	73
12th	03	91	97	102	102	92	74	71	83	75
Sec. Spec.	16	19	27	28	4	19	23	23	21	4
Total	1104	1071	1029	1015	997	954	940	925	923	887

Source: Superintendent's Office

Table 4-6 Existing Schools

School	Grades Housed	Location	Age In Years
Evangeline School	K - 2	5th Avenue	68
Acadia School	3 - 5	282 Main Street	60
Madawaska Middle/High School	6 - 12	7th Avenue	45

Sources: Town of Madawaska Tax Maps

Past Trends/Present Needs

The largest impact on the school system has come from the computer age. Not only has the curriculum changed, but also administrative duties and techniques. Billing, bookkeeping, attendance records, report cards and guidance counseling programs have all become computerized. The immediate needs of the school system include the construction of a new K-5 elementary school scheduled to open fall of 1994; making schools handicap accessible; and repairs and renovations to school buildings.

Future Needs

Although amounts of state and federal education funding determine immediate as well as future needs, the following list provides a general overview of what is needed for the proper functioning of the school department:

1. Updating and upgrading obsolete computer systems;
2. Making all school buildings handicap accessible;
3. Providing gifted and talented programs for students in grades K-8;
4. Computerization of the library to expand research capabilities; and
5. General repairs and renovations.

Public Library

The Madawaska Public Library is located on Main Street and is open Monday - Friday (10:00 AM - 8:00 PM) and Saturday (1:00 PM - 3:00 PM). Four employees are necessary for the proper functioning and maintenance of the library.

Existing Equipment

Along with the 20,000 books, the library has a micro-film and micro-fiche machine. Although not scheduled to be functioning until 1995, the library will be computerized. Employees are currently entering information and placing bar codes on all books.

Past Trends

In 1991 the library staff applied for a grant from the Library Service and Construction Act, and were awarded a \$137,600 matching grant. With these funds the library was expanded to provide room for maps, a video collection, genealogy room and office space. Due to the expansion, the number of adult users has increased. In order to meet the community's interest in Madawaska's history, the library staff applied and was awarded a \$500.00 grant from the Rose B. Rudman Trust. These funds are being used for the proper preservation of pictures and historical documents.

Present Needs

The immediate need of the library is the continued development and maintenance of the genealogy room. To keep up with the interest in history and genealogy; cataloging, covering and

organizing books, and proper care of photographs is necessary. To meet this need, the library staff will continue to look for preservation grants.

Solid Waste Disposal

The Northern Aroostook Regional Incinerator Facility (NARIF) serves as a disposal site for Madawaska, Frenchville, Fort Kent, Sinclair, Guerrette, T-17R5, T-17R4, New Canada, Wallagrass, Eagle Lake, Winterville, Portage Lake, Clayton Lake, and Grand Isle. The regular operations of the facility require three full-time employees. The facility has room available for sorting, processing, and storing plastics and paper collected from the recycling bins.

Table 4-7
Equipment

Equipment	Use
CAT IT12	Used to load garbage.
Crane	Used to load garbage.
International UB240	Hydraulic pump unit.
International 1986	Used to pull trailers out of garage.
24 Igloo recycling bins	Used for recycling plastics and paper.
2 Box trailers	Used for collection and storage.
Down stroke baler	Used for baling paper and plastics.
Forklift	Used to moved pallets.

Source: Solid Waste Superintendent

Present Use

On July 27, 1992 NARIF was ordered by the Environmental Protection Agency (EPA) and the Department of Environmental Protection (DEP) to close the facility due to an inability to meet air-emission standards. The facility has since served as a transfer station; loading, transporting and dumping solid waste in Orrington (PERC) at a cost \$44.00/ton with cost of living adjustments due to interest rates and ash disposal.

Future Uses and Needs

NARIF is now looking to become a recycling center with the ability to sort solid waste by categories (i.e. paper, cardboard, plastics, and white goods) and to sell the recycled goods. In order to become a recycling center, purchases have been made to upgrade the facility and only a separating conveyor remains to be purchased. The superintendent of NARIF intends to develop a policy requiring commercial businesses to separate their waste by cardboard, office paper and non-recyclable wastes.

