

APPENDIX A6 TRANSPORTATION

(October 23, 2002)

Whether it is an evening walk through the neighborhood, a car-ride to the hairdresser, a bus ride to work, or an airplane flight to a vacation destination, transportation corridors are the links to the world beyond our doorstep.

Changing development patterns and changing economic conditions alter the way in which people move through the landscape. The population has grown rapidly in towns surrounding Sanford/Springvale. Employment opportunities in Sanford/Springvale and along the York County coastline have mushroomed. Increasingly, services that were once available in dense urban areas are moving to more outlying locations. These trends, and many others like them, impact how residents move in and around town.

This chapter inventories the Town of Sanford's transportation network and where appropriate, quantifies the changing uses of this system.

A. Vehicular Traffic

1. Road Classifications

Sanford/Springvale is served by a public road network totaling 163 miles (Figure A6-1). Of this mileage:

- X 22 miles are arterial roadways, defined by the Maine Department of Transportation as travel routes that carry high speed, long distance traffic, usually with interstate or U.S. Route number designations. The arterial roads in Sanford/Springvale include:
 - X Route 202,
 - X Route 109 (Main Street), from the Oak Street/Bridge Street intersection in Springvale to the Wells border, and
 - X Route 4.

- X 28 miles are collector roadways, defined by MDOT as travel routes that collect and distribute traffic from and to arterials, serving places of lower population densities and somewhat removed from main travel routes.
 - X Roads classified by the state as "major" collectors include:
 - X Route 11A,
 - X Route 224,
 - X River Street

- X School Street,
- X Jagger Mill Road,
- X Route 99,
- X Hanson's Ridge Road,
- X Berwick Street,
- X New Mill Road,
- X Bennet Street,
- X North Street,
- X Grammar Road,
- X Grammar Street,
- X High Street, and
- X Rest of Route 109.

- X Roads classified as "minor" collectors include:
 - X New Dam Road; and
 - X Mount Hope Road.

- X 113 miles are local roads, defined by MDOT as all roadways not classified as an arterial or collector, and serving primarily adjacent land areas.

