

2007 AUGUSTA COMPREHENSIVE PLAN INVENTORY

This is the Inventory to the 2007 Update of the Augusta Comprehensive Plan. It describes recent trends, existing conditions, and issues facing the City. Each of the topical sections reflects the discussions of twelve subcommittees active in the Augusta Comprehensive Planning Committee process in 2006, as well as provides information sufficient to meet State of Maine standards for growth management inventories. The twelve committees include:

- ⇒ Comprehensive Planning Committee
- ⇒ Transportation and Infrastructure
- ⇒ Economic Development
- ⇒ Housing, Neighborhoods, & Quality of Life
- ⇒ Community Development
- ⇒ State Government/Non-Profit
- ⇒ Environment, Conservation, & Open Space
- ⇒ Leisure and Recreation
- ⇒ Education
- ⇒ Cultural Assets
- ⇒ Health and Welfare
- ⇒ Public Safety

The Inventory was also completed with the help of the consultant firm Planning Decisions, Inc., and the staff of the Augusta Planning Department. The next page provides a list of volunteers and staff involved in preparing this document.

This is a companion piece to a second volume of the Comprehensive Plan, The Strategy for the 2007 Update of the Augusta Comprehensive Plan.

Information on this Inventory or the Comprehensive Plan Update generally can be obtained from the Augusta Planning Department.



Volume Two: Inventory

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Vice-Chair: Lisa Dickson

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INVENTORY TABLE OF CONTENTS

	Page
Introduction	1
List of Subcommittee Members	2
<hr/>	
Part One: History	
Land Use	4
Population and Demographics	14
<hr/>	
Part Two: Live and Work	
Transportation and Infrastructure	26
Economic Development	41
Housing, Neighborhoods, and Quality of Life	52
Community Development	64
State Government and Non-Profits	74
<hr/>	
Part Three: Nature	
Environment, Conservation, and Open Space	79
Leisure and Recreation	95
<hr/>	
Part Four: Education and the Arts	
Education	102
Historic and Cultural Assets	111
<hr/>	
Part Five: Health and Safety	
Health and Welfare	120
Public Safety	125
<hr/>	
Part Six: Fiscal Capacity	132
<hr/>	
Appendices	
<hr/>	
<hr/>	
<hr/>	

AUGUSTA'S LAND USE HISTORY

Augusta played two major roles in its early history: as an outpost on the eastern frontier of the emerging United States, and as an economic powerhouse supported by the power of the Kennebec River and the Irish and French-Canadian immigrants who came to work.

These roles supported the physical development of the city from a small colonial outpost to its eventual role as the state's capital.

EARLY SETTLEMENT: 1750-1850

(Exhibit A1)

In the early 1750s, the descendents of four Boston merchants formed a company — commonly called the Kennebec Proprietors — to manage their interests on the Kennebec. They took possession of the land in 1753 and established forts at Augusta (Fort Western) and Winslow (Fort Halifax) to protect British interests in the region.

Fort Western, built in 1754, marked the beginning of permanent settlement on the east side of the Kennebec River, and by 1762 there were numerous huts and a population of around 30. Fort Western, situated at the head of navigation on the river, was the storehouse and way station for goods going to Fort Halifax further up the river. Over this time, Federal-style houses in town and the steeples of Augusta's first churches began to dot the landscape.

In April 1797, the three parishes of Hallowell divided, with the middle and north sections forming Harrington, later renamed Augusta. The first bridge across the river (located at the Fort) opened that year. A meeting house was finally put up on the west side in 1782. In 1786, Augusta was a "co-county seat" with Pownalborough for Lincoln County.

The dawn of the 19th century found Augusta a prosperous river port with stores of brick and wood lining Water Street. Further evidence of wealth appeared on the hillside above Water Street in the form of Federal-style houses.

Augusta's wealth was based primarily in commerce, industry, land speculation, and lumber. The city's stature was further enhanced as county seat for the new Kennebec County (established in 1798) and the state capital (voted as such in 1827).

This period saw the completion of major public buildings: the State House in 1832, the Maine Insane Hospital in 1840, and the Kennebec Arsenal in 1834. Other structures supported civic and economic activity: the Kennebec Dam in 1837, and assorted factories and commercial buildings on Water Street. The first cotton mill was built in 1845-46. With this came housing for merchants and workers, and the construction of the dam brought Irish and French-Canadian workers down the Canada Road.

THE GOLDEN AGE: 1850-1930

(Exhibit A2)

From 1850-1930 is considered the golden age of Augusta. Industry in the form of cotton manufacturing, publishing, shoe making, granite quarrying, railroad cars, wood products, tools, gristmills, and shipbuilding, fueled the city's economy. The great fire of 1865 destroyed most of Water Street, but it was rebuilt, creating what is today's downtown. Train service came to Augusta in 1852 and the first electric trolleys began operation in 1890. More elegant churches were added in the late 1800s, including St. Mark's.

The Civil War Monument was dedicated in 1882. The Togus Veteran's facility opened in 1866. Gas streetlights came in 1859, telephone service in 1880, the Water District and the Board of Trade in 1880.

A 1909 amendment to the State Constitution made Augusta the Capital of Maine. Fine homes and a robust economy made for a vibrant city throughout the early 20th century.

Exhibit A1: Augusta Development 1750-1850 (Note: This only includes buildings that are still standing and is a representation of building pattern NOT an accurate siting of structures.

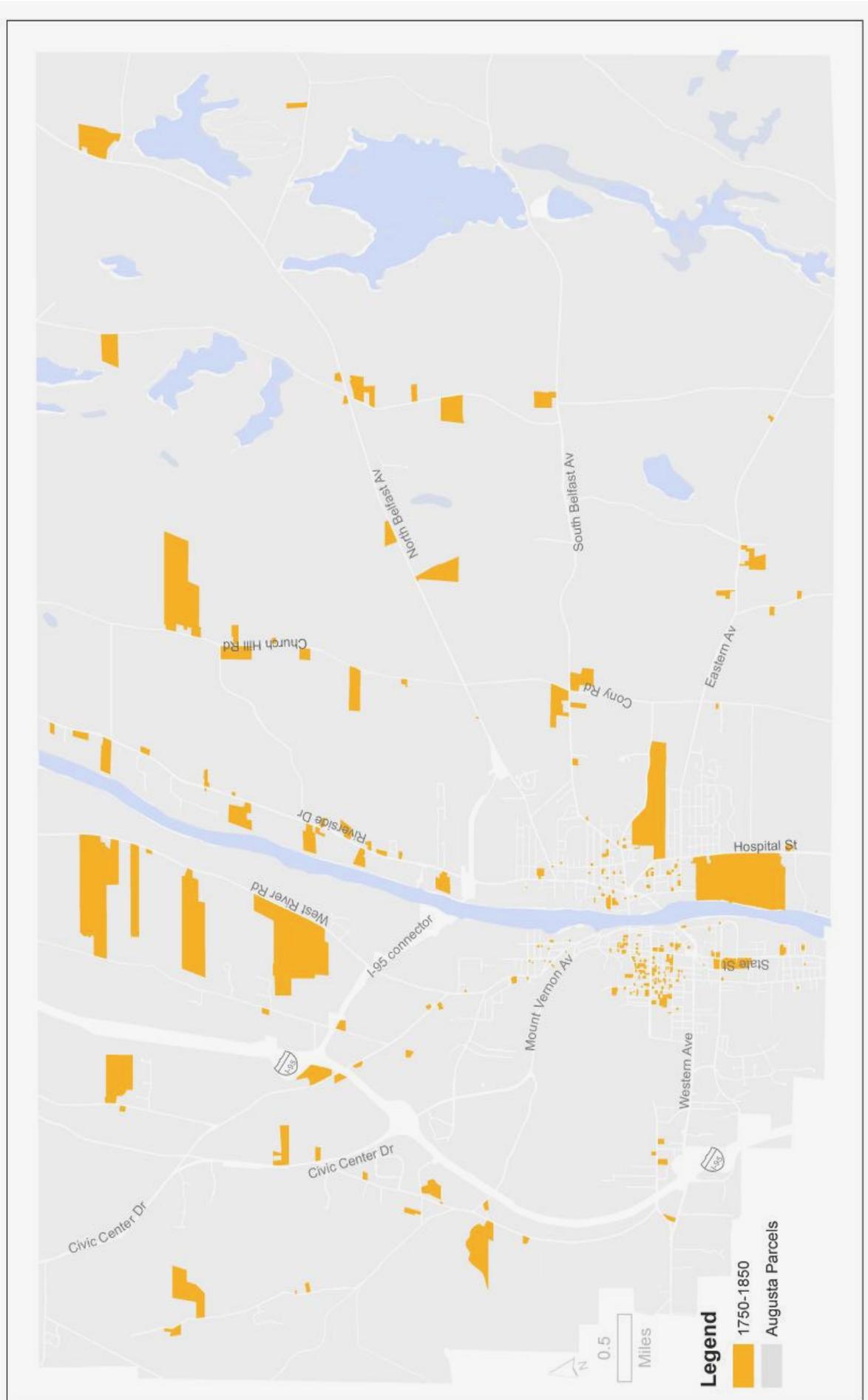
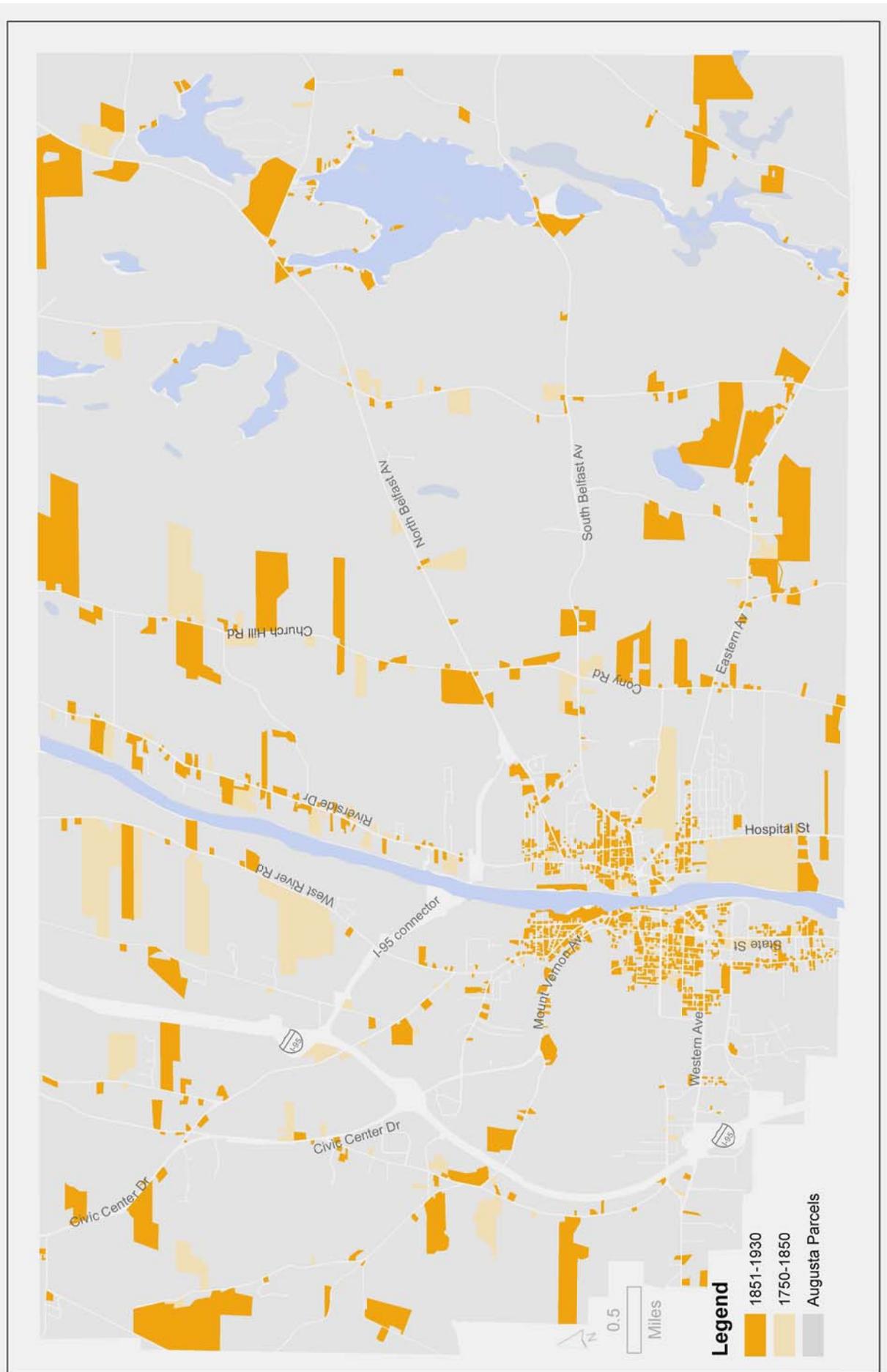


Exhibit A2: Augusta Development 1850–1930 (Note: This only includes buildings that are still standing and is a representation of building pattern NOT an accurate siting of struc-



Source: Augusta Assessor's Database

END OF AN ERA: 1930-1997

(Exhibit A3)

Between 1930 and 1997, much of the grandeur of Augusta’s earlier period was lost. The impact of urban renewal projects on Augusta was similar to that of many other old cities in America. The major part of the twentieth century was also a period of sweeping social, technological, and economic change — of which Augusta saw its share. The Great Depression, three major U.S. wars, and the technology revolution all affected Augusta and Maine.

In the 1960s and 1970s, manufacturing (cotton, shoes, paper) in the city reached its height, bringing with it a residential construction boom. Augusta grew to its largest population, 21,945 in 1970, then began to slide back to its 2000 U.S. Census level of 18,560.

CHANGE & GROWTH: 1997- 2006

(Exhibit A4)

Much change has taken place since 1997, including major retail development, new public buildings, and demographic shifts in the citizenry.

However there has been limited residential development. Much of the new housing has taken place in surrounding towns. Development in general has been limited.

Looking ahead, existing development on the west side, as well as the physical limitations of the land, will encourage a focus on the east side of Augusta for future development.

CURRENT LAND USE DEVELOPMENT

In general, development has followed the community’s vision as outlined in the 1988 Growth Management Plan (GMP) which wanted to see Augusta:

- ⇒ As a place where new urban development is compact;
- ⇒ As a safe and convenient place to live;
- ⇒ Where affordable housing is available to all;

- ⇒ Where the districts and character of the rural and urban areas are maintained; and
- ⇒ Where the essential character, quality of life, and sense of community and history are maintained.