Sewage Disposal

Madawaska Water Pollution Control Plant

The Madawaska Water Pollution Control Plant is owned by the Town of Madawaska and operated by two full-time employees and one part-time lab technician. The financing of the plant is done through sewer usage fees that are billed twice a year, in February and July. Sewer rates are figured in two ways 1) if a building is metered for water the rate is \$1.15/100 cubic feet of water used, with a minimum bill of \$27.60, or 2) if a building is not metered, a flat rate of \$46.00 is charged biannually.

Treatment

The treatment plant is responsible for providing services to all areas in Madawaska by 1) direct sewer lines, or 2) the maintenance of private septic tanks. Sewer lines provide services to buildings located on U.S. Route 1 from the Madawaska/Frenchville townline to Fournier Road and all buildings located in the urban area. The Water Pollution Control Plant operates a secondary treatment system. Through a chemical process, the plant removes between 85% and 95% of the solids from the water before it is returned to the St. John River. The remaining sludge is disposed of in a land spread on their 30 acre Endico Farm site and plowed over. During the winter months the sludge is placed in an underground concrete storage facility.

The treatment plant is designed to handle .6 million gallons of sewerage per day and a maximum of two million gallons at any given time on a short-term basis. On the occasion that levels of sewerage would exceed two million gallons, two overflows one at Fraser Paper LTD. and the other at the main pump station, would send the waste water into the St. John River.

Future

The future needs of the Water Pollution Control Plant will depend on a CSO (combined sewage overflow) study that will locate problem areas. Results are expected at end of 1994 with either lead to the replacement of sewers or upgrades and changes to the treatment facility.

When the treatment plant was first built, it was built to accommodate the existing 1977 community. Although the population has decreased since 1977, the number of households has increased by 9.4% between 1980-1990. This increase in households has caused the treatment plant to work at full capacity. Any future development will necessitate the enlargement and upgrade of the existing plant.

Water Supply

Madawaska Water District

The Madawaska Water District is governed by the Public Utilities Commission (PUC) and a three-member Board of Trustees, and operated by four licensed employees. The PUC is responsible for setting regulations and guidelines, and the Board is responsible for setting

policies. The Board members are elected for a three-year term by members in the water district at the annual January meeting.

Service Area

The Water District is responsible for servicing the area between the Madawaska/Frenchville townline to Fournier Road. Although there are no future plans for expansion, there are plans for replacing the existing pipe from Acadia School to Gagnon Road. The project is scheduled to take place in 1995 with funds from a CDBG (Community Development Block Grant) and in collaboration with the Maine Department of Transportation and the Madawaska Water Pollution Control Plant.

Source

Before June 28, 1992, the Water District got water from Martin Brook on 11th Avenue, and the St. John River. Since then, the Department of Human Services has stopped the use of Martin Brook because the surface water was not being sufficiently filtered. The St. John River provides Class B surface water and its intake is located at the Madawaska/Frenchville townline.

Treatment

The treatment facility, located on West Main Street, filters the water through a chemical process for flocculation, which causes soil to form into clumps before the soil is removed. The water is then sent through a rapid sand filter which has a turbidity level, amount of suspended foreign particles, of 0.5.

Distribution/Rates

During the day, water is pumped to a 500,000 gallon holding tank on 7th Avenue and directly to buildings. In the evening, water is supplied from the holding tank to users by means of gravity. The following table illustrates the users of water by percentage.

Table 4-8
Users of Water

User	Annual Rate	User	Annual Rate
Metered Residential	49.0%	Industry	38.0%
Commercial	12.5%	Government	1.5%

Source: Madawaska Water District

The Madawaska Water District is financed through revenues received from their water rates. The following charts illustrate their current rates.