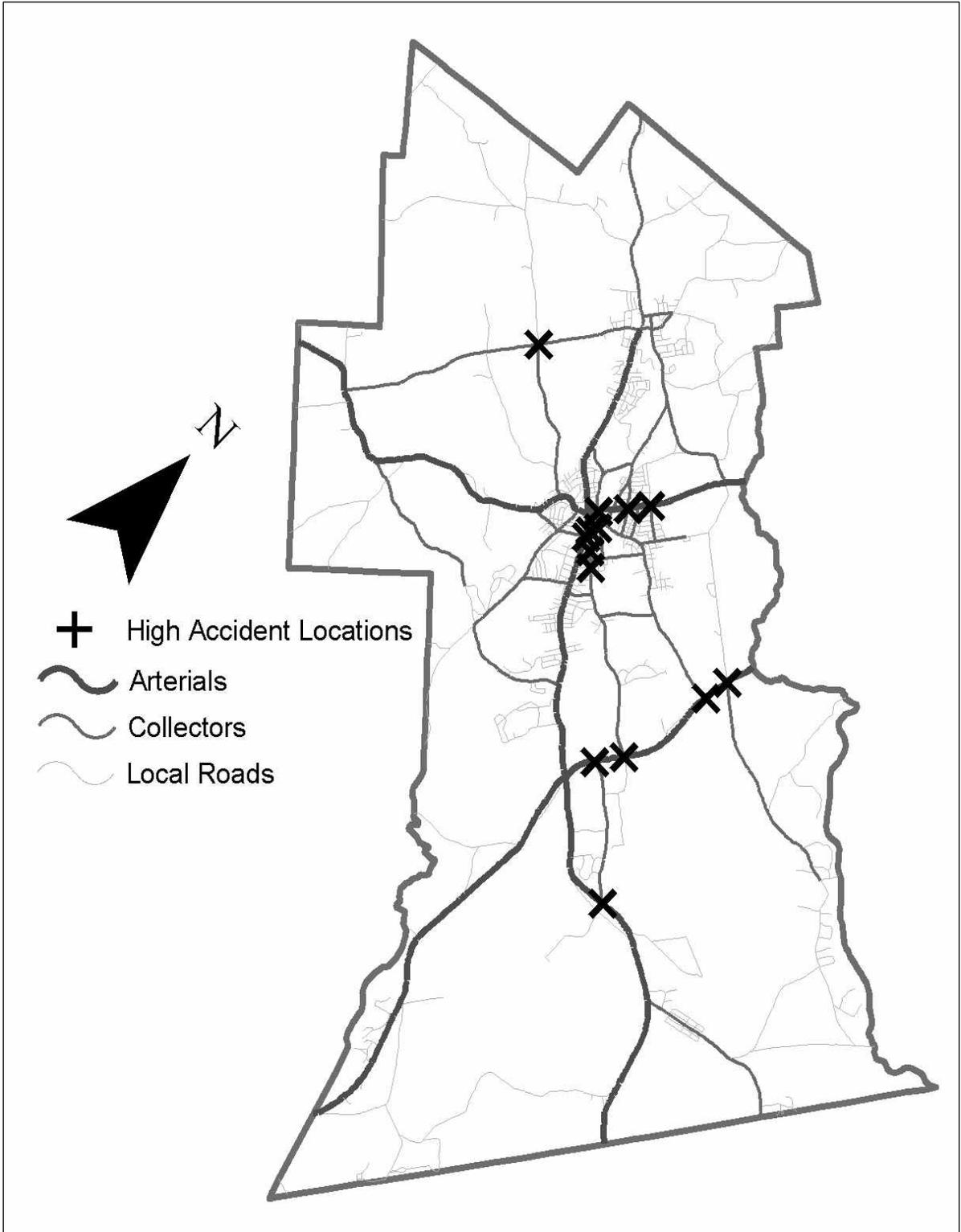
2. Road Standards

Standards for the design and construction of roads in the Town of Sanford are contained in the Town's subdivision ordinance. They distinguish among commercial, collector, local, and private way. The standards are conventional, requiring:

- X for commercial, 80' rights of way, 30' of pavement, and 8' of shoulders on each side;
- X for collectors, 60' rights-of-way, and, in urban areas 32' of pavement or 24' of pavement in rural areas (sidewalks are required in urban areas if connection to existing sidewalk is feasible);
- X for local streets, 50' rights of way, and in urban areas 26' of pavement or 22' in rural areas (sidewalks are required in urban areas and are required in rural areas if connection to existing sidewalk is feasible); and
- X for private ways, 33' right of way and a 16' pavement width.

In addition to the road standards, the Town regulates the access of properties to roadways. Except where unique site factors exist, the zoning ordinance prohibits a lot fronting on Route 4, 109, 202, 11A, or 224 from having its access onto that road; rather, access must be to and from a local or collector street.

**Figure A6-1.
Sanford/Springvale Road Network and High Accident Locations**



Source: Maine Department of Transportation, Maine Office of Geographic Information Systems

3. Traffic Volumes

Traffic counts are illustrated in Figure A6-2. Main Street in the heart of the Downtown Sanford experiences the heaviest traffic in Sanford. An average of 22,280 cars travel through the Downtown every day. Other heavily trafficked roadways include on Route 109 at the intersection with the Airport Road, on Route 111 near the Goodall Hospital, and on Route 4 near the Alfred town line.

Traffic volumes have generally increased throughout the past decade (Table A6-1). Traffic volumes are increasing the fastest in southern Sanford and on Route 11A in Springvale. These two locations are increasing at more than 2% per year. The only principal traffic corridor that decreased in volume is the Route 109 corridor between Sanford and Springvale, although discrepancies in data collection could account for some of this decrease.

As the population spreads from the urban cores into rural areas, dependence on vehicular transportation becomes more important. What once was a walk to the corner for a gallon of milk is now more likely to be a ride to the supermarket. Not only is the Town's population spreading to rural areas, but the populations in the surrounding communities are growing rapidly. Because Sanford/Springvale is the service center for these communities (offering shopping, services, employment, and recreation), the Town's road network must shoulder the demand from its neighboring communities.

In addition, the rapid growth of coastal York County's service economy has created a demand for employees from interior communities. Residents from neighboring communities, as well as Sanford/Springvale residents, fill these positions. This creates daily commuter traffic on the community's major roads. Finally, the expansion of recreation opportunities in the communities to the north and west of Sanford/Springvale draw vehicle trips through Sanford/Springvale, especially on the weekends.