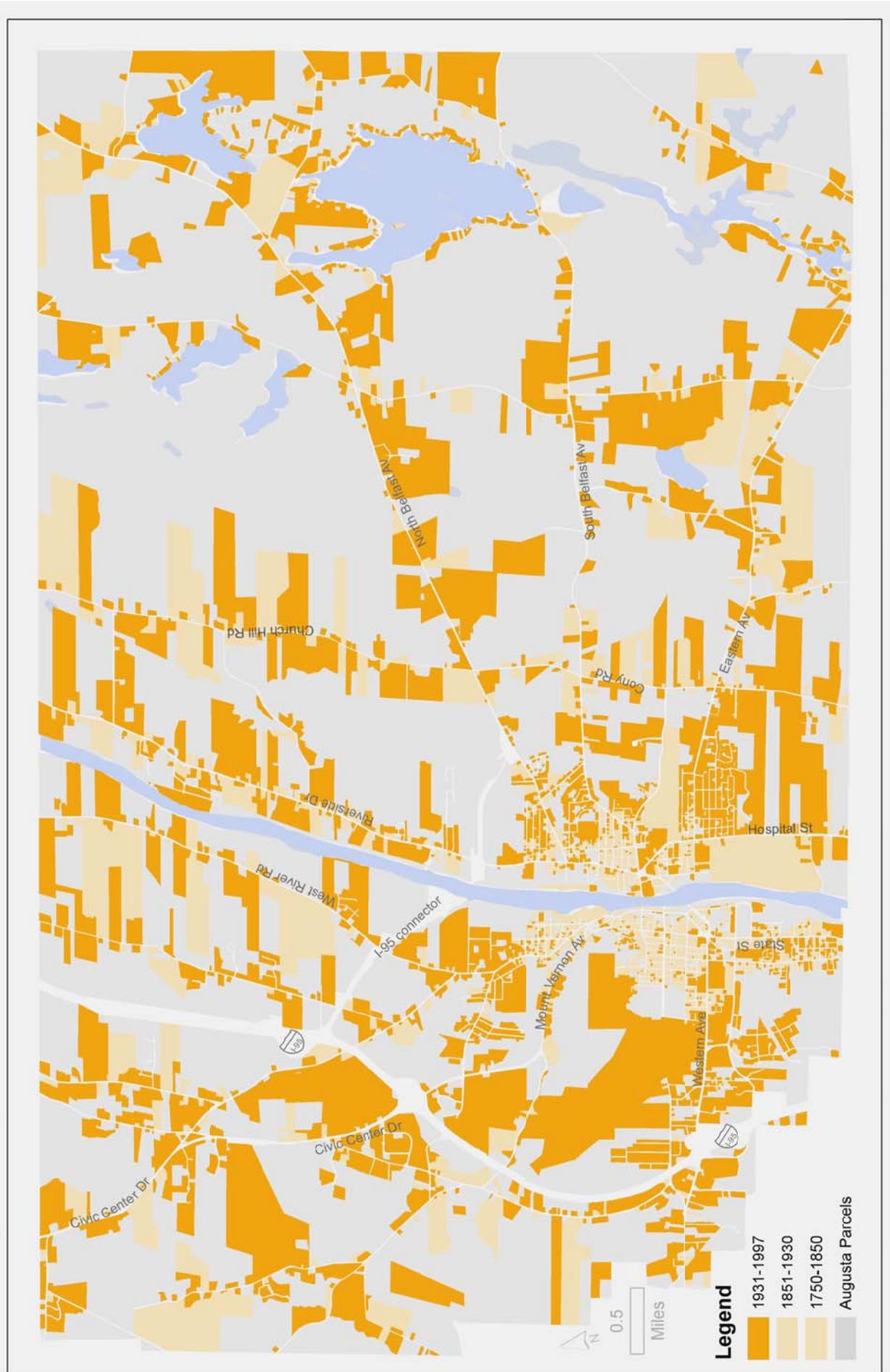
The traditional village and neighborhood development of Augusta is that of a compact urban core including separated commercial and residential zones, punctuated by small pocket parks against a backdrop of a rural landscape. Commercial and industrial development historically occurred along the Kennebec River, with government and social services clustered around the Capitol and AMHI (Augusta Mental Health Institute) complexes. Residential development fans out along the hillsides behind these commercial and business developments.

These development patterns remain today through designated land use zoning districts and performance standards. The standards are designed to preserve district characteristics while allowing for some mixed or specific uses to accommodate growth and demand.

Commercial and Industrial

Commercial development has been steady in Augusta over the last five years (2001-2006). It has included a mix of new lot construction, commercial infill (changes of use to existing businesses/homes in the downtown area), and commercial subdivision development. Most of the growth has been in subdivision or “business park” developments including two large mall complexes and numerous business parks. Commercial and industrial developments have occurred mainly within the 1998 Urban Growth Area (UGA) along major arterials and collector roads, particularly around the turnpike corridors.

Exhibit A3: Augusta Development 1930—1997 (Note: This only includes buildings that are still standing and is a representation of building pattern NOT an accurate siting of struc-



Source: Augusta Assessor's Database

Exhibit A4: Augusta Development 1997 - 2006 (Note: This only includes buildings that are still standing and is a representation of building pattern NOT an accurate siting of struc-



Source: Augusta Assessor's Database

The corridors are considered, by the 1988 GMP, to be gateway areas or transition zones between the city's rural and urban communities, providing important visual distinctions between the two. However, little has been done to date to create design standards, greenbelts, or other policies for the development of these gateway areas.

Residential

Recent residential development has been limited in Augusta (see Housing Chapter for more detail). The majority of new homes have been built in compact subdivisions with several serving the affordable markets. Some older buildings in and around downtown are being renovated as affordable and market-rate apartments and condominiums.

There are several mobile home parks, also called land-lease developments, throughout Augusta. The majority are within the 1988 UGA on the fringes of existing water and sewer lines.

Land Use Regulation

Augusta has full-time Code Enforcement and Planning Departments, as well as a nine-member Planning Board. Planning and Codes work closely with the City's Engineering and Economic Development staff to review and process primarily commercial development applications. Most residential development is handled at the Codes level, with the exception of subdivisions and development within the shoreland zone. The Planning Board meets twice a month to review and decide on development applications over three acres in size. Currently the Board is discussing the need to create other review boards, such as a Design Review Board or a split Planning Board, one group of which is dedicated specifically to planning rather than project review.

Augusta's land use performance standards establish criteria for ensuring compatibility between uses, including visibility, aesthetics, privacy, resources protection, noise, light, and traffic.

Emphasis is placed on neighborhood compatibility and buffering of residential uses from noise, light, and visibility associated with commercial and industrial uses.

Augusta utilizes a number of regulations to manage land use. These include shoreland and floodplain management ordinances; site plan review, performance zoning and flag lot ordinances; and conventional zoning ordinances for rural, residential, commercial, business/professional, industrial, government, and mixed land uses (see Exhibit A5).

Current Standards for Development

- ⇒ Residential Districts dimensional standards include minimum standards ranging from 7,500-sewered to 20,000-unsewered square feet minimum lot size; lot areas per dwelling unit ranging from 1,650 to 5,000 square feet; and frontages of 75 or 100 feet and depths of 100 feet.
- ⇒ Capitol Commercial Districts use Impervious Surface ratios ranging from 0.85 to 1.0, Floor Area ratios ranging from 0.4 to 5.0, and Maximum Heights from 42 to 100 feet.
- ⇒ The Civic Center District (CD) Impervious Surface ratio is 0.8, Floor Area is 0.45, and Maximum Height is 56 feet.
- ⇒ The Industrial District (IA) lot area is 60,000 sq. ft., frontage is 150 feet, and depth is 200 feet.
- ⇒ The Planned Development District (PD) minimum lot size area per dwelling unit is 20,000 sq. ft., minimum frontage is 150 feet, and minimum depth is 100 feet.
- ⇒ The Rural River District (RR) dimensions vary based on whether the use is a permitted or conditional use. The Rural Residential (RRES) and Rural River 2 (RR2) Districts vary based on single development, minor or major subdivision.

The Rural Ponds District dimensions are based on soils tests and associated watersheds. The Rural Village District (RV) dimensions are based on residential, retail, or professional uses.

- ⇒ Shoreland Overlay and Riggs Brook Village Districts (RBV) each have unique dimensional standards specifically related to the use. The Government Services District (GS) has the fewest dimensional restrictions, and is limited to setbacks of structures and bufferyards.

AUGUSTA NEIGHBORHOODS

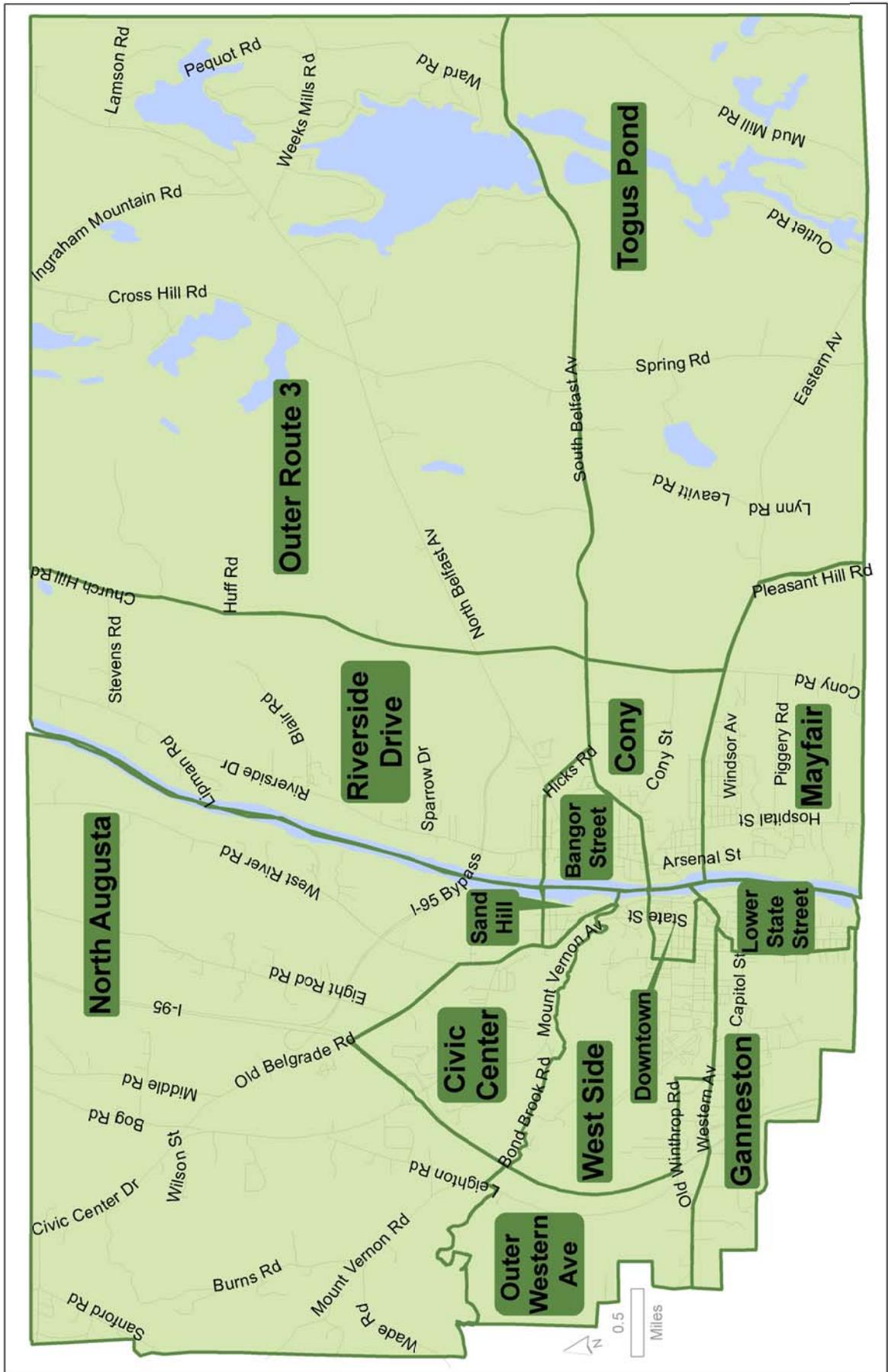
As the Augusta Comprehensive Planning Committee (CPC) looks ahead to the future development of Augusta, it takes into account the historic patterns of development, the existing development structure of neighborhoods, and the community's desires for the future. Exhibit A6 shows a neighborhood map of Augusta that will be used throughout this document to define areas of study. These 14 neighborhoods were created based on historic characteristics as well as Census tract delineation (see Exhibit A6).

KEY ISSUE AND CONCERNS

Several issues threaten Augusta's traditional development pattern, including:

- (1) commercial development moving further from the urban core into residential and rural areas,
- (2) the replacement of urban residential building with commercial uses,
- (3) the loss of small-town aesthetics and rural character in areas outside the Urban Growth Area,
- (4) the need for city gateways to distinguish between urban and rural characteristics, and
- (5) a lack of green space, safe pedestrian paths, and a continued expansion of impervious surfaces.

Exhibit A6: Augusta Neighborhoods



Source: City of Augusta

POPULATION AND DEMOGRAPHICS

Augusta began as a small farming and trading community along the Kennebec River, grew to be a manufacturing, retail, and governmental hub in the late 1800s and early 1900s, saw a decline of population in post World War II, and is now stabilizing and poised for new growth. This chapter broadly summarizes trends in Augusta’s population and demographics.

This chapter provides a statistical profile of Augusta’s population and demographics and discusses the major trends that could affect future services and facilities.

HISTORIC POPULATION GROWTH, 1800-1970

Augusta’s population increased from 1,211 residents in 1800 to 8,225 residents in 1850. Following a modest decline after the Civil War, the expansion resumed in the late 1800s as the city became an industrial employment center. Growth slowed down in the twentieth century, and by 1970 the city’s population peaked at 22,000 residents.

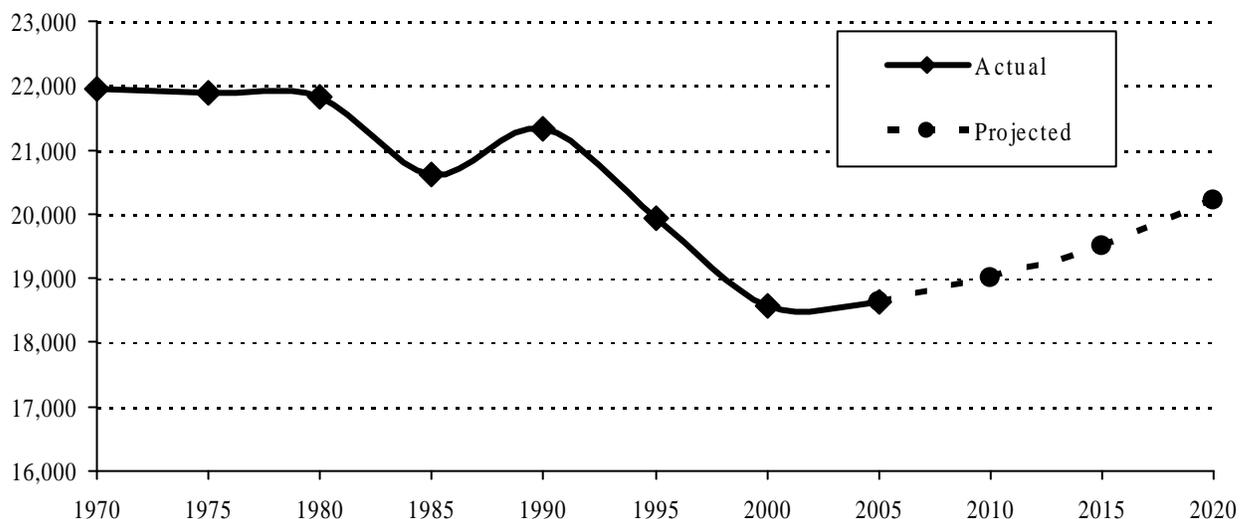
POPULATION DECLINE, 1970-2000

In 2000 the city’s population was about 18,500 residents. This decrease was due to smaller household sizes, reduced institutional populations (due to the restructuring of the Augusta Mental Health Institute), and a negative rate of natural population change.

The negative rate of natural population change was a result of the aging of the city’s population. Overall in Augusta, annual births decreased and annual deaths increased during this time. The Maine Bureau of Vital Records indicates that there was a decrease from 333 births in 1980 to 208 births in 2000, and an increase in the number of deaths from 242 to 256. Thus, there was a negative rate of natural population change during this time.

The U.S. Census divides population into two categories, those living in households (homes and apartments), and those living in group quarters (nursing homes, prisons, dormitories, institutional housing).

Exhibit B1. Augusta Historic and Projected Population, 1970 to 2020



Source: US Census, Planning Decisions Inc.

HOUSEHOLD POPULATION CHANGE, 1970-2000

An estimated 18,000 residents lived in households in 2000. This is significantly lower than the peak household population of 21,000 residents in 1980, but a slight increase since 1990.

The population is sprawling to surrounding communities. While Augusta’s population has declined, the population in communities around Augusta has increased. This trend is because of a greater reliance on the automobile, less expensive home prices, lower taxes and a preference for a rural lifestyle. Nevertheless, Augusta remains the service center for this growing population.

In 1960, Augusta’s total population accounted for nearly 40% of the total population in the Augusta Labor Market Area. By 2000, this had decreased to 24% (Exhibit B2).

A labor market consists of a number of geographically contiguous cities and towns which share common employment centers. It is defined by the US Census and the Maine Department of Labor. The Augusta Labor Market is the same as the Census-designated Augusta Micropolitan Area (See Exhibit B6).

Population growth in the surrounding Augusta Labor Market Area significantly outpaced that of the city over the past four decades (Exhibits B3 and B5). In the 1960s, Augusta grew by 1% while the surrounding labor market grew by 7%.

During the 1990s, Augusta’s population decreased by 13%, while the labor market as a whole more than offset this decrease (increasing by 3%).

Augusta was not the only community in Maine to lose population during this time. Cities like Waterville, Lewiston, Auburn, and Bangor, which are also aging central cities with surrounding suburbs, were losing population over these years as well (Exhibit B4).