Table 4-9
Meter Rates

Quarterly Rates			
For first	1,200 cu. ft.	per quarter	\$27.95
Next	1,800 cu. ft.	per quarter	1.58 per 100 cu. ft.
Next	27,000 cu. ft.	per quarter	.91 per 100 cu. ft.
In excess of	30,000 cu. ft.	per quarter	.75 per 100 cu. ft.

Source: Madawaska Water District

Table 4-10
Minimum Charge

Meter Size	Minimum Bill Per Quarter	Minimum Allowance Per Quarter
5/8"	\$ 27.95	1,200
3/4"	42.17	2,100
1"	61.85	3,600
1.5"	94.61	7,200
2"	158.29	12,000
3"	247.49	24,000
4"	347.09	36,000
6"	617.09	72,000
8"	1157.09	144,000

Source: Madawaska Water District

Future

The current pumping capacity of the system is one million gallons of water per day, and the community is using 400,000 gallons per day. Therefore, future expansions will not be necessary, but upgrades and replacement of equipment will be necessary. With changing regulations and drinking water standards, a second water storage tank is a priority. Currently, during a heavy rainfall the water becomes dirtier than normal and in order to efficiently treat the water, the plant needs to shut down. If the Water District had a second reservoir tank the plant could shut down to treat the water and at the same time provide everyday services.

Downtown Revitalization

In 1987, Madawaska received a two-year CDBG grant to initiate the revitalization of the downtown area. The grant provided funds to address serious problems in Madawaska's downtown, central business area. The following problems were addressed:

1. **Deteriorated sidewalks.** The Town used funds to rebuild sidewalks in conjunction with the Maine Department of Transportation's reconstruction of Main Street.
2. **Underground Electrical Services.** Funds were used to place 25% of the electrical services on the north side of Main Street underground. The need for underground services was based on topography and the recommendations of Maine Public Service Company.
3. **Facade Grants.** The Town used this money to fund sixteen facade grants aimed at fixing up downtown properties.
4. **Revolving Loan Fund.** These funds were used to establish a temporary revolving loan program that stimulated economic development and promoted the creation of jobs for low-moderate income people for two years. Loan payments are currently used for single-family housing and ongoing economic development.
5. **Handicap Accessibility.** Funds were used to help the St. John Valley Association for Handicapped Citizens Inc. make changes and repairs to increase the handicap accessibility of their building.

Parking

The Town of Madawaska maintains 135, two-hour parking spaces located between 1st Avenue and 16th Avenue the downtown area and a 22 space public parking lot located on the corner of 11th Avenue and Main Street. Additional public parking can be found on avenues located between 6th Avenue and 14th Avenue, as well as in both the Ames and K- Mart shopping centers.

Street Lights

Prior to a Board of Selectmen's meeting on June 16, 1993 the following policy was utilized for the placement of street lights:

1. Citizen makes a written request to the Town of Madawaska.
2. Police department reviews location and makes a recommendation.
3. Citizen is made aware of recommendation.
4. Board of Selectmen makes final decision.

After the meeting moratorium was placed on street lights except in an extreme emergency. Table 4-11 illustrates the amount of money expended on street lights in Madawaska as compared to surrounding communities. The Town's street light account is second highest to Presque Isle, a community with double the population of Madawaska.

Table 4-11
Street Lights, 1993

	Type	Quantity	\$ Per Year
Madawaska	9,500 Sodium	359	50,145.10
	16,000 Sodium	35	5,867.40
	27,500 Sodium	5	1,466.40
			<hr/> 57,478.90
Fort Fairfield	9,500 Sodium	297	41,485.00
Fort Kent	9,500 Sodium	60	8,380.80
Presque Isle	4,000 Sodium	374	42,770.65
	9,500 Sodium	157	21,929.75
	16,000 Sodium	137	22,966.70
	27,500 Sodium	48	14,77.45
			<hr/> 101,744.55

Sources: Respective Town Offices

Cemeteries

There are four cemeteries in Madawaska: one located on US Route across the street from the St David Catholic Church (2.5 acres), the second on West Main Street (4.5 acres), the third along US Route 1 (.39 acres), and a fourth on Dionne Road adjacent to the Church of Madawaska Shinning Light Assembly (.30 acres). Although none are at full capacity two issues must be kept in mind: the age of the people in the community and the saturation of open space.