**Table A6-1.
Average Annual Change in the Annual Average Daily Traffic, 1989 - 2000**

Station Number	Location	2000 AADT*	Average Annual Change**
1	Route 202, east of Grammar Road	12,360	1.9%
2	Route 202, west of Grammar Road	8,820	1.6%
3	Route 11A, Springvale	4,210	2.3%
4	Route 109, south of Route 11A intersection	12,440 [^]	-1.2%
5	Route 109, at Route 4 intersection	19,830	0.9%
6	Route 109, at intersection with Airport Road	13,140	2.7%

** Average Annual Daily Traffic is measured by the Maine Department of Transportation on a rotating schedule– Sanford is measured every two to three years.*

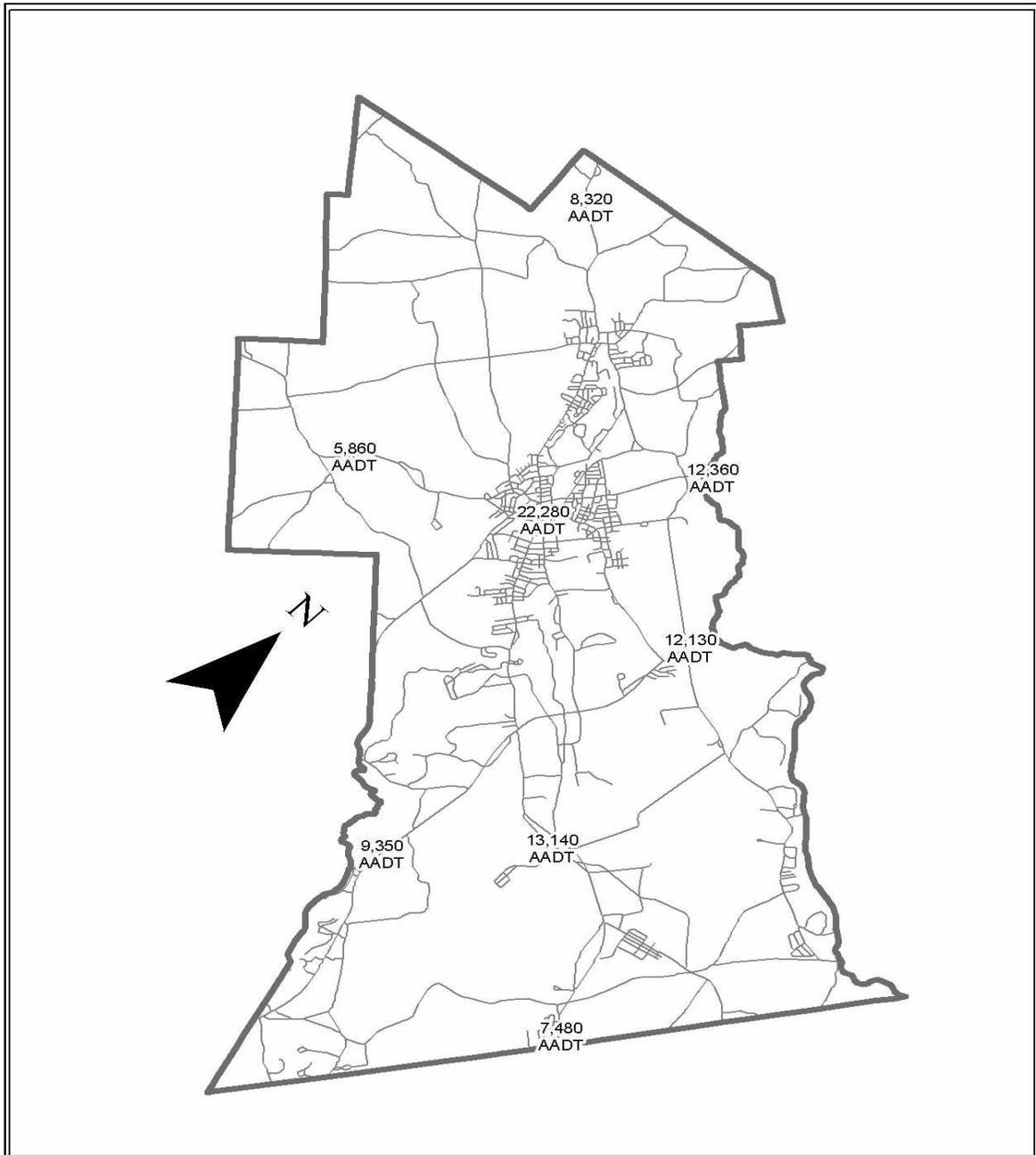
*** Historical information used to compute Average Annual Increase vary. Most of the data were from 1989 MDOT records.*