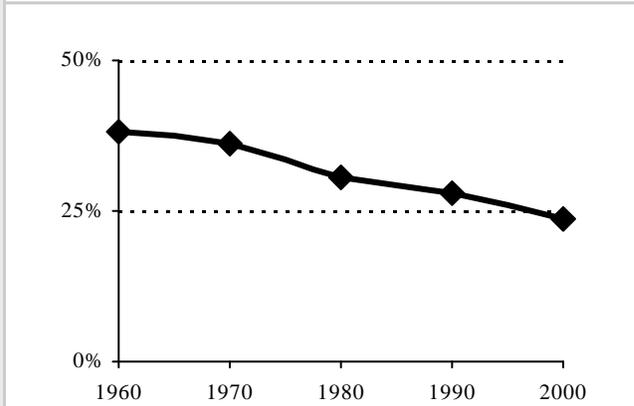
Exhibit B3. Population Change Over Time

	1960	1970	1980	1990	2000
Augusta	21,680	21,945	21,819	21,325	18,560
Augusta Micro SA*	56,690	60,697	71,097	76,508	78,583
Kennebec County	89,150	95,247	109,889	115,904	117,114
Maine	969,265	992,048	1,124,660	1,227,928	1,274,923

Source: US Census

*Augusta Micropolitan Statistical Area has the same boundaries as the Labor Market Area see Exhibit A6

Exhibit B2. Augusta Population as a % of the Labor Market Area



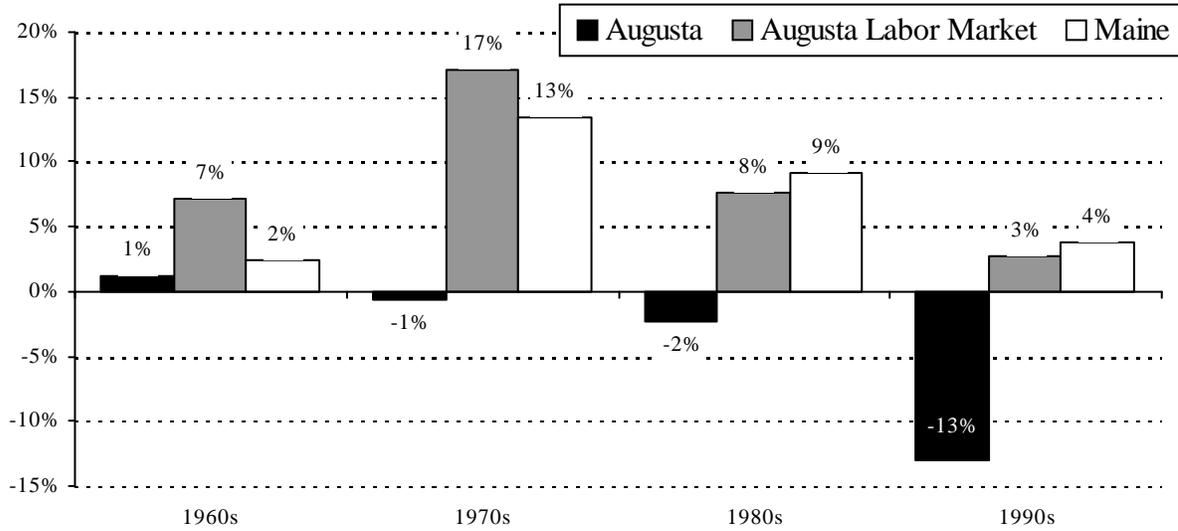
Source: US Census

Exhibit B4. Population Decreases in Service Centers 1990 to 2000

	1990	2000	% Change
Augusta	21325	18560	-13%
Auburn	24309	23203	-4.5%
Bangor	33181	31473	-5%
Lewiston	39757	35690	-10%
Sanford	10296	10133	-1.5%
Waterville	17096	15605	-9%

Source: US Census

Exhibit B5. Population Changes, 1960s through 1990s



Source: US Census

Exhibit B6. Augusta Micro SA and Labor Market Area



Source: Maine Department of Labor

The attraction to lakes outside of Augusta has also contributed to the sprawl effect, as many seasonal homes on lakes have been converted to year-round use. In 2000, the Census counted approximately 4,800 seasonal housing units in the Augusta Labor Market Area, of which only 155 (or 3.2%) were within the City of Augusta. Seasonal residents also contribute to the demand for services in the City of Augusta during the summer months. Augusta’s seasonal population grew slightly in the 1990s, and is projected to grow to 200 housing units by 2020.

GROUP QUARTERS POPULATION CHANGE, 1970 TO 2000

The group quarters population in Augusta has decreased dramatically (Exhibit B7). In 1970, 1,906 residents lived in group quarters. This fell to 1,051 in 1990 and about 600 in 2000. The major cause of the reduction has been the policy of “de-institutionalizing” the state mental hospital. In 2004, there were 92 patients with mental illness at the Riverview Psychiatric Facility, where once there were thousands at its predecessor, Augusta Mental Health Institute. In addition, in 2000, people were institutionalized in other settings in Augusta: 267 in nursing homes, 140 in correctional facilities, 104 in group homes, and 79 in other group quarters.

Planning Decisions projects a slight increase in the institutionalized population to 750 people in the next 15 years. This increase is projected because the number of “very old” elderly (those over 85) are increasing in the region, and people in this age group are more likely to require institutional care (Exhibit B7).

DAILY POPULATION FLUCTUATION

Augusta is a regional service center. Like the cities of Waterville, Bangor, Lewiston, Auburn, Biddeford, Brunswick, and Sanford, Augusta serves more people than just those living within its boundaries. In addition to the resident population, a significant number of people travel to Augusta to work, shop, and play, and to use services such as hospitals and state government facilities. The daytime population is composed of three principal segments:

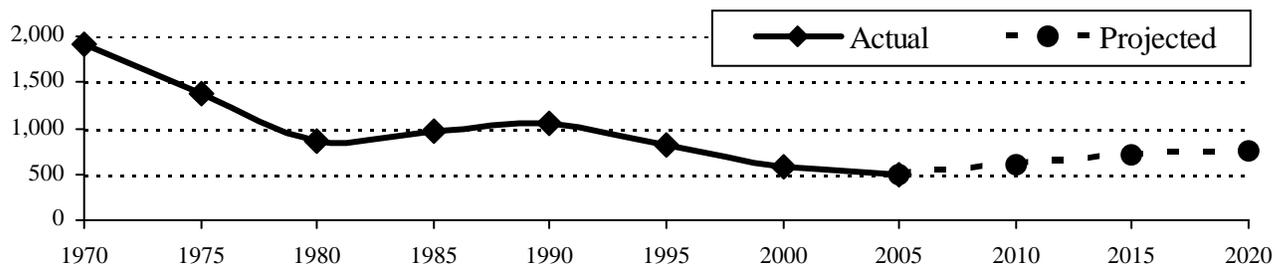
DAYTIME RESIDENTS are residents who live in the city and either work within or outside the city. The Census estimates that in 2000, there were 15,960 daytime residents in Augusta.

DAYTIME COMMUTERS are those who live outside Augusta and commute into the city to work. In 2000, there were 19,263 commuters that came to Augusta for work.

SERVICE SEEKERS includes a wide assortment of individuals that travel to Augusta to shop, visit doctors, see a movie, go to the post office, go to the gym, etc. The Census does not estimate this segment, but in Augusta’s case it is significant.

Taken all together, the Census estimates a daytime population of over 35,000 in Augusta, or twice the resident population (not including service seekers).

Exhibit B7. Recent Group Quarters Population Change, 1970 to 2015



Source: US Census, Planning Decisions Inc.

This large population places significant demand on city services. The high volume of cars places a burden on the City's public works and public safety departments for road maintenance and traffic control. This burden falls primarily upon local property taxpayers.

POPULATION PROJECTIONS, 2006-2020

Planning Decisions projects Augusta's population to increase to 20,250 residents by 2020 (an increase of 1,600 residents over 2005). This growth will be driven by a slight increase in group quarters population and additional housing construction.

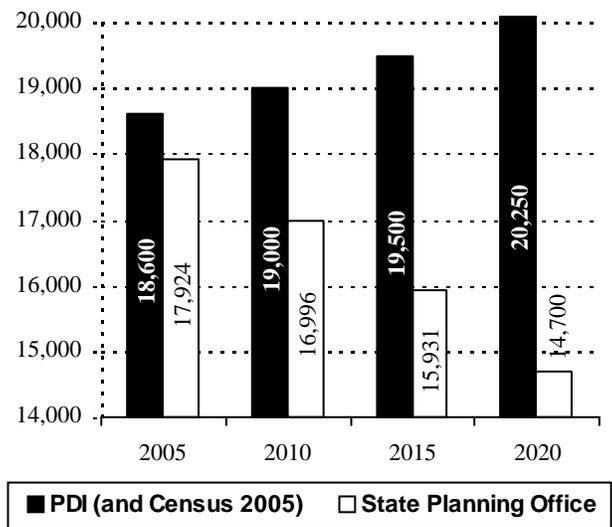
This projection differs from the Maine State Planning Office, which projects a decline in Augusta's population to 14,700 by 2020.

The SPO model assumes the historic decline of the 1980s and 1990s will continue. This model was created before the U.S. Census found that Augusta's population would be increasing during this decade (the SPO projection for 2005 is 1,200 below the Census estimate). Planning Decisions projects that the U.S. Census population of 18,560 in 2000 will be 20,250 by 2020, an increase of 9% (Exhibits B8).

Augusta's household population is projected to increase from an estimated 18,227 residents in 2005 to 20,250 residents in 2020 (Exhibit B9). This projection is based on the following assumptions:

- Moderate housing unit growth will continue through 2020. Planning Decisions projects a continued growth of about 50 units per year in the City of Augusta (which is consistent with the residential development pattern of the past 15 years);
- The vacancy rate of housing will decline from 8.2% in 2000 to 6.0% in 2020. A 6% figure is closer to the historic norm, and as the housing stock improves and unemployment remains low, vacancies can be expected to be reduced; and,

Exhibit B8. Population Projections, '05 to '20



Source: SPO, PDI, U.S. Census

SPO data based on Municipal Population Forecast by Age Cohort to 2020 www.maine.gov/spo/economics/projections/

Exhibit B9. Augusta Population Projection

2005 Population	
2005 population (US census)	18,626
- less group quarters	500
= 2005 population in households	18,126
2005 yr housing units (Assessor's Office)	9,607
- Annual increase in yr units, 2000-05	56
Vacancy rate (2000 rate)	8.0%
2005 occupied housing units	8,838
2005 household size	2.05
2020 Population Projection	
2005-2020 yr housing unit additions per year	50
2020 total year-round housing units	10,350
Estimated vacancy rate	6.0%
2020 occupied housing units	9,750
2020 household size	2.00
2020 household population	19,500
2020 group quarters pop	750
2020 total population	20,250

Source: Planning Decisions, Inc; U.S. Census

- The average number of persons per household will continue to decrease, but at a slower rate. The 2.10 persons per household in 2000 will become 2.00 persons per household by 2020.

Augusta's group quarters population will increase from an estimated 600 residents in 2005 to 750 residents in 2020. This projection is based on an expansion of health care facilities driven by demand from the aging population. This projection does not include the potential impact of any new residential dormitories at the University of Maine at Augusta.

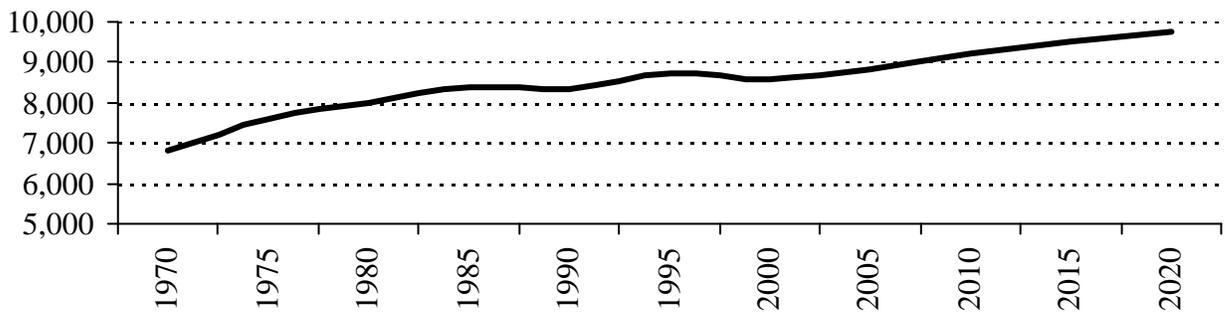
HOUSEHOLD CHARACTERISTICS

In 2005, there were an estimated 8,840 households in Augusta. The U.S. Census records show a dramatic increase in households in the 1970s, a modest growth in the 1980s, and a modest decline in the 1990s (Exhibit B10). Based on a review of City assessment records, Planning Decisions

estimates the household growth was more gradual over the period, and held steady rather than declined in the 1990s. Since 2000, the number of households in Augusta has begun to increase again. Between 2005 and 2020, the number of households is projected to increase by 900, to reach 9,750.

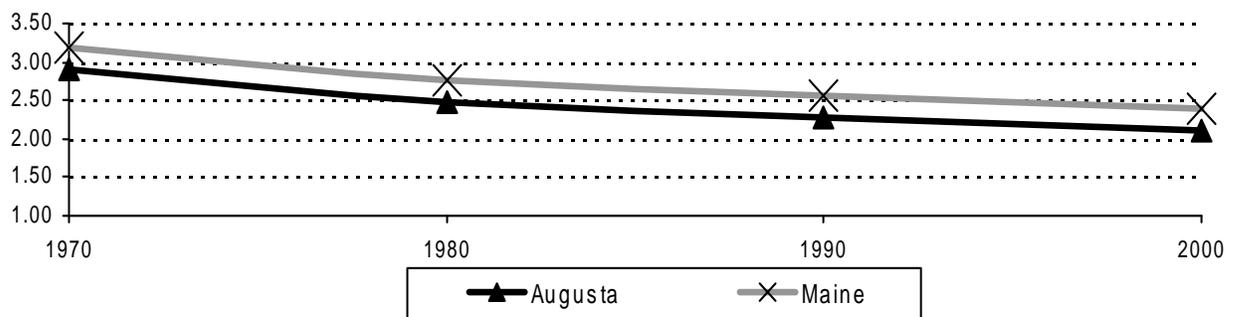
The apparent discrepancy between the relatively stable, increasing households and the decrease in household population is explained by a rapid decrease in the number of people living in each housing unit. Household sizes have decreased nationwide for the last 40 years for several reasons: (1) a trend towards single-person households, (2) the increased longevity of seniors living on their own, (3) an increase in divorce rates, and (4) the trend for younger couples to wait longer before starting families.

Exhibit B10. Augusta Projected Household Change, 1970 to 2020



Source: US Census (with adjustments from Planning Decisions Inc.)

Exhibit B11. Average Persons Per Household, 1970 to 2000



Source: US Census

Following this trend, the average Augusta household size has decreased from 2.90 persons to 2.10 persons between 1970 and 2000 (Exhibit B11). Augusta household sizes are generally smaller than those in the state as a whole, but the change in average household size in Augusta mirrors that of the state. Augusta's household size is smaller because of its higher shares of older empty-nesters and young single people age 25 to 34.

The principal factor driving down average household sizes in Augusta is the dramatic increase in the number of one-person households. In 2000, more than 38% of the households in Augusta were occupied by one person. This was significantly higher than the Augusta Labor Market (27%), Kennebec County (28%) or the State of Maine as a whole (27%). The percentage of single person households is growing faster in the labor market as a whole (20% from 1980 to 2000) and the state (23%) than the City of Augusta itself (12%).

Note:

These seemingly small changes in the average household size can have large impacts on the overall population size. For example, assume no new housing units are built in a community for ten years and the average number of persons per household decreases by 0.2 (the same decrease as recorded in Augusta between 1990 and 2000). In a city the size of Augusta, this would translate into a decline of roughly 1,700 residents. Put differently, if the City had set a goal of keeping population stable during this period, it would have needed to add 815 occupied housing units.

AGE DEMOGRAPHICS

Augusta's population is getting older. Between 1990 and 2000, Augusta's residents under 25 years decreased from 32% to 29% of the population (a reduction of 1,400 residents in absolute terms). Conversely, its working-age population (25 to 64 years) increased from 50% to 53% of the population. This includes the large Baby Boom generation. The population of seniors remained a constant percentage of the city's population (See Exhibits B12 and B13).

The median age in Augusta was 40.3 in 2000. This was higher than the state median (38.6) and most of the other service centers like Waterville, Brunswick, Lewiston, Auburn, Bangor, Biddeford, and Sanford (whose median ages range from 35 to 38).