Municipal Buildings

1. Town Office

Location: 98 St Thomas Street

Map/Lot: Map 6 / Lot 56-57

Assessed Value: \$229,300

Facilities: Town Administrative staff and respective offices, Community Development Office, Council Chambers and Superintendent of Schools and staff.

2. Water Pollution Control Plant
Location: US Route 1
Map/Lot: Map 1 / Lot 8B
Assessed Value: \$8,001,000
Facilities: Laboratory with office, chlorinate room, chlorine room, processing room, truck bay, pump/blower room, bathroom with shower and supply room.
3. Pumping Station
Location: US Route 1
Map/Lot: Map 1 / Lot 13A
Assessed Value: \$7,700
Facilities: Generator room and pumping room.
4. Public Works Department
Location: US Route 1
Map/Lot: Map 1 / Lot 8
Assessed Value: \$154,000
Facilities: Main office, Supervisor's office, parts room, repair area, four bay doors, bathrooms, break room, and parking area (indoor for equipment)
5. Safety Complex
Location: 360 Main Street
Map/Lot: Map 3 / Lot 18
Assessed Value: \$883,600
Facilities: Police Department, Fire Department, Ambulance Services, General Assistance, Photo Licensing, HEAP, AFDC, Food Stamp program, WIC, dispatch room, waiting room, booking area, fingerprinting room, interview room, bathrooms, kitchen, laundry room, conference room, offices, dormitory, training room, gym, darkroom and evidence room
6. Fire Station 2
Location: Lavertu Settlement Road
Map/Lot: Map 20 / Lot 14A
Assessed Value: \$26,700
Facilities: Two-bay garage provides storage for equipment necessary for fighting fires in the rural areas of Madawaska.
7. Multi-Purpose Building
Location: 7th Avenue
Map/Lot: Map 6 / Lot 67
Assessed Value: \$3,361,200
Facilities: Large arena (seasonal use: skating, basketball courts, banquets etc.), bathrooms, changing room, arts and crafts room, reception area, office and storage area.

Non-Municipal Services

Although the Town of Madawaska offers a wide variety of services, time and budgeting constraints necessitate the need for non-municipal services. The following is a list of private sector services.

1. Electricity: Maine Public Service Company
2. Television: United Video Cablevision
3. Telephone: NYNEX / New England Telephone
4. Newspapers: Bangor Daily News and the St John Valley Times
5. Medical: Madawaska Out-patient Center: The following is a list of services provided at the Center. Names of doctors and office hours are not included because they are subject to change on a regular basis.

- Lab, X-ray, EKG, Physical Therapy
- Public Health Office: Wednesday and Thursday
- Community Lecture Series: 2nd Wednesday each month
- Nutrition Counseling Services
- Physicians
- Podiatrist
- Dentists
- Orthodontists
- Chiropractors
- Optometrists - Ophthalmology
- Audiologists

6. Social Services/Non-Profit:

American Legion Post # 147	American Legion Auxiliary
Aroostook County Action Program	Aroostook Mental Health Center
Acadia Cultural Exchange of Northern Maine	Boy Scouts
Dr. McQuarrie Memorial Workshop and Activity Center	Delta Kappa Gamma Society
Employment Security Bureau and Job Service	Forever Young Club
Greater Madawaska Chamber of Commerce	Hospice
Historical Society	Keystone Kops
Knights of Columbus	Lion's Club
Lioness Club	Madawaska Homemakers
Madawaska Snowmobile Club	Optimist Club
Parent Teacher Association	Rotary Club
The Sociables	Teacher's Association
Valley Alliance for the Mentally Ill	Vietnam Veterans of American
Visiting Nurses of Aroostook	