[^] only available data is from 1997 Source: Maine Department of Transportation

B. High Accident Areas

The Maine Department of Transportation tracks accidents and measures potential safety problems by looking at the total number of accidents in a location and comparing this to the number that may be expected given the type of roadway involved and its traffic volume. From this information, MDOT calculates a “critical rate factor” (CRF). Any location that has a CRF greater than 1.00 and that has had eight or more accidents over a three year period is considered a high accident location. The Town’s most recent data includes 1998, 1999, and 2000 (Table A6-2 and Figure A6-1).

Figure A6-2. Sanford/Springvale Average Annual Daily Traffic, 2000



Source: Maine Department of Transportation

**Table A6-2.
High Accident Locations, 1998 - 2000**

Location	Critical Rate Factor	Accidents
Oak Street and Hanson's Ridge Road	6.39	15
Winter Street and Riverside Avenue	3.24	24
School Street and Jackson Street	3.00	9
Route 4 and New Dam/Grammar Road	2.92	18
Route 109 and Jagger Mill Road	2.58	22
School Street and Elm Street	2.14	8
Route 4 and Jagger Mill Road	1.87	11
Riverside and Pioneer and Washington	1.53	14
Route 4 and School Street	1.51	9
Main Street and Roberts Street	1.49	18
Route 4 and High Street	1.49	10
Cottage Street and June Street	1.19	9
Cottage Street and Brook Street	1.02	8
School Street and Washington Street	1.00	9

Source: Maine Department of Transportation

The intersection of Oak Street and Hanson's Ridge Road is the most dangerous intersection in town. Although other intersections had more accidents, the damage and personal injury in each accident at Oak Street and Hanson's Ridge Road was greater. The other high accident areas tend to be along Route 4 or clustered in Downtown Sanford.

C. Parking

Parking is an issue primarily in Downtown Sanford. There are three principal public parking lots Downtown: behind Town Hall off Roberts Street, surrounding the Mid-Town Mall with access from Main Street and Washington Street, and on School Street across from the Post Office. These lots have a total of approximately 500 spaces (the Town recently expanded the Town Hall lot by 40 spaces). In addition, there are an estimated 1,000 on-street parking spaces in the area of Downtown from Brook Street on the east to Berwick Street on the west, and from Pleasant Street on the north to West Elm St./Emery Street on the east.

No recent parking inventories have been completed, but studies in 1990 and 1986 approximate the number of spaces available in Downtown Sanford.

In 1990, at the Town's request, the Transportation Committee of the Chamber of Commerce conducted an inventory of parking in the Downtown area. Its purpose was to determine the shortfall of off-street parking compared to contemporary requirements of the zoning ordinance. Including churches, the study found a

deficiency of 622 spaces: a shortfall of 2,326 spaces associated with private properties, which was offset in part by the 1,704 public off-street and on-street spaces. When churches are excluded--because parking for their users usually is in demand when other activities are closed--the deficiency is 103 spaces when compared to current zoning requirements.

As part of the study, the committee also monitored the public parking lot around Mid-Town Mall. Of 394 spaces at the mall, according to the week-long study (May 31 to June 8), an average of 258 spaces were vacant at various times of day. The Transportation Committee concluded that there is generally a sufficient number of parking spaces (though not necessarily ideally located) for Downtown.

In a separate study in 1986 that focused on the Sanford Mill Yard, it was found that there was off-street parking available for 475 - 500 cars after allowances for on-premise loading and truck storage areas. Fewer than half the space (44%) was found to be used, but this ranged from only 18% in the vicinity of buildings with a lot of vacant floor space to 70% where buildings were mostly full. At the time, 1,200 people were working in the complex, suggesting that off-street parking was meeting only about half the need. Many off-street parking spaces remained empty because on-street parking (for example, on Pioneer A venue) was more convenient.

D. Public Transportation

In 1983 the Town contracted with York County Community Action Corporation (YCCAC) to operate a fixed route bus service ("Sanford Transit") in Sanford/Springvale.