Augusta tends to have fewer young residents and fewer seniors than the state as a whole. Approximately 32% of the state's residents are under 25 years, compared with 29% in Augusta. Approximately 18% of the state's residents are over 64 years,

Exhibit B12. Augusta Age Cohorts, 1990 and 2000

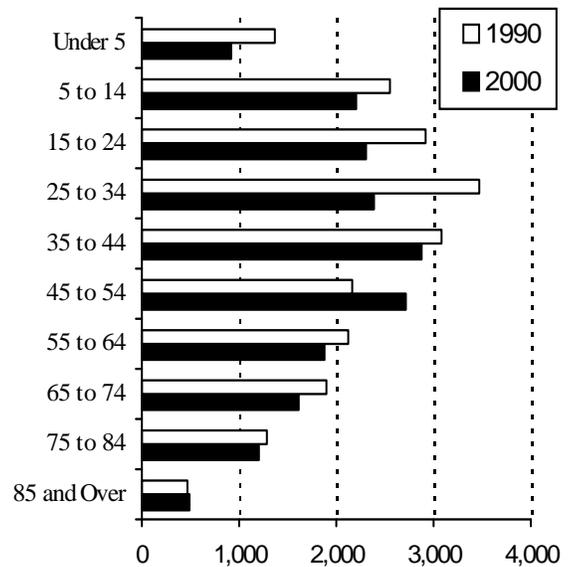
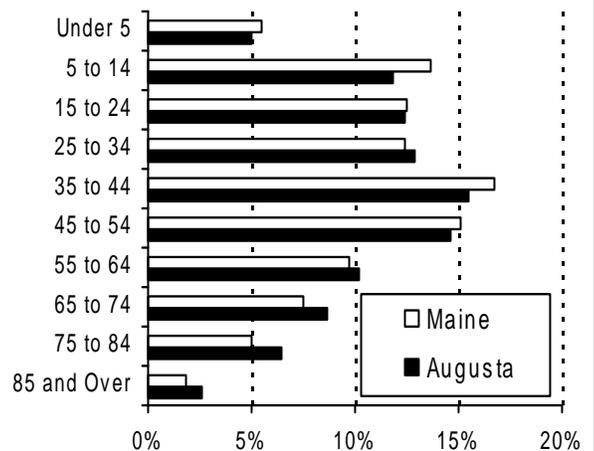
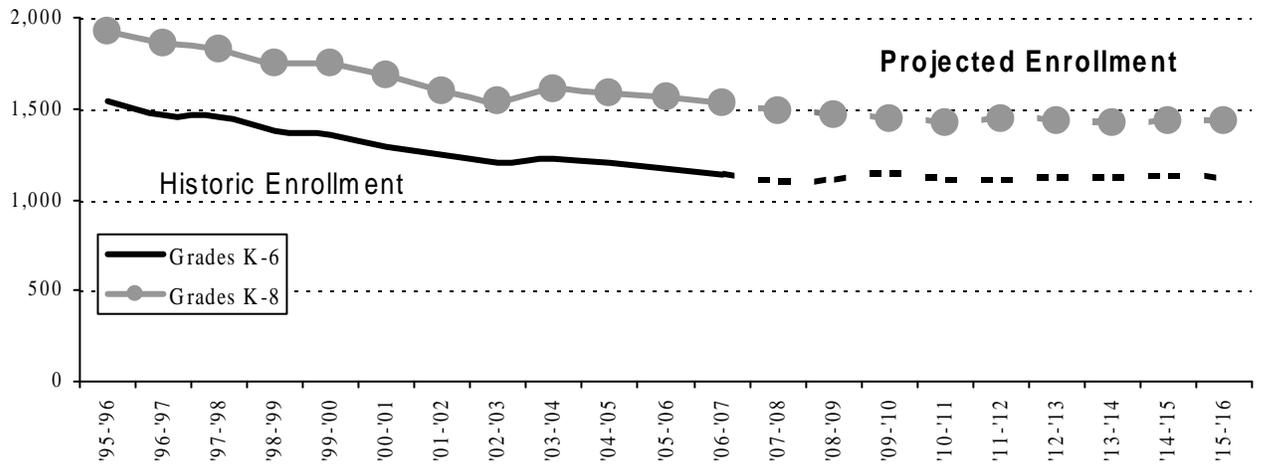


Exhibit B13. Augusta and Maine Age Cohorts, 2000



Source: U.S. Census

Exhibit B14. School Enrollment Projections



Source: Augusta School Department, Planning Decisions

compared with 14% for Augusta.

However, Augusta does have a slightly higher percentage of young people ages 25 to 34 than Kennebec County or the State. These are young single people attracted to the apartments of Augusta. As they connect with other people and start families, they tend to move away – Augusta has a much lower percent of the 35 to 44 cohort than does Kennebec County or the State.

The departure of young parents in the 35 to 44 age group has led to a reduction in the number of students enrolled in the public school system. Between the '95 to '96 school year and the '05 to '06 school year, school enrollments at the elementary and middle schools decreased from 1,925 to 1,558 students, a decline of 23% — see Exhibit B14.

There are two causes behind the enrollment decline: there are fewer children who are born in Augusta, and more young families with children are moving out of Augusta to surrounding communities.

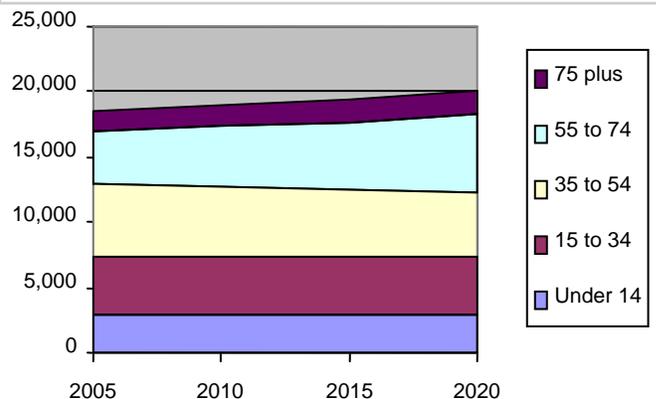
Future enrollments are projected to continue to decline through 2010, but at a much slower rate. After 2010, enrollments are projected to stabilize. This is the result of an expected stabilized rate of resident births, although families with younger children are projected to continue moving to surrounding communities.

Future population growth is projected to be greatest in the 55 to 74 age group, reflecting the aging of the baby boom generation (Exhibit B15).

EDUCATION ATTAINMENT

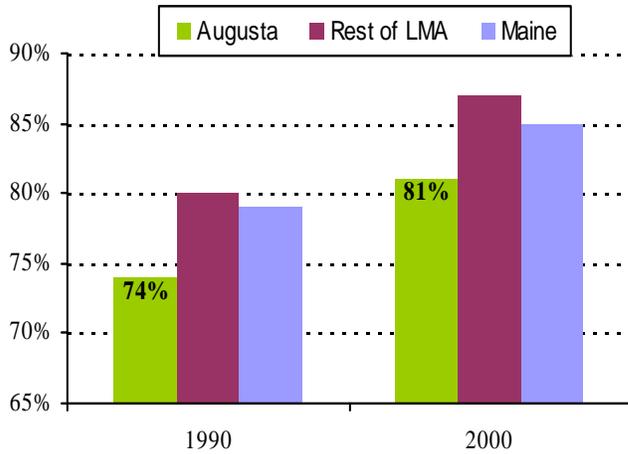
Augusta residents are increasingly better educated. In 2000, 81% of residents had at least a high school diploma (or equivalent), up from 50% in 1970. This is slightly lower than the average for Maine (85%) and the surrounding communities in the Labor Market Area (87% — see Exhibit B16) but is about average for other service centers (Exhibit B17).

Exhibit B15: Population Projection by Age



Source: Planning Decisions

Exhibit B16. Residents with at least a High School Diploma



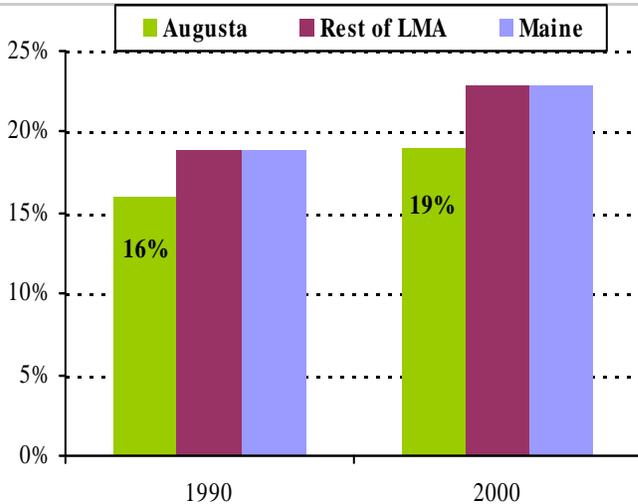
Source: U.S. Census

Exhibit B17. Educational Attainment in Maine Service Center Cities 2000

	High School Diploma/GED	Bachelor Degree or Higher
Augusta	81.4%	19.2%
Auburn	81.2%	18.9%
Bangor	87.0%	26.5%
Biddeford	78.0%	16.7%
Brunswick	87.9%	35.0%
Lewiston	72.3%	12.6%
Sanford	75.8%	9.8%
Waterville	82.7%	21.0%
Maine	85.4%	22.9%

Source: U.S. Census

Exhibit B18. Residents with a Bachelors Degree or Higher



Source: U.S. Census

Augusta has a lower percentage of residents (over age 25) with at least a Bachelor's degree than the state but is roughly the same as other service centers. There was a 3% increase of adults in Augusta with Bachelor's degrees between 1990 and 2000 (Exhibit 18), which reflects national trends. More parents with higher education degrees will provide a boost to student achievement in public schools, as the level of parental education is an important factor in students continued education.

OCCUPATIONAL PROFILE

About 33% of Augusta's employed residents work in managerial or professional occupations and another 30% work in sales. Traditional blue collar jobs – natural resources, construction, and manufacturing – account for another 21%. The remaining 16% of residents work in service professions.

Comparisons with historic occupational profiles are difficult because the U.S. Census changed the categories of occupations in the 1990s. But in general, Augusta residents are becoming more white-collar and working more in service fields. This follows national and state trends, as traditional manufacturing jobs have gone overseas and been replaced by service jobs (Exhibit B19).

Due to the presence of state government offices, Augusta workers are heavily concentrated in white-collar occupations. More than three-quarters of all employed residents work in white-collar occupations (78% of all occupations in Augusta) versus 73% for the state as a whole.

Exhibit B19. Occupational Profile (employed residents 16+ years)

	Augusta		Maine	
	#	%	#	%
Managerial	1,047	12%	73,477	12%
Professional	1,798	21%	123,385	20%
Service Sector**	1,394	16%	95,601	15%
Sales*	2,630	30%	161,480	26%
Natural Resources	17	<1%	10,338	2%
Construction	765	9%	64,064	10%
Manufacturing and Production	1,126	13%	95,666	15%
Total Occupations	8,777	100%	624,011	100%

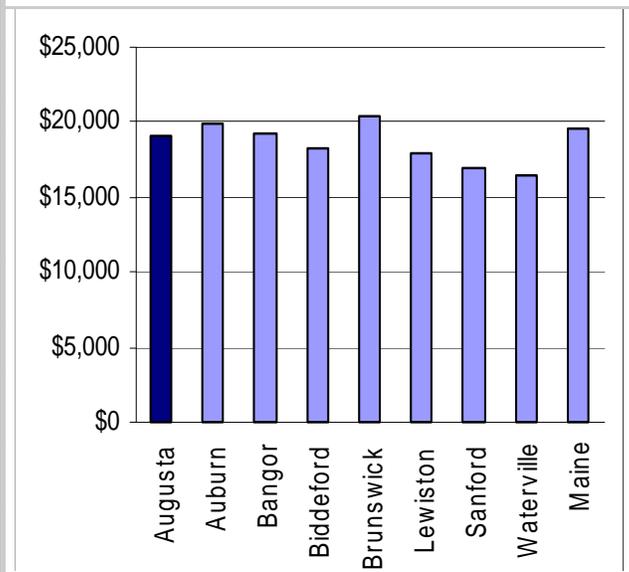
Source: U.S. Census

- * Sales includes retail and wholesale sectors
- ** Services Sector includes healthcare, arts and education

HOUSEHOLD INCOME

In 1999 (the year in which the U.S. Census tracks income data) Augusta's median household income was \$29,921. This was \$8,000 lower than the state's median income of \$37,240. The gap is widening; between 1989 and 1999, Augusta's median income fell from 93% of the state's median to 80% of the state's median.

Exhibit B20. Per Capita Income 1999

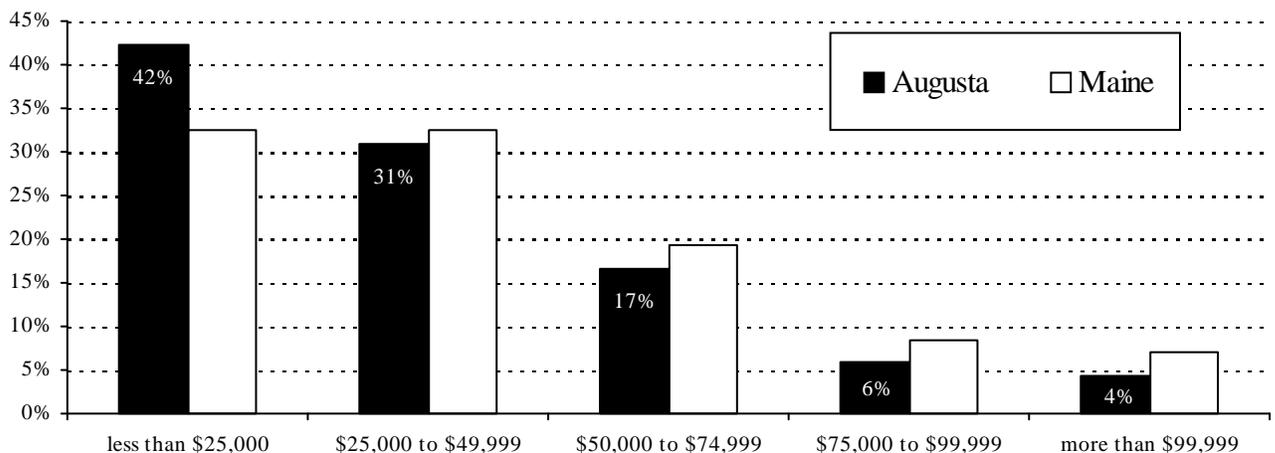


Source: U.S. Census

Augusta's income is roughly in line with other state service centers. In 1999, Augusta had a per capita income of \$19,145 — lower than Bangor, Auburn and Brunswick but higher than Waterville, Lewiston, Biddeford and Sanford (Exhibit B 20).

In 1999, approximately 15% of Augusta's population was below the poverty level (the poverty level is defined by the federal government and varies by household size — in 1999, a 1-person household was under poverty with an income under \$8,240; a 4-person household was under poverty if its income was under \$16,700).

Exhibit B21. Income Profile, 2000



Source: U.S. Census

Approximately 11% of Augusta residents below the poverty level were over 64 years, while 27% were under 18 years of age.

Forty-two percent of Augusta households earned less than \$25,000 in 1999; nearly 33% earned between \$25,000 and \$50,000; and 27% of the households earned more than \$50,000 (Exhibit B21).

Compared with the state as a whole, Augusta’s residents were more likely to be below the poverty level. Statewide, 11% of the population was below the poverty level, compared with 15% for Augusta. Augusta has more working-age residents below the poverty level than the state (61% versus 57%), more seniors (13% in Maine versus 16% in Augusta), as well as more school-aged children (3% in Maine versus 4% in Augusta) below the poverty level.

POPULATION WITH DISABILITIES

A population that is older and of lower income is more likely to have disabilities as well.

Augusta citizens reported on the 2000 U.S. Census a higher rate of disabilities in every category: sensory (sight and hearing), physical, mental, self-care, mobility, and employment-related, than the rest of the state.

Because of the presence of the state mental hospital (formerly AMHI, now Riverview Psychiatric Hospital), the issue of caring for people with mental illness is a concern in the city.

In 2000, approximately 1,330 Augusta residents reported having a mental disability. This accounted for nearly 8% of the population over 5 years old.

The rate of mental disability in Augusta is not much different than for the state or the rest of Kennebec County for most ages, except for working age people age 21 to 64, where Augusta’s rate is somewhat higher than elsewhere (see B22).

HOMELESSNESS

Every several years the Maine State Housing Authority conducts a census of homelessness in every part of the state. The most recent was in July 2005. In that month, there were 63 admissions of homeless people to Augusta shelters: 6 to the Family Violence Assistance Project Shelter, and 57 to the Bread of Life Shelter. Ages ran from 2 to 61, with a median of 25. Of the 28 adults reporting their marital status, 23 were single. The median education level reported was grade 12. None had full-time employment – one was employed part-time. About half had come there from an apartment, and half from living with family and friends. The reason for homelessness was family conflict for 19 guests, expensive housing for 25, and mental health issues for 7. Thirteen (13) reported chronic mental illness, 16 developmental disability, 7 a physical disability, 7 alcohol dependence, and 2 drug dependence.

Obviously, this is a group with income and housing-cost issues. But they also have many social issues related to disabilities, lack of job skills, substance abuse, family conflict, and the like. While many were receiving help, the following reported that they needed help and were not getting it: with transportation, 39%; with job training, 30%; and with housing placement, 37%.

Exhibit B22. Percent of Population with Mental Disability, 2000

	Augusta	Rest of Kennebec County	Maine
5 to 15	4.4%	5.9%	6.2%
16 to 20	7.7%	5.4%	5.8%
21 to 64	8.6%	5.3%	4.8%
65 to 74	4.6%	6.8%	5.6%
75 and over	10.4%	17.1%	14.6%
Total	7.8%	6.2%	5.8%

Source: U.S. Census

ISSUES AND IMPLICATIONS

Augusta is a service center. Even though the city's population has decreased, the population living in surrounding communities that rely on Augusta's services and facilities has continued to grow. This regional development pattern will have significant impacts on the transportation network and public safety services, especially during peak business hours.

As the population grows older, the types of services demanded by residents will change. For example, there will be less demand for elementary schools and more for in-home health services. This is an obvious example, but no service will escape experiencing changes in the kinds of things people need and ask for in the coming years as the population profile of the city changes.

TRANSPORTATION AND INFRASTRUCTURE

PART ONE: TRANSPORTATION

Augusta's transportation network consists of streets, sidewalks and trails, bus and taxi systems, an airport, and the riverway. The primary component is roadway. Responsibility for building and maintaining the components is shared by the City and the State of Maine. This section describes the existing transportation infrastructure in the city and key issues related to future use.

Transportation Inventory: Roadways, Bridges, Parking and Gateways

Augusta's road system is built upon routes traveled by foot and horseback years ago. When bridges have been built over the Kennebec, roads have been routed to serve the pass-through traveler.

Since the arrival of the automobile in the early 20th century, there has been a continuous intensification in the number of vehicles owned by each household, and the number of miles driven per person. Augusta's road and street system is adequate for the needs of city residents and businesses alone, but these are not its only users. The daily influx of drivers and shoppers and tourists who commute into and through the city are straining the transportation network. This is particularly felt in the historic city core.

Roads

Augusta has 159 miles of publicly-maintained roads. These roads vary in classification and character, from the high-speed through streets to low-speed residential streets. The Maine Department of Transportation (MaineDOT) defines roads according to three types¹: arterial, collector, and local (see Exhibit C1).

⇒ Arterials provide connections between major destinations, from one city to another. These streets account for 38 miles of Augusta roadway. The routes have Interstate or U.S. Route numbers and are often listed as state highways.

Arterial roadways in Augusta include State Routes 3, 8, 9, 11, 17, 27, 104, 105, 201, and 202. This includes North Belfast Avenue, Eastern Avenue, Western Avenue, Riverside Drive, and Civic Center Drive.

⇒ Collector roads connect traffic from local roads to and from arterials. Approximately 24 miles of road in Augusta are collectors. They serve places of lower population densities. The following are some of Augusta's collectors: South Belfast Road, Hospital Street, Sewall Street, and Northern Avenue.

⇒ Local streets primarily provide access to private property or low-volume public facilities. They comprise 97 miles, or the majority of length, of Augusta's roads. This includes all neighborhood, rural, and seasonal roads.

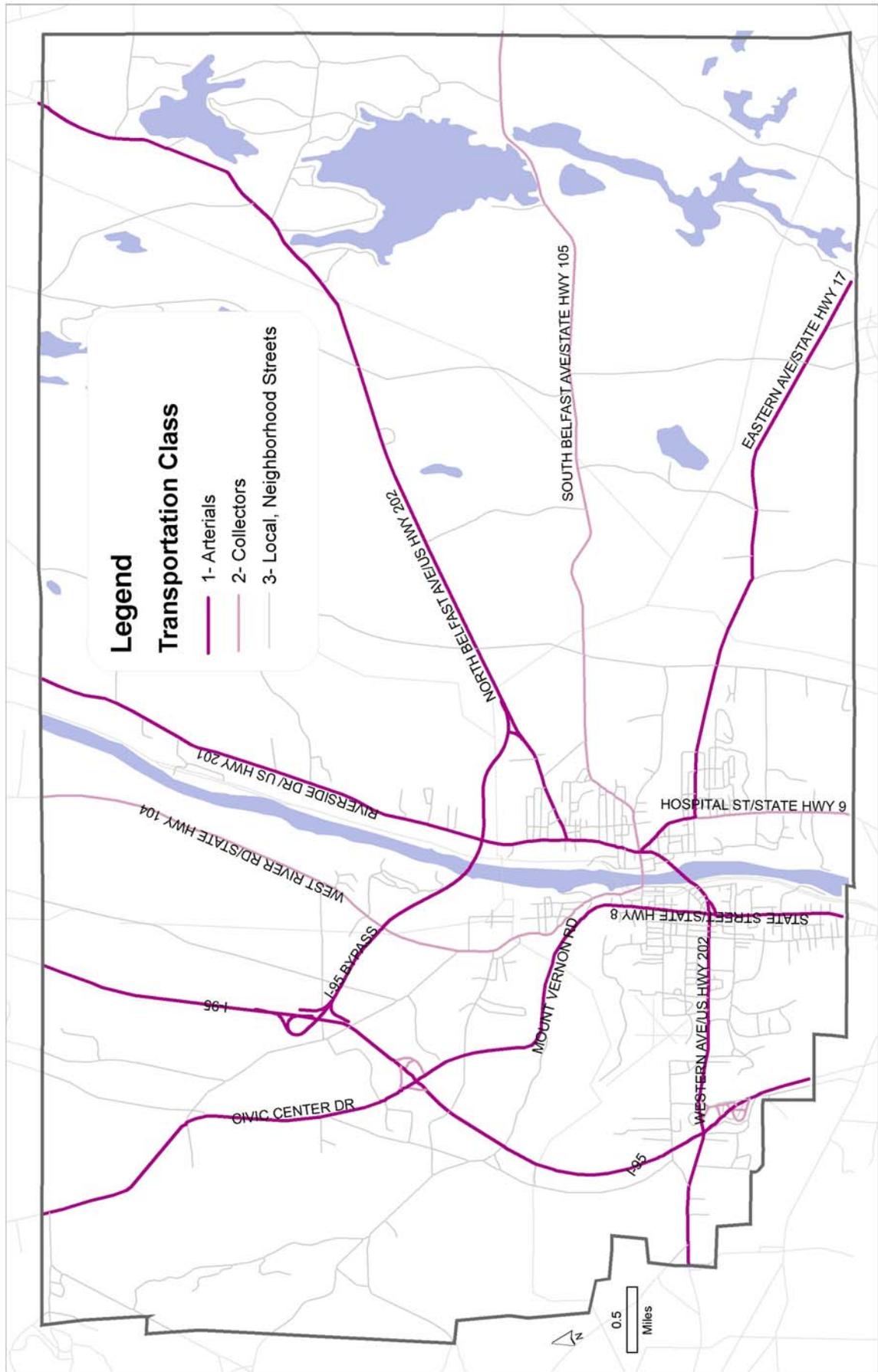
Issues along Augusta's Major Roads (identified by the Transportation Subcommittee)

⇒ Route 17 (Western Avenue) is a major route to the coast and is traveled by a number of large trucks. It serves the area from I-95 across the Memorial Bridge to Eastern Avenue. Issues include:

- The Cushnoc Bridge may change truck routes and impact Route 17; this issue needs detailed study.
- The intersection of Western Avenue/ Orchard Street/Meadow Road has alignment problems.
- The I-95 southbound off-ramp that currently serves vehicles west along Western Avenue forces vehicles to drive up Western Avenue to Edison Drive in order to turn around. Alternatives should be examined, such as a 4-way stop, to see if vehicles could have direct access to Whitten Road.

¹ MaineDOT website www.maine.gov/mdot

Exhibit C1: Augusta Road Classification



- Western Avenue fluctuates between 2 and 4 lanes between I-95 and the Pond Road in Manchester, contributing to traffic congestion.

⇒ Route 27 (Civic Center Drive/Mt. Vernon Avenue/State Street) runs along the western edge of the Kennebec River and serves traffic from Hallowell to the Belgrade Lakes Region. Issues include:

- The road north from the playground to the I-95 overpass is in good shape and can accommodate the traffic in the foreseeable future.
- The portion of Civic Center Drive north of the Business Park to the intersection of the Bog Road needs modification for turning left into the Central Maine Commerce Center.
- The sidewalks along Lower State Street are in poor condition.
- If Camp Keyes is relocated and the land is redeveloped, there could be additional left turn delays at the intersection of State and Winthrop Streets.
- Gas House Hill is extremely narrow, with homes in close proximity to the road.
- The portion of Route 27 from Mill Street north to the playground is in poor shape. The retaining walls are owned by the MEDOT and need to be repaired or reconstructed. The roadway is narrow and sidewalks in poor condition.
- If traffic increases on Bond Brook Road, it will create pressure for modifications at its intersection with Mt. Vernon Avenue.
- The portion in the vicinity of the I-95 overpass is a bottleneck, with only one through lane for the northbound traffic and the second lane serving as a left turn lane southbound onto the Interstate.
- The portion of Civic Center Drive from the overpass to the entrance to the Augusta Business Park is poorly designed and very congested. A thorough study of this area is needed.

- The area along Civic Center Drive has developed intensively in recent years and has seen an increase in pedestrian traffic. A sidewalk would be helpful, starting just south of the Civic Center Drive/Bond Brook Road intersection and going north to Darin Drive.

⇒ Route 104 (West River Rd./Northern Ave./Water Street) was recently reconstructed, and easily handles current volumes and potential increases. If the population continues to increase in the Town of Sidney, an I-95 interchange in the vicinity of the Densmore Road could be studied as a way to alleviate some of the volume on Route 104 and the Bog/Middle Roads.

⇒ Route 105 (South Belfast Ave.) from the eastside rotary to its intersection with Bolton Hill Road, can easily handle current volumes and potential increases. There will be an impact on this route from any potential circumferential road/connector road from Route 3 to Route 17.

⇒ Route 201 (State Street/Bangor Street) is a major north-south connector for the city and the region. Because the existing interstate exit at Route 126 in West Gardiner is too far to the south for the residents of Gardiner, Farmingdale, and Hallowell to utilize to commute to Augusta, these commuters use Route 201 as an alternative. As such it is a highly visible, high-volume route that needs special consideration in both design and function. Issues include:

- From the Hallowell line to the Memorial Circle Route 201 is a major gateway to the Capitol. Its appearance could be improved through the widening of sidewalks and landscaping.
- Because many commuters use Route 201 who might be better served by using I-95, strategies to make it easier to shift traffic to the Interstate should be considered (such as a new interchange in Hallowell or Farmingdale, or the removal of the toll barrier).

- The actual speeds on Bangor Street and State Street are above the posted speed limit. Traffic-calming alternatives might be considered, including the conversion to a 3-lane section (2 through lanes and a combination center turn lane). Studies have shown that reducing a roadway from 4 to 3 lanes reduces the speed of traffic, improves safety by reducing rear-end and side-swipe collisions, enhances pedestrian access through wider sidewalks, and creates opportunities for beautification (such as landscaped esplanades)².
- The last portion of Route 201 from North Belfast Avenue to the Vassalboro line can handle the current amount of traffic. If more development occurs in this area, it may become necessary to consider increasing the capacity of the roadway from North Belfast Avenue to the new Route 3.
- Route 201 from Memorial Circle to North Belfast Avenue has had recent improvements with the re-decking of Memorial Bridge and the reconstruction of Bangor Street. However, Memorial Circle and Cony Circle are two of the highest crash locations in the State of Maine.

In the high accident locations of Memorial and Cony Circles improvement could include (1) reducing the number of “legs” feeding into these circles (for example, discontinuing Chamberlain Street could reduce the number of roadways entering into Memorial Circle) and (2) reconfiguring the Cony Circle based upon recommendations from a roundabout expert³. Both circles could benefit from better signage and markings.

- The City should consider constructing new roadways to access undeveloped back land with commercial potential along outer Riverside Drive. Such roads could include shared driveways, reducing the number of curb cuts along the major roadways.

² Hoyle, Cynthia L. *Traffic Calming*. PAS Report. Chicago, IL: APA, 1995.

³ This will occur with the development of the proposed supermarket at the former Cony High School property.

Road Maintenance

In general, the maintenance of roadways is divided between state and local maintenance facilities. The state is primarily responsible for the upkeep and repair of state routes (arterials and collectors), while local government pays for the upkeep and repair of collector and local roads.

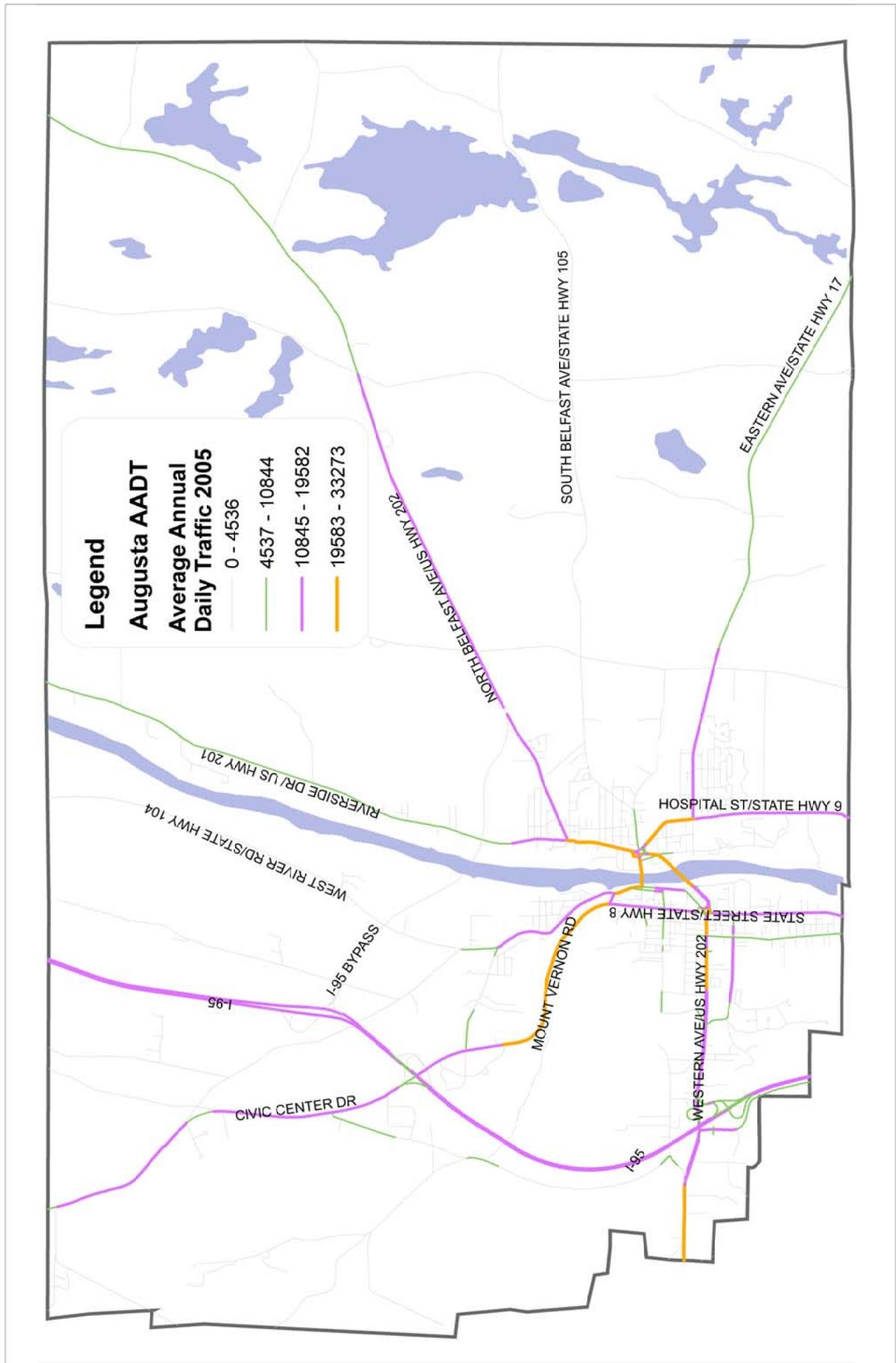
The Augusta Bureau of Public Works maintains 150 miles of city streets performing repairs, snow removal, street cleaning, and weekly curbside trash collection. This includes pothole patching, road resurfacing, street striping, sign installation, emergency response to floods and washouts, as well as pit operations. All streets are swept twice in the spring to help with the removal of accumulated winter sand. There is also year-round weekly sweeping of major arterial roads to control dust and remove debris. Snow removal is a large part of Public Works, with twenty-two full time employees dedicated to snow operations. The department takes care of sanding, plowing of streets/sidewalks/public and school parking lots, snow hauling, and ice removal.