The Sanford/Springvale service operates "My Bus" five days a week. Hourly runs are made on the route from Railroad Avenue in Springvale to South Sanford, with morning and afternoon commuter runs to the South Sanford industrial area. The route includes Springvale Square, Goodall Hospital, Washington Street downtown, South Sanford Plaza, and Center for Shopping. The fares, as of 2002, were \$.75 for the commuter runs; and \$.50 at other times (\$.25 for senior citizens and small children).

In addition to Sanford Transit, YCCAC provides a demand response service in York County for clients of several social service agencies, as well as a subscription route service under contract with these agencies. These services are provided to and from a number of York County communities, with fares ranging depending on the distance.

In addition, the WAVE (Wheels to Access Vocation & Education) transports employees and trainees to their destination (as well as their children to daycare). Transportation must be arranged in advance and is available seven days a week. Fares vary depending on the trip's origin and destination.

E. Bridges

The Town owns 5 bridges for which it has maintenance and repair responsibility. The state owns others. The names, types, locations, and conditions of the bridges for which the Town has responsibility (as reported by MDOT as the result of inspections in 1988-89) are:

- X Morrison Bridge, steel beam, on Littlefield Road over Morrison Brook, reconstructed in 1990;
- X Jellison Bridge, on the Emery Mills Road over the Mousam River, generally poor to fair condition;
- X Beef Bridge, on Berwick Road over the Great Works River, generally good condition;
- X Hay Brook Bridge, steel beam, over Hay Brook (shared with Alfred), generally fair condition, except deck too narrow (although was replaced in 1988 and is in good condition); and
- X Johnson Mill Bridge, steel pipe arch, on Sand Pond Road over Great Works River, generally good condition.

F. Pedestrians and Bicycles

Sanford/Springvale has approximately 30 miles of sidewalks. Most of the sidewalks are old, although 95% are in good condition. The Public Works Department has an ongoing program to upgrade and expand the sidewalks as needed; this program has an annual budget of between \$20,000 and \$30,000.

There is no overall evaluation of sidewalk condition in Sanford/Springvale, or comprehensive plan for expansion. All of the public buildings and schools have sidewalks, and most of the urban areas have sidewalks. New developments within the urban areas are sometimes asked to construct sidewalks by the Planning Board, although their connection to the existing sidewalk system is not always certain.

Sanford/Springvale has two formal bicycle/pedestrian routes. The Mousam Way begins at Mill Street in Springvale and runs south along the Mousam River into Downtown Sanford. It combines beauty and natural scenery with access to downtown, to residential neighborhoods, and to the high school. Much of the land is owned by the Town, and the Town is now working on extending the trail south from Downtown Sanford into South Sanford.

The old Boston and Maine (Sanford and Eastern) railroad right-of-way, which runs through Springvale and the Deering Pond area, is a pathway that is popularly used for walking, biking, cross-country skiing, and snowmobiling. The Town owns the portion of the 99' wide and three mile long path that extends from Main Street to the Sanford/Lebanon town border.

G. Sanford Regional Airport

Sanford Regional Airport is classified as a general aviation airport. It is located in South Sanford, bounded by Route 109 to the north and east, Route 4 to the west, and Sam Allen Road to the southeast. It is considered a Class C facility, intended to accommodate propeller aircraft as well as small business jets. The main use of the airport is by business people and corporations with individual aircraft and by those who fly for recreation.

At present, an average of 180 flights per day use the airport. Approximately 60% of this traffic is local general aviation, 35% is transient general aviation, and 5% is air taxi. Of the 67 aircraft based at the field, 51 are single engine, 11 are multi engine, and 5 are jet airplanes.

At present, cargo shipments into and out of the airport are negligible. Nevertheless, the presence of the airport, because of its availability to business people, is seen as an important part of the Town's economic development offerings. Further, it is a designated reliever general aviation' airport for Portland (Portland is running out of general aviation parking space).

The airport was built during the 1940s by the Federal government for use by the Navy. It consists of two runways (6,000' x 150' and 5,000' x 100') and 50' wide taxiways. It has 20 spaces for tiedowns and 20 spaces for itinerant aircraft on the apron. The airport is served by a terminal building, which includes a fixed base operator's (FBO) office, a restaurant, and a waiting area, and by two condominium hangar buildings, plus conventional hangars, one of which houses a second FBO. FBO services include an air taxi, flight training, fuel storage, and maintenance. The Town owns most of the land and the buildings, and leases the buildings to Sanford Air, an FBO.

In addition to these facilities, the Sanford Fire Department's new South Sanford station is adjacent to the airport.