Traffic Volume

As the state capital, Augusta serves individuals from all across Maine, almost all of whom arrive by car. As a result, the city has a number of high volume arterial roads that service residents, commuters, and visitors. The Maine Department of Transportation (MaineDOT) provides Annual Average Daily Traffic (AADT) counts for all major roadways in Augusta.

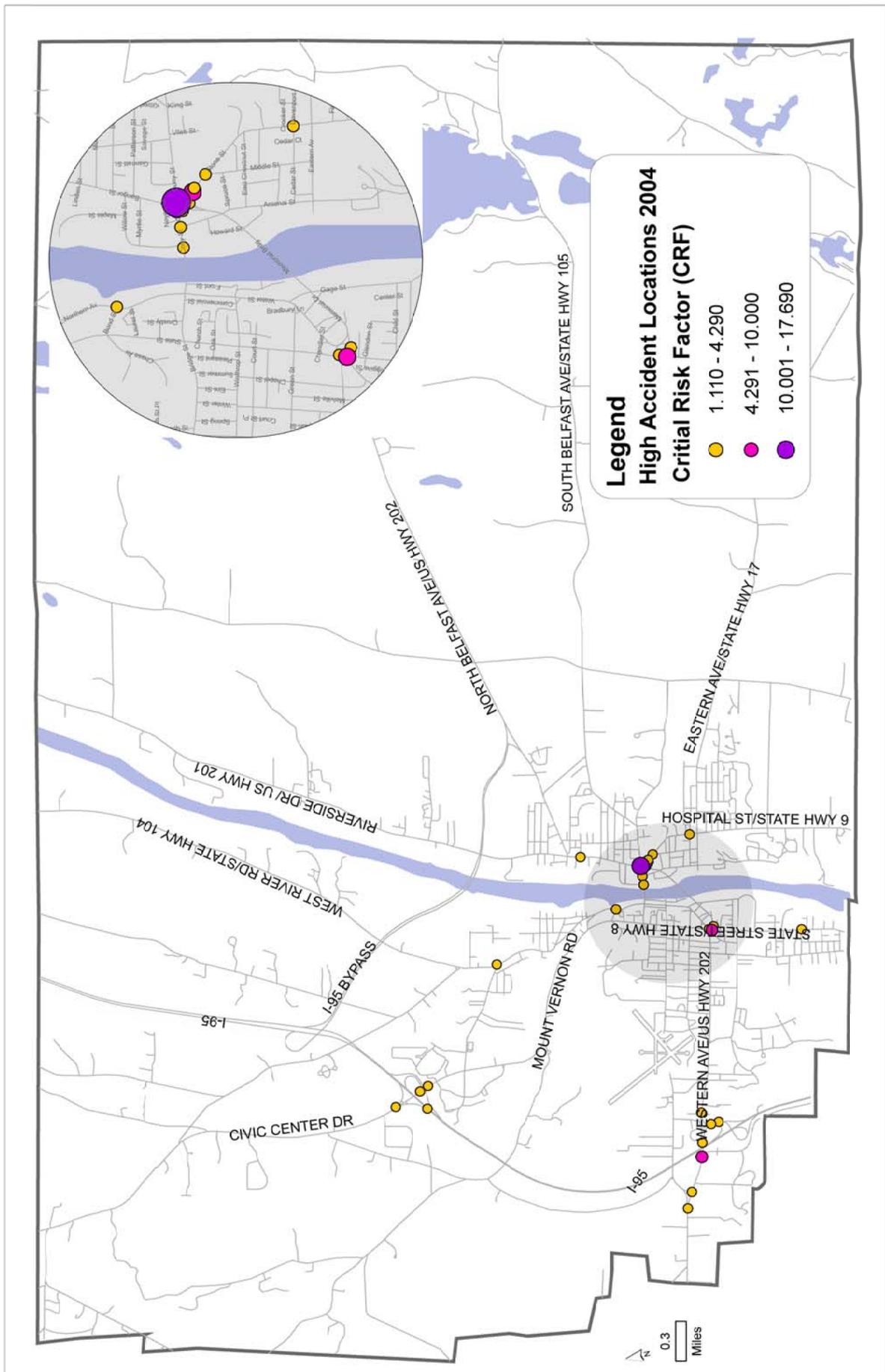
Traffic is most congested around the Cony Circle, where all major routes through the city converge (Exhibit C2). Routes such as Western Avenue and Mt. Vernon Avenue, which lead to and from the interstate, see over 20,000 vehicle trips per day. Traffic studies conducted prior to the construction of the Cushnoc Bridge projected an increase

Exhibit C2: Augusta Average Annual Daily Traffic Counts 2006



Source: Maine Office of Geographic Information Systems

Exhibit C4: High Accident Locations in Augusta



Source: Maine Office of Geographic Information Systems

Exhibit C3: Augusta Projected Annual Average Daily Traffic (AADT)

ANNUAL AVERAGE DAILY TRAFFIC	1995	2003	2006	Change (pre-bridge) 95-03	Change (post-bridge) 03-06
LOCATION					
WEST SIDE					
State St., south of Circle	18,010	16,520	16,010	-8.3%	-3.1%
Sewall St., south of Capitol St.	8,500	8,250	6,950	-2.9%	-15.8%
Capitol St., south of Sewall St.	13,440	11,660	11,570	-13.2%	-0.8%
Western Ave., west of Memorial Circle	24,580	28,750	20,040	17.0%	-30.3%
Western Ave., at Armory	15,720	18,350	14,330	16.7%	-21.9%
Western Avenue, west of I-95	15,560	14,920	13,840	-4.1%	-7.2%
State St., north of Memorial Circle	8,770	9,990	10,010	13.9%	0.2%
Mt. Vernon Ave., north of Bond St.	18,370	18,970	16,820	3.3%	-11.3%
Northern Ave., north of Bond St.	9,910	12,220	7,410	23.3%	-39.4%
EAST SIDE					
Bangor St., north of Cony Circle	23,750	25,850	18,720	8.8%	-27.6%
Riverside Dr., north of N. Belfast Ave.	12,830	11,890	12,000	-7.3%	0.9%
North Belfast Ave., east of Bangor St.	10,540	12,900	6,200	22.4%	-51.9%
Cony St., east of Cony Circle	7,490	7,340	6,010	-2.0%	-18.1%
Stone St., south of Cony Circle	24,010	26,350	22,000	9.7%	-16.5%
Eastern Ave., east of Stone St.	11,960	13,700	12,890	14.5%	-5.9%
Hospital St., south of Eastern Ave.	15,190	16,190	14,320	6.6%	-11.6%

Source: MaineDOT Bureau of Planning, Research, and Community Services

in traffic volumes of 27% along Western Avenue between 1995 and 2025. Similar levels of increases were projected for other streets.

The construction of the Cushnoc Bridge in November of 2004 alleviated some of the internal traffic pressures. Between 2003 and 2006, traffic on Western Avenue, Bangor Street, and North Belfast Avenue has been reduced by 20% - 50% (See Exhibit C3).

Traffic Mobility

Good traffic mobility depends upon a steady flow of automobiles through intersections. MaineDOT categorizes each intersection based on its perceived level of service, providing each with a letter grade from A (free-flowing) down to F (heavily congested). Intersections with a D or lower rating are considered in need of rehabilitation. The intersection of

State and Capitol Streets is an example of an E-rated area.

Congestion in Augusta occurs in the downtown, at the rotaries, and at the arteries coming into and leaving Augusta.

High Accident Location

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 volumes.

From this information, MaineDOT calculates a “critical risk factor” (CRF). Any location that has a CRF greater than 1.00 and that has eight or more accidents over a three-year period is considered a high accident location (HAL).

Using MaineDOT and OGIS data, 29 high accident locations were identified in Augusta in 2004. The most dangerous is the Cony Circle, with over 150 crashes annually (see Exhibit C4). The heavy use of this circle and its alignment are part of the reason for its high accident rating.

Traffic Speed

The perception of many in Augusta is that drivers routinely drive above the speed limit on Augusta streets. Increased speed leads to more accidents, intimidates pedestrians and bicycle riders, and takes away from the quality of neighborhood life.

Parking Facilities

Parking facilities and needs are overseen by the Augusta Parking District. They preview plans for new parking development, approve fees, and provide guidance for installation.

In addition to its own municipal parking facilities, the city has a number of state-owned lots. These are clustered around the state government campuses on the east and west sides of the river. There is a large demand for parking in and around these areas both due to the large number of employees as well as the number of daily visitors. In particular there is a parking “squeeze” when the legislature is in session.

Even with reduced retail activity downtown and a new parking garage, parking remains an issue along Water Street. The parking garage appears to be underutilized, and parking along the waterfront prevents redevelopment for more attractive uses. A new parking reduction waiver allows for a reduction of up to 50% in parking requirements to encourage development in urban areas.

Additional public parking facilities are not anticipated to be necessary to accommodate new development, as new development is required to provide its own on-site parking. Existing public parking may need closer management if downtown redevelops as hoped.

Bridges

The City of Augusta is served by roughly 30 public bridges, including three major bridges (Memorial, Father Curran and Cushnoc) crossing the Kennebec River. The Cushnoc Bridge was completed in 2004. It is designed to alleviate traffic at the two rotaries by diverting through traffic to the north. Traffic patterns on the bridges have already begun to change. There has been a 30% reduction in Average Annual Daily Traffic (AADT) on Memorial Bridge and a 36% reduction on the Father Curran Bridge between 2001 and 2006 (see Exhibit C5).

Exhibit C5: AADT for the Major Bridges

Bridge	2001	2003	2006
Memorial Bridge	31,900	29,910	22,370
Father Curran Bridge	23,210	22,540	14,900
Cushnoc Bridge*	-	-	17,410

*Traffic data for cars crossing the new Cushnoc Bridge is not yet available but counts for the intersection of Riverside Dr. and the bridge (SR3 SE/O SR 100.US 201) have been used here to estimate bridge crossings for 2006.

Source: MaineDOT

Gateways

Many of Augusta’s major roadways can be considered gateways. Gateways are the arterial streets through which travelers come into Augusta, and which by nature of this function provide lasting impressions and images of the city. Gateways announce the entrance to the city (separating rural from urban areas); mark the entrances into defined districts, such as commercial, governmental, or neighborhoods; and announce entry into the historic sections of the city.

The goals of gateways are to provide:

- ⇒ A sense of arrival to a specific place;
- ⇒ A character-sensitive impression of a community;
- ⇒ Entry points to neighborhoods or specific districts;

⇒ A definition between rural and urban space, while facilitating access to and from the city itself.

Gateway areas can be categorized into three basic types:

- ⇒ City Gateways (such as the interstate, major corridors, and collector streets) which provide “enhanced” entry points to the city and lead clearly to core areas (downtown, historic areas, government districts, marketplace)
- ⇒ Special District Gateways (business, residential, and historic, or in combination) which support neighborhood identity.
- ⇒ Rural Gateways which separate rural towns from the city.

The 1988 Comprehensive Plan identified several key gateways into Augusta. They included State Street from the south, Bangor Street on the eastside, and Western Avenue. The Plan observed that access to the city via Civic Center Drive was “enhanced by topography and road alignment” (i.e., attractive) but since that date, significant commercial development has taken away some of that visual appeal.

Of particular note from the 1988 Plan was a proposed policy on visual integrity for the city calling for “a high degree of naturalism... especially on hillsides...that can be seen from, among other places, the Maine Turnpike.” Recently, commercial developments at exits 109 and 112 off I-95 have dramatically reduced the naturalism called for in the Plan.

Other city/major corridor gateways currently facing pressure for development include North Belfast Avenue (Route 3), Eastern Avenue (Route 17), South Belfast Avenue (Route 105), Hospital Street (Route 9), West River Road (Route 104), and Riverside Drive (Route 201).

Areas closer to the city core that fall in to the category of “special district” gateways are Mt. Vernon Avenue, Bond Street, Grove Street (including Memorial Circle), State Street (the

full length, but particularly from Western Avenue to Mt. Vernon), and Cony Street (including Cony Circle). These need careful consideration and protection (although some clearly need rehabilitation) as they are part of the city’s historic core.

A dramatic entrance to Augusta that presents the natural and rugged beauty of Maine and is particularly vulnerable to development is the area surrounding the new Cushnoc Bridge. The natural landscape, the rock and granite exposed to build the roadways, and the vistas of the river present the dramatic beauty of Maine in an area close to an urban area.

The dramatic descent into the City from Winthrop Street (from the airport), which has a panoramic view of the historic core, is also threatened. This street’s transition from a residential area to a business area has left it with much of its nineteenth century presentation. It includes a long section of historic cemeteries lining both sides of the street at the crest of Winthrop Hill. Stone Street, Grove Street, and Northern Avenue also offer dramatic points of entry to the core city. These areas need careful consideration to ensure the continued protection of their viewsheds.

In addition, Augusta, being Maine’s Capital City, has a responsibility to protect views of the Capitol Building and Dome from all perspectives.

Growth and development are inevitable, but careful planning and the appropriate tools can shape a community into an area that is attractive, economically and culturally vibrant, and a desirable place to live. Developing, designing, and protecting the city’s gateways and viewsheds is one way to accomplish this.

Other Modes of Transportation

⇒ Public Transportation in Augusta is run through Kennebec Valley Transit (KV Transit), a private non-profit agency. They offer a semi-fixed bus and van transit route with operations in the greater Waterville and Augusta areas.

Route structures offer a convenient, low-cost means of transportation to commuters, the elderly, passengers with disabilities, and the general public. In some cases the buses pick individuals up directly from their homes.

Primary destinations include shopping centers, medical and educational facilities, business parks, elderly and low-income housing projects and community service organizations. There are three fixed routes. Buses run on the green and yellow lines run hourly while the blue line is limited to peak ridership times only. Current schedules are as follows:

- *The Green Route* provides service from the Depot (corner of Water and Winthrop Streets) to Augusta's East side. Service is hourly (except for 11:30) from 8:30AM to 3:30PM. The last stop ends at 4:30PM.
- *The Yellow Route* serves an area from the Depot to the Western Avenue corridor. Service is hourly (except 9:30 and 12:30) from 7:30AM to 3:30 PM. The last stop ends at 4:15PM.
- *The Blue Route* serves an area from the Depot to Hallowell and Gardiner. It runs three times a day leaving at 6:45 (from Gardiner), 9:30, 12:30, and 4:30. This bus is a commuter link between Hallowell, Gardiner and downtown Augusta.

In the Fall 2006 public survey conducted by the Augusta Comprehensive Planning Committee, public transportation was consistently considered a major issue. Over sixty percent of residents surveyed indicated that Augusta needs to do more in regards to its public transportation and over half indicated that they would use public transportation if times and locations were more convenient.

In addition to having local transportation buses, Augusta participates in MaineDOT's Go Augusta program which provides commuter service to and from the City to major Maine communities.

Augusta has a fixed-route Greyhound Line terminal at the airport which provides service to outlying communities including Boston. Concord Trailways plans to develop a terminal at the J&D Business park and offer service to Portland, Bangor, and Boston. This service will provide links to Portland and Boston Amtrak Stations.

⇒ There are a myriad of Pedestrian and Bicycle Facilities in Augusta, including over 200 miles of sidewalks and trails. The sidewalks are maintained by the City's Department of Public Works which insures that walkways are in good repair and clean of debris, snow and ice. Trails are maintained by the City in conjunction with non-profit organization such as the Bicycle Coalition of Maine (BCOM). More information on trails is available in the Leisure and Recreation chapter.

⇒ Possible ideas for encouraging bicycle use in Augusta include:

- Establishing a City bicycle and pedestrian advisory committee
- Requiring bicycle racks for all commercial developments as part of the approval process; and
- Constructing "complete streets" which include accommodations not only for vehicles, but for pedestrians, bicyclists, and other users. These could include an 11-foot-wide vehicular lane along with a 4-foot-wide bicycle lane (5 feet wide if adjacent to a curb or guardrail).

⇒ The Augusta State Airport has evolved from a military airfield to a scheduled airline stop, and today it is a general aviation airport with limited airline service. Non-scheduled service (charter) has been available continuously since 1946 through Maine Instrument Flight. This company was among the first in the nation to provide flight instruction for the

military and airlines operating in all-weather conditions. They continue to graduate a large number of Airline Transport Pilots. The Augusta State Airport is owned by the State of Maine and managed and operated by the City of Augusta. It provides regular scheduled passenger service to and from Boston and 15 other cities in the mid-Atlantic and Northeast United States. The airport has two runways and averages 91 flights per day.

The airport manager hopes to expand the marketing of the airport facilities with incentives including low-cost parking, more connecting flights to major carriers, and increasing the number of enplanements (individuals who departed from the airport to other destinations). In addition, there are attempts to have the current scheduled service provider (Colgan Air) upsize their plane and provide a flight attendant and bathroom facilities for passengers.

An airport master planning process is underway to plan for the future needs of the airport. One issue that will be addressed is the lack of runway safety areas. The current airport has very short safety areas and it would be very difficult to extend them due to the terrain and lack of available space.

⇒ Railroad activity in Augusta is limited to one active line which is jointly owned by Maine Central Railroad Company and the State of Maine. The State of Maine line is operated by the Maine Eastern Railroad Company and serves points south of the city. The Maine Central Railroad Company both owns and operates the northern portion of the line. At this time the line is used solely for freight transportation. However, the line's close proximity to the city and its connection to major points both north and south create the potential for passenger service.

Portions of the former Maine Central Rail Line are now part of the Kennebec Rail Trail. Other sections, such as those through downtown and the railroad bridge itself are not currently in use. The tracks through downtown have been temporarily covered to allow for parking but MaineDOT has reserved the right to open them at any time.

⇒ The Kennebec River was historically a fully functioning transportation corridor known as the Kennebec-Chaudière International Corridor from Bath, Maine to Quebec, Canada. The draft of the river varies in depths from 13 feet in South Gardiner to 5-8 feet in the vicinity of Britt Shoals (Augusta/Hallowell line). Under normal conditions, there is a 3-knot current. The Army Corps of Engineers states that the River is not at authorized depths, and a lack of funding and the low demand for larger ships to travel up the river to Augusta, make it unlikely the Army Corps will perform dredging in the Augusta area.

However, flat-bottom boats have traveled from Bath to Augusta in the past and there is the possibility of renewing these activities. The new wharf at the Arsenal, the east-side boat launch, and Mill Park are all popular recreational boating sites that could be expanded.

Transportation Projects

The City accomplishes at least one or two significant road reconstruction projects per year and heavily invests in paving existing roads as needed. City departments collaborate to prioritize each year for the Capitol Improvements Plan based on road condition, traffic volume, and infrastructure condition. Road improvements are coordinated with sewer and water improvements whenever possible. MaineDOT Urban-Rural Initiative Program funds are used to offset a portion of municipal road improvement costs and Capitol Improvement costs.

The Kennebec Valley Council of Governments (KVCOG), in conjunction with MaineDOT's Strategic Investment Plan, are looking to implement a series of new projects to aid long-term regional transportation development. KVCOG's list of Augusta-oriented projects includes:

- Alleviating commuter-related congestion issues on city "entry routes";

- Mobility improvements to Route 201 from Gardiner to Hallowell;
- Expand KV Transit;
- Upgrade Rail service, including passenger service;
- I-95/Route 3 interchange park and ride with bicycle connections;
- East side connector between Route 3 and 17;
- Bicycle - East Coast Greenway connection (Augusta to Waterville), intercity network;
- I-95: new interchange in Hallowell and Farmingdale;
- Route 202, Augusta to Manchester capacity expansion;
- Route 202, corridor widening;
- Route 11, capacity improvement within urban area; and
- Route 3 connector from I-95 to Route 27 then to Route 202 (added by the Transportation subcommittee).
- Interstate 95, modify the exit to allow direct access to the new Harold Alfond Center for Cancer Care from I-95, north and south.

In the process of planning and funding transit projects, MEDOT has three plans known as the 20, 6, and 2-year plans. The 20-year plan is for long term and sizeable projects. The two-year plan (also known as the Work Plan) is for relatively small projects that are typically maintenance projects such as road reconstructions, overlays, and smaller projects (typically Capital Improvement Projects). The 6-year plan is essentially an expansion of the two-year plan and is stretched out for planning and funding purposes. Currently no MaineDOT plans include any major upgrades, widening, or construction in Augusta.

MaineDOT reviews a municipality's requests and prioritizes them based upon safety, need, and funding. It is recommended that in future requests, projects are identified as recommendations made through the Comprehensive Plan of the city. This would give the project requested a higher rating during the MaineDOT's prioritizing process.

PART TWO: INFRASTRUCTURE

The infrastructure of Augusta includes water, sewer, and solid waste facilities. This section provides an overview of these facilities available in Augusta.

Public water and sewer services are provided by the Augusta Water and Sanitary District, a non-profit, quasi-municipal chartered corporation. Solid waste disposal is run by the Bureau of Solid Waste in conjunction with the Department of Public Works.

The Augusta Water and Sanitary District manages the distribution of drinking water and sewer services for the city and surrounding towns including Manchester, Winthrop, Monmouth, and Hallowell.

Within the more densely populated core of Augusta, public water and sewer services are generally available. For the rest of the city water supply and sewer disposal are an individual responsibility typically provided by individual well and septic systems.

Public Water Service

The Augusta Water District maintains over 100 miles of water pipes, 470 hydrants, 6 pump stations, 10 storage tanks, as well as three gravel-packed covered wells along Bond Brook and two surface water basins (see Exhibits C6a and C6b).

The covered wells are capable of delivering approximately one million gallons per day. The 10 water storage facilities have capacities between 150,000 and 5,700,000 gallons and maximum supplies ranging between 1.5 and 2.5 days of service.

Though groundwater supplies may be finite, there are many sources of surface water available around Augusta, including 90 million gallons per day from Cobbossee Lake. This supply, if needed, would cost tens of millions of dollars in treatment.

Exhibit C6a. Covered Water Sources				
Covered Wells	Depth	Diameter	Estimated Daily Yield (in thousand gallons)	Treatments
Brookside	85	18"	1,000,000	Lead/Copper; Calcium Sequestration; Fluoridation; Chlorination
Triangle	89	18"	1,300,000	
South	89	18"	1,100,000	
Source: www.augustawater.org				

Exhibit C6b. Surface Water Sources				
Surface Water	Area (in square miles)	Storage Capacity (in thousand gallons)	Estimated Daily Yield (in thousand gallons)	Treatments
Carlton Pond*	2.5	1,717,000	2,000	Lead/Copper; Filtration; Sedimentation; Flocculation; Fluoridation; Chlorination
Cobbossee Lake*	131.7	25,178,000	90,200	
* Not utilized in 2005				
Source: www.augustawater.org				

In the event of a drought, Augusta’s Water District would look for groundwater supplies in Chelsea near the Hallowell production well. This water is of similar quality and could carry the city through a protracted dry period.

No increase of the current public water supply is anticipated. The usage of water has declined steadily since registering 3.34 MGD in 1974; to 2.44 MGD in 1990; to 1.755 MGD in 2002; to the all-time historic low of 1.586 MGD in 2004. Some of this loss is due to loss of water sales revenue from the many manufacturing and industrial operations that are no longer in business, as well as overall customer conservation.

The Water District does not feel that there is adequate protection around its three wells. Of particular concern is the increased development in and around wells and the impact that may have on water and water quality. For example, a new mobile home park with a septic system was built across from a production well, creating a potential for pollutants to enter the groundwater.

Water quality protection and conservation actions are promoted through various state and non-profit agencies throughout Augusta. More on this is available in the Environment Chapter.

The Augusta Water District is in the process of making the following improvements:

- ⇒ Expanding the water main along Riverside Drive;
- ⇒ Improving the water main located on the lower portions of State Street toward Hallowell;
- ⇒ Expanding the storage tanks located on Civic Center Drive; and

In the development and expansion of water facilities, the District tries to “piggyback” on development projects in order to streamline costs.

Public Sewer and Storm Water Collection System Services

The Augusta Sanitary District collects and transports wastewater, maintains the city’s storm water system, operates the secondary wastewater treatment plant, and treats wastewater for Manchester, Winthrop, Monmouth, and Hallowell. Current needs are met through a sanitation system, which includes 115 miles of sewer mains, 15 wastewater pump stations, 38 miles of storm water mains, and 3,281 catch basins.

An issue in older parts of the city are the catch basins that collect surface water from the streets during rain events and flow directly into the sewer system. During heavy rains these sewer lines cannot handle the large amount of water in conjunction with the sewage, and the system overflows into natural drainage ways such as streams and rivers.

The District in conjunction with the Department of Environmental Protection is charged with eliminating these combined sewer overflows over the next ten years. In newer parts of the city, there is a system of pipes separate from the sewer lines which handle ground and surface water, limiting these possible overflows.

The Sanitary District has several projects in the works:

- ⇒ Upgrading the Riggs Brook pump station;
- ⇒ Upgrading Whitney Brook trunk line;
- ⇒ Installation of separate storm drain system on Pearl Street; and
- ⇒ Extension of sewer and water to the new Cancer Treatment Center.

The District is also looking into expansions in the Mount Vernon Avenue/Bond Street/and lower Water Street are due to the large number overflow points there. Development along Civic Center Drive will most likely lead to increased line size and an underground sewage storage tank near the former Edward Mills site.

The District will not pay for expansions to their system. Expansions to the system must be paid for by individuals other than the ratepayers of the systems. Impact fees have been discussed as a means to pay for expansions and upgrades.

Also under the jurisdiction of the Water and Sewer District is the Kennebec River. The District is responsible for maintaining the river's water quality and keeping it clean. The costs for maintaining a recreational-grade river far exceed what the city can pay.

A new funding mechanism is needed to ensure that the river remains a safe and viable recreational area for residents and visitors alike.

Solid Waste Service

The Bureau of Solid Waste is responsible for the operation of the Hatch Hill Waste Disposal Facility located on Route 105 (So. Belfast Ave). The facility provides waste recycling and disposal services for Augusta, Chelsea, Farmingdale, Gardiner, Hallowell, Manchester, Pittston, Randolph, and Whitefield. The contracting communities pay an annual fee for use of the facility. In 2005, approximately 28,000 tons of waste was landfilled and 5,000 tons was recycled and/or composted. Expansion III of Hatch Hill was begun in 2001 and it is anticipated that the new facility will be able to provide 14 years of waste disposal capacity, based on the existing volumes.

Trash collection is provided on a weekly basis to all single-family and multi-family homes of four units or less by the city's Public Works department. As part of trash collection the department also provides recycling collection (once a month), two three-week "For-A-Fee" spring services including bulk trash pick-up and leaf collection, a free fall leaf-collection program, and a wood stove ash collection program (November through April).

The current recycling rate for the facility (items that are brought to the facility and recycled rather than placed directly into the landfill) is approximately 45%. The Landfill has recently received a Regional Efficiencies Recycling Grant of \$20,000 to look at increasing the recycling rate for the region as a whole (regionalization).

One way to encourage an increase in the recycling rate for the residents of the City of Augusta is to charge a fee for each bag of rubbish that is placed curbside. The cost of the rubbish collection is currently included in the property taxes.

If the cost is removed from the property tax and individuals must pay for each bag, it is felt that people would recycle more items to reduce that amount of disposal they would need to pay for. This “pay per bag” system is currently in use in the cities like Portland and Falmouth.

Since the landfill has approximately 14 years of remaining life, a study of the facility and options of what should be done for the long term (after 2020) should begin relatively soon. These options include another expansion, creating a transfer station to send the rubbish to another approved facility, or build an incinerator to burn the rubbish. One recommendation that should be looked at is the possibility of transferring the city’s rubbish to an existing incinerator in exchange for accepting ash at the current landfill. An incinerator can reduce the volume of rubbish to ash by 50-70%. This would extend the life of the landfill by many years.

Public Facilities

⇒ The Augusta Civic Center is primarily a convention, exhibition, and special-events facility owned and operated by the City of Augusta. The Center serves as the primary public assembly facility in the area. The Center promotes and facilitates various events and group functions, generating hotel & motel room nights and related revenues for city business and increasing economic stimuli for the local infrastructure. The Augusta Civic Center, built in 1973, includes a main auditorium (24,576 sq. ft), 2 ballrooms, and 24 flexible-capacity/meeting rooms, for a total of 48,000 square feet.

Issues and Implications

Augusta’s existing public facilities are not anticipated to need expansion due to growth and development. Public buildings, parks, recreational facilities are all adequate to accommodate the current population and the modest increase in population expected over the next decade. Many facilities will need typical maintenance and some will receive major renovations, and these items are necessary to maintain the quality of life in the city. But they are not expected to be necessary to serve new population growth.

There are a number of areas within the designated growth area that do not have public water or public sewer. Extension of these services to these areas is being considered as a method to stimulate both commercial and residential growth in these areas. These services are not necessary to serve growth, but would allow a much more efficient use of the land and other services, benefiting the municipality by reducing the long-term cost to serve development, increasing the tax base in the short-term, allowing space for future development, and making efficient use of municipal infrastructure.

ECONOMIC DEVELOPMENT

The first trading post was established in Augusta in the early 1600s, and the community has served as a retail and wholesale trade center ever since. State government and county government located their seats here in the early 1800s, adding government and services to the city's core economic mix. Later in that same century, the Industrial Revolution brought manufacturing to the city; it boomed in the last century, and remains today, but at a reduced level. In recent years health care has become an important job generator for the area, as it has elsewhere in the state.

These four legs of Augusta's economy – trade, government, manufacturing, and health services – are discussed in detail in this section.

AUGUSTA LABOR FORCE

In 2006, there were an estimated 9,362 Augusta residents in the labor force (residents over 16 years that were working or actively seeking work). This is greater than in 2000 (9,229) but less than 1990, when an estimated 10,399 residents participated in the workforce.

The education and health care sector employs approximately 20% of Augusta's residents (three out of four of these workers are in health and social services). Public administration and retail trade employ about 14% apiece, manufacturing employs 9%, and arts/entertainment employs 7% of the city's residents. Natural resource businesses – farming, forestry, fishing – employ less than 1% of the city's workforce (see Exhibit D1).

Within these industries, nearly one-third of Augusta residents are managers or professionals.

Another 30% work in sales-related positions, and 16% work in service-related positions (see Exhibit D2). Augusta residents are more likely to work in sales and service positions than residents of Kennebec County as a whole.

About 7.5% of Augusta workers are self-employed or in a family business – 664 out of the total workforce in 2000. This is not a high figure – rural Maine communities often have 10% to 20% in the self-employed category. Self-employed people do not show up, however, in much of the Maine Department of Labor data, which only covers jobs that receive unemployment insurance. The success of small business owners is important to Augusta's ability to grow and diversify its economy.

Approximately 70% of Augusta's residents work in the city itself. The remaining workers have jobs throughout the region – 4% in Waterville, and around 2% apiece in Hallowell, Windsor, Winthrop, Gardiner, and Bath.

Exhibit D1. Industry Profile of Augusta Residents, 2000

	Augusta	Kennebec County	State of Maine
Natural Resource	0.6%	1.5%	2.5%
Construction	6.0%	6.8%	6.7%
Manufacturing	8.6%	11.1%	13.9%
Wholesale	4.1%	4.1%	3.4%
Retail	14.1%	12.8%	13.2%
Transportation	4.8%	4.9%	4.2%
Information	3.3%	2.6%	2.4%
Finance, Insurance, Real Estate	4.8%	4.4%	6.0%
Professional and Managerial	5.6%	5.4%	6.7%
Administrative	2.5%	2.1%	2.6%
Education and Health Care	19.8%	24.7%	22.6%
Arts and Entertainment	6.9%	5.7%	7.0%
Other	4.8%	4.4%	4.6%
Public Service	14.1%	9.4%	4.4%

Source: U.S. Census

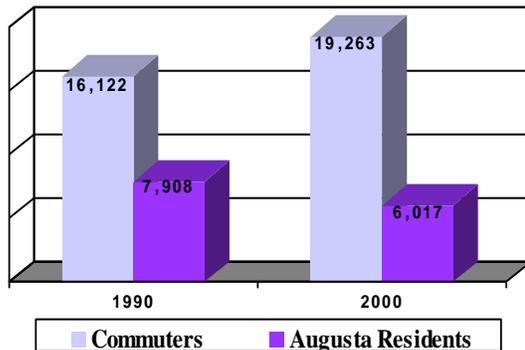
Exhibit D2. Occupation Profile of Augusta Residents, 2000

	Augusta	Kennebec County	State of Maine
Managerial and Professional	32.4%	33.2%	31.5%
Service	15.9%	14.8%	15.3%
Sales	30.0%	26.7%	25.9%
Natural Resource	0.2%	0.8%	1.7%
Construction	8.7%	10.8%	10.3%
Production and Transportation	12.8%	13.7%	15.3%

Source: U.S. Census

Approximately one in seven Augusta residents work for the government, yet one in three of the jobs in Augusta are government-related. This suggests that a relatively large share of government employees commute to Augusta from surrounding communities.