The 1987 master plan is in the process of being updated. As of the 1987 master plan, the airport's annual capacity was estimated at 184,000 operations, and its peak hourly capacity at 78 operations. The master plan concluded that the annual capacity is adequate through at least 2006, when annual operations were forecast to be 144,000 to 152,000 (compared to 70,000 in 1986). But the peak hourly capacity

will be exceeded sometime between 1991 and 1996, when peak hour operations are forecast to reach 100 (compared to 70 in 1986).

Any airport located in or near an urban community must fit into its surroundings; conversely, land uses planned nearby should be compatible with an airport as a neighbor. Two concerns have arisen with respect to the airport: the potential for incompatible uses and drainage to the headwaters of Branch Brook, which ultimately serves as the public water supply for the towns of Kennebunk, Kennebunkport, and Wells.

To address the first issue, the Town's zoning ordinance specifies an Airport Protection Overlay Zone and Airport Clear Zone (Section 13.0 of the Zoning Ordinance). No object can intrude into the clear zone, as depicted in the master plan, and residential uses in the overlay district permitted after September 1989 must be on lots of at least 80,000 square feet (mobile home parks are prohibited). In the case of Branch Brook, the airport master plan recommended that when a new corporate jet area and/or the infield of the airport is developed, there be construction of a detention pond south of Runway 7-25 to allow settleable and floatable pollutants to be removed from surface water runoff. The potential of pollutants reaching Branch Brook is of great concern to the Kennebunk-Kennebunkport-Wells Water District, and the district and Town are discussing the issue.

Also, though not discussed or identified in the airport master plan, the grasslands around and within the airport property have been identified by the state as habitat for the grasshopper sparrow, considered an endangered species by the State. The mown fields in and around the airport are an integral part of the grasshopper sparrow's habitat.

H. State Investments

In 2002 - 2003, the Maine Department of Transportation is making several transportation investments the Town of Sanford. On the list of projects to be funded are:

- X Several maintenance paving and resurfacing projects including the Mount Hope Road, Route 224, School Street, and High Street. The value of these projects is projected to be \$600,000.

- X Ongoing program assistance and capital investments for the York County Community Action Corporation (which serves all of York County). The value of these investments is projected to be \$1,350,000.

- X An update the 20-year plan and purchase of snow removal equipment for the Sanford Regional Airport. The value of these investments is projected to be \$375,000.
- X An investment of a projected \$200,000 in a Sanford Area Transportation Feasibility Study.

I. Issues and Implications

- § Roadway improvements Downtown raise difficult issues. On the one hand, the widening of roads and intersections would allow traffic to move more freely and probably more safely. Without improvements, the levels of service are projected to become seriously deficient. Shoppers, commuters, and others may be inconvenienced to the point of seeking to avoid Downtown altogether. On the other hand, widening of roads and intersections eliminate some on-street parking perceived as crucial to the businesses on which the spaces front. And widening almost always makes downtowns less friendly to pedestrians. Where is the balance? What Downtown traffic improvements, if any, should be endorsed by the Comprehensive Plan?
- § The increase in traffic levels, not just on arterials or commuter routes, but on local and rural roads generally, and relatively high accident rates in several of these locations, are signs of the growth in rural parts of Sanford over the last decade.
- § Route 202 is a major east-west arterial and truck route. Its intersection with Route 109 Downtown is not well aligned. On the other hand, realignment and reconstruction may disrupt nearby land uses.
- § The Town's roadway standards are conventional, favoring wide, paved travel ways. Do they properly balance the need for safe, easily maintained roads against the need for good urban design and the ability to produce reasonably priced housing?
- § The management of the number and design of driveways along thoroughfares is a key tool for traffic safety and in trying to make existing roadways work as efficiently as possible. The Town has recognized this need and already enacted provisions to manage access.
- § While most of Sanford's growth over the last 20 years has been outside of the urban and village centers, these centers maintain a density that continue to justify public bus service.

- § Should the Town's designated growth areas be designed in a way (appropriate density, mix of uses) that reduces dependence on the automobile and makes walking, biking, and bus use more feasible?
- § The airport is recognized as an important part of the Town's economy. Like most forms of transportation -- roads, rail, mass transit -- revenues directly generated by the airport probably will have to continue to be supplemented by public funds for the foreseeable future.
- § How should the Town and airport approach a solution for protecting the headwaters of Branch Brook?