Exhibit D3. Commuters and Augusta Residents Working in Augusta



Source: U.S. Census

Augusta residents, however, are a minority of the total number of people working in Augusta. In 2000, there were 19,000 commuters coming into the city to work, joining 6,000 Augusta residents who also worked in the city. During the 1990s, the number of in-coming commuters grew, and the number of Augusta residents working in the city declined, reflecting the suburbanizing pattern of the region (see Exhibit D3).

Augusta is the job center for the region -- nearly 70% of the jobs in the Augusta Labor Market Area (Exhibit D5—on the following page) are located in the city. Augusta tends to have a larger share of jobs in public administration (93%), information (88%), professional and business services (75%), and other services (74%), than the rest of the Labor Market Area. Conversely, Augusta tends to have fewer manufacturing (48%), construction (33%), and natural resource-based jobs (6%).

Augusta has lost about 750 jobs in the last four years, largely due to losses in the manufacturing sector. During the same period, social service jobs increased by 300 (Exhibit D6).

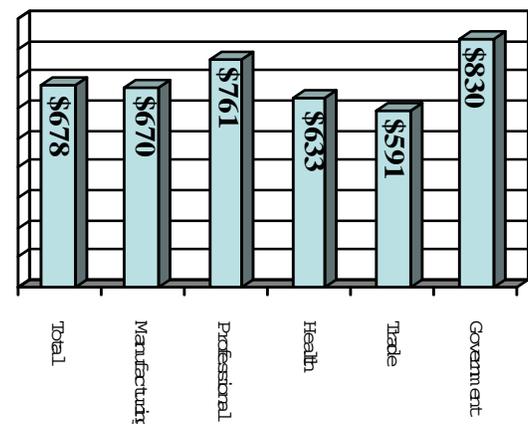
Wage data indicates that government jobs pay the highest in the area (see Exhibit D4). Professional service jobs also pay well. Health-related jobs pay slightly under the city average, and retail jobs pay the lowest amount.

AUGUSTA AS AN EMPLOYMENT CENTER

The Maine Department of Labor estimates there were just under 27,000 jobs in the City of Augusta in 2005 (the most recent year in which data is available). Of these jobs, almost a third are in public administration (state, county, and local government), a fifth are in education and health, and a fifth are in retail and wholesale trade.

This pattern is largely consistent with the industry profile of Augusta's labor force. The one major exception is government jobs.

Exhibit D4. Average Weekly Wage in Augusta



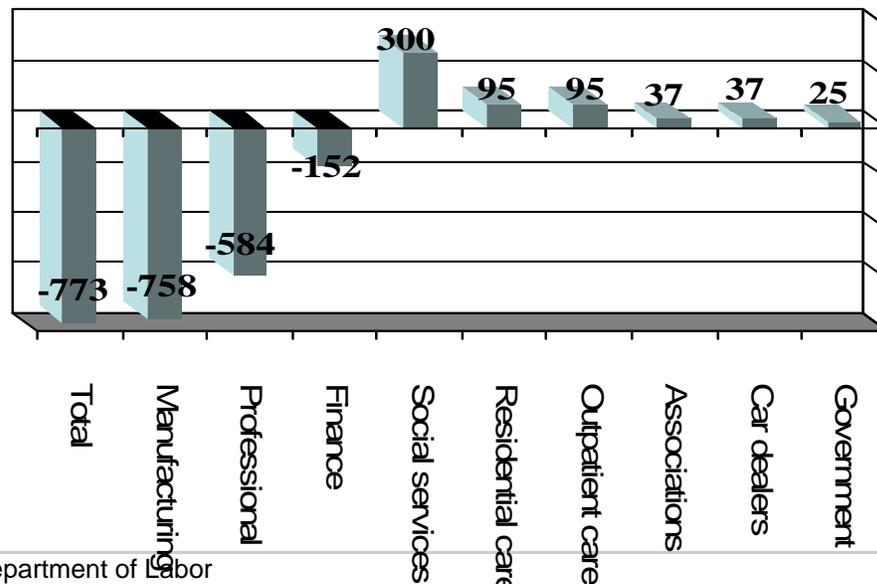
Source: Maine Department of Labor

Exhibit D5. Augusta Labor Market Area and Micropolitan Area



Source: Maine Department of Labor

Exhibit D6. Changes in Augusta Covered Employment, 2001-2005



Source: Maine Department of Labor

Exhibit D7. Where Augusta Workers Come From as % of Total Augusta Workforce, 2000

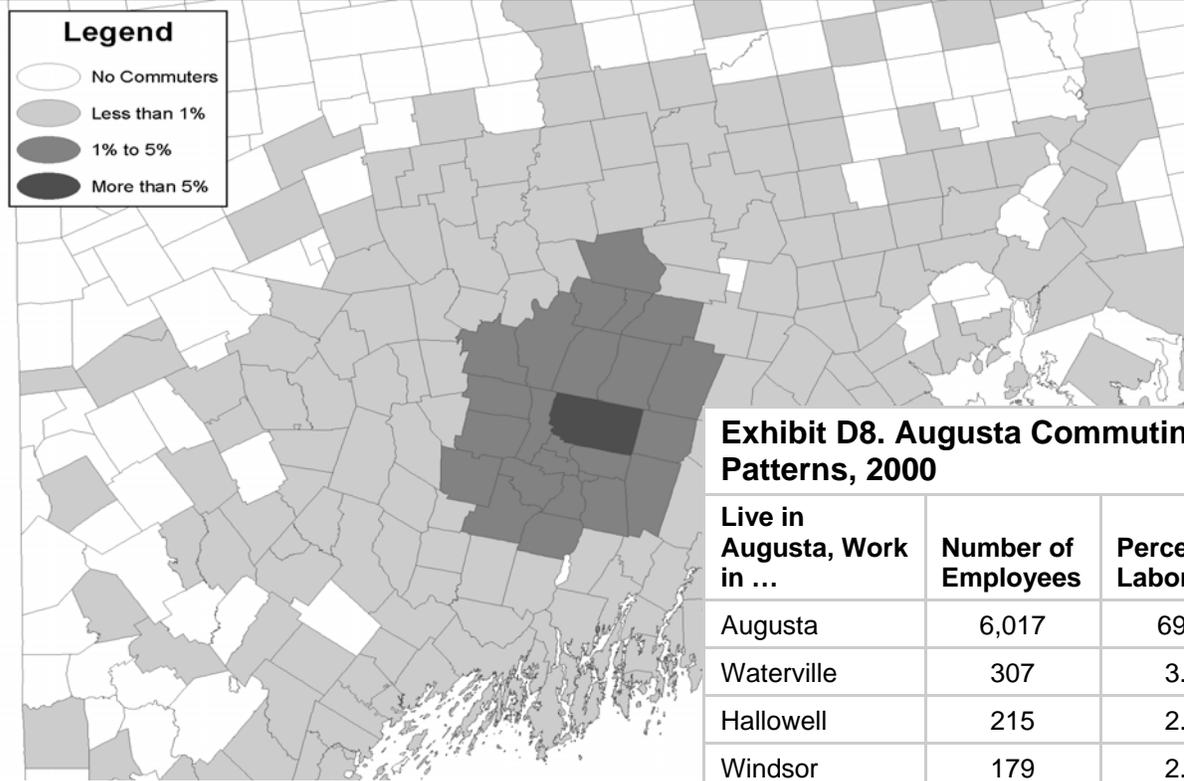


Exhibit D8. Augusta Commuting Patterns, 2000

Live in Augusta, Work in ...	Number of Employees	Percent of Labor Force
Augusta	6,017	69.8%
Waterville	307	3.6%
Hallowell	215	2.5%
Windsor	179	2.1%
Gardiner	164	1.9%
Winthrop	156	1.8%
Bath	150	1.7%
Winslow	84	1.0%
Portland	83	1.0%
Auburn	82	1.0%
Farmingdale	64	0.7%
Chelsea	61	0.7%
Rockland	53	0.6%

Source: U.S. Census

Source: U.S. Census

Augusta residents are commuting farther to their jobs. Seventy percent of the employed city residents worked in Augusta in 2000, a 10% decrease from 1990 when 80% lived and worked in Augusta.

Whereas 2,500 Augusta residents left the city to go to work, approximately 19,000 workers commute into Augusta for their job. These employees travel from York, Houlton, and most communities in between (see Exhibit D7).

Proximity to Augusta increases the number of workers commuting from Winthrop and Gardiner, each housing more than 1,000 Augusta workers in 2000. Waterville, Sidney, and China had more than 700 workers. These commuter trends are likely to continue in the future (see Exhibit D8).

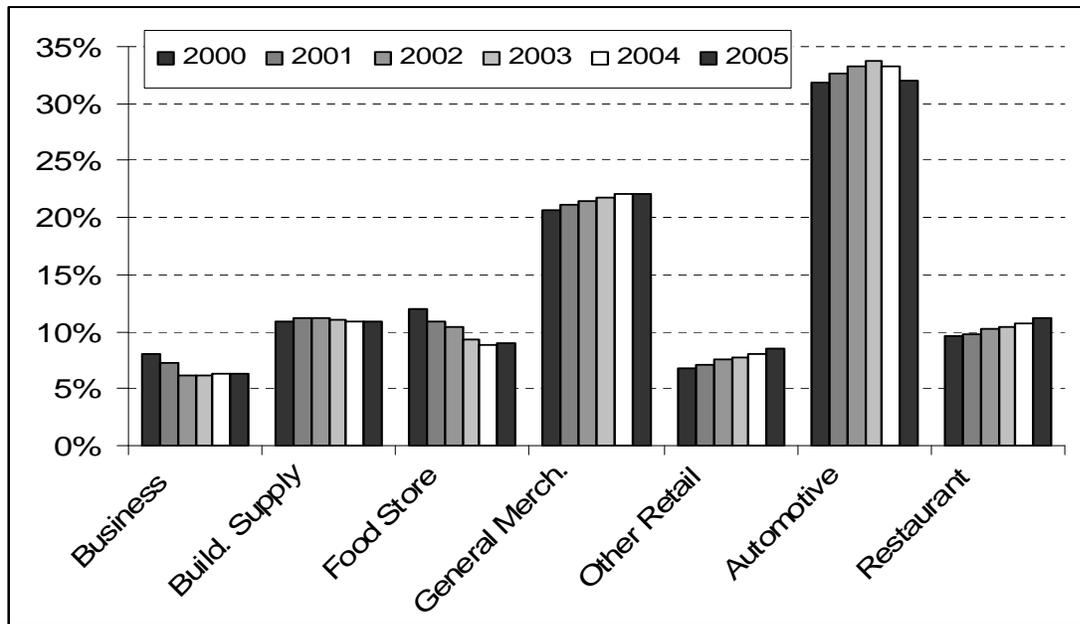
The future is generally positive for overall employment in the city, even while some major employers have cut their workforce (State government, Central Maine Power, Maine General Medical Center).

AUGUSTA AS A RETAIL CENTER

Augusta is a regional retail center. One-fifth of its jobs are in retail or wholesale trade. Over 30% of Augusta’s residents work in sales positions.

The Maine State Planning Office tracks the retail sales of all items subject to Maine’s sales tax. According to this information, retail sales in Augusta totaled \$700 million in 2004. Retail sales have been expanding rapidly in Augusta – 13% since 2000 (or \$85 million in four years).

Exhibit D9. Augusta Region Retail Sales by Category, 2000 to 2005



Source: Maine State Planning Office

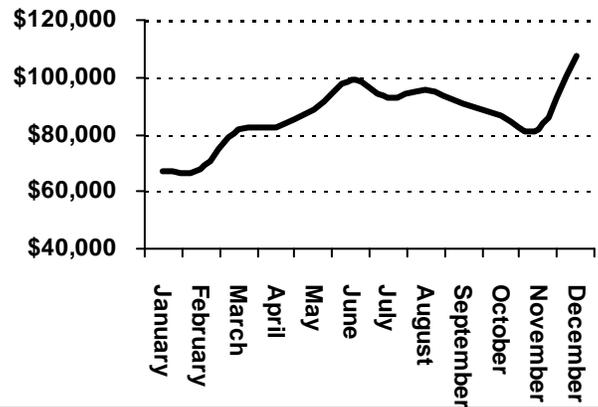
The City of Augusta captures approximately 80% of the retail sales in the Augusta Economic Summary Area¹. The retail sales figures for this region as a whole have increased at the same rate as the City of Augusta, in large part because the city dominates the retail activity in the region. The Marketplace at Augusta area has become the second-largest retail concentration in Maine, next to the Maine Mall in South Portland.

General Merchandise, Other Retail, and Restaurant retail sales are the fastest growing retail sectors (see Exhibit D9).

Retail sales spike in December around the holiday season, decline through the early winter, increases in the spring, and peak again in the summer months (see Exhibit D10).

¹The Augusta Economic Summary Area includes the communities of Augusta, Chelsea, Farmingdale, Gardiner, Hallowell, Litchfield, Manchester, Monmouth, Mount Vernon, Pittston, Randolph, Readfield, Richmond, Somerville, Vienna, Wayne, West Gardiner, Whitefield, Windsor, and Winthrop.

Exhibit D10. Average Augusta Region Retail Sales by Month, 2000 to 2005



Source: Maine State Planning Office

Major Retail Sections of Augusta

Commercial areas can be found downtown and along the corridors of major arterial and connector streets.

⇒ The Downtown is the oldest retail center in Augusta. Along Water Street is an assortment of smaller, targeted retail stores, service businesses, and restaurants. Reinvestment in the Downtown area is increasing. Still, the downtown lacks upstairs housing and enough foot traffic to support a thriving retail atmosphere. Several successful retail operations are longstanding family businesses with loyal customers.

- ⇒ Western Avenue is a retail corridor that connects the waterfront with Interstate 95. This corridor turned from residential to commercial when the Memorial Bridge and Maine Turnpike opened in the 1950s, and this road became a major access to the coast. In keeping with its automobile-oriented roots, the corridor has many convenience and fast-food stores, both chains and locally-owned. A fast-growing automotive retail and service center is developing on outer Western Avenue.
- ⇒ The Civic Center area is one of the fastest-growing retail centers in Maine. It is located at the intersection of Route 27 and Interstate 95, and is largely occupied by national retail businesses and restaurants (the Marketplace). The amount of space available for new development east of the Interstate is limited, although pressure to expand this center west of the Interstate is growing.

TOURISM

As the state capital, Augusta receives many visitors annually. Most go to the State Capitol and the Maine State Museum. But few of these visitors get in their car and drive to see Old Fort Western or Augusta’s downtown.

Augusta has a great potential for historic and arts tourism. This potential is discussed in detail in the History and Culture Chapter.

Augusta is also a “pass-through” community for tourists heading from the south to Midcoast, eastern, and northern Maine. Its strategic location is why the Marketplace at Augusta has been a success. This stream of visitors is another potential source of tourism for downtown.

AVAILABLE LAND FOR ECONOMIC DEVELOPMENT

There is ample land in Augusta zoned for industrial and commercial development (see Exhibit D11). Industrial areas encompass existing or traditional industrial uses along the river and in outlying areas to the northwest of the urban core.

Commercial areas encompass the heart of the city and spread along the river (except to the northwest, which is rural), between the rural and industrial areas to the northwest of the city, and in pockets along major arteries and connectors, including the Interstate.

Augusta has several commercial areas of focus; Lower State Street, Downtown/Riverfront, Riggs Brook Village, Civic Center Drive area, Western Avenue, Bangor Street/Riverside Drive, Leighton Road. The Riggs Brook Village area has the largest amount of land available for growth in the next 25 years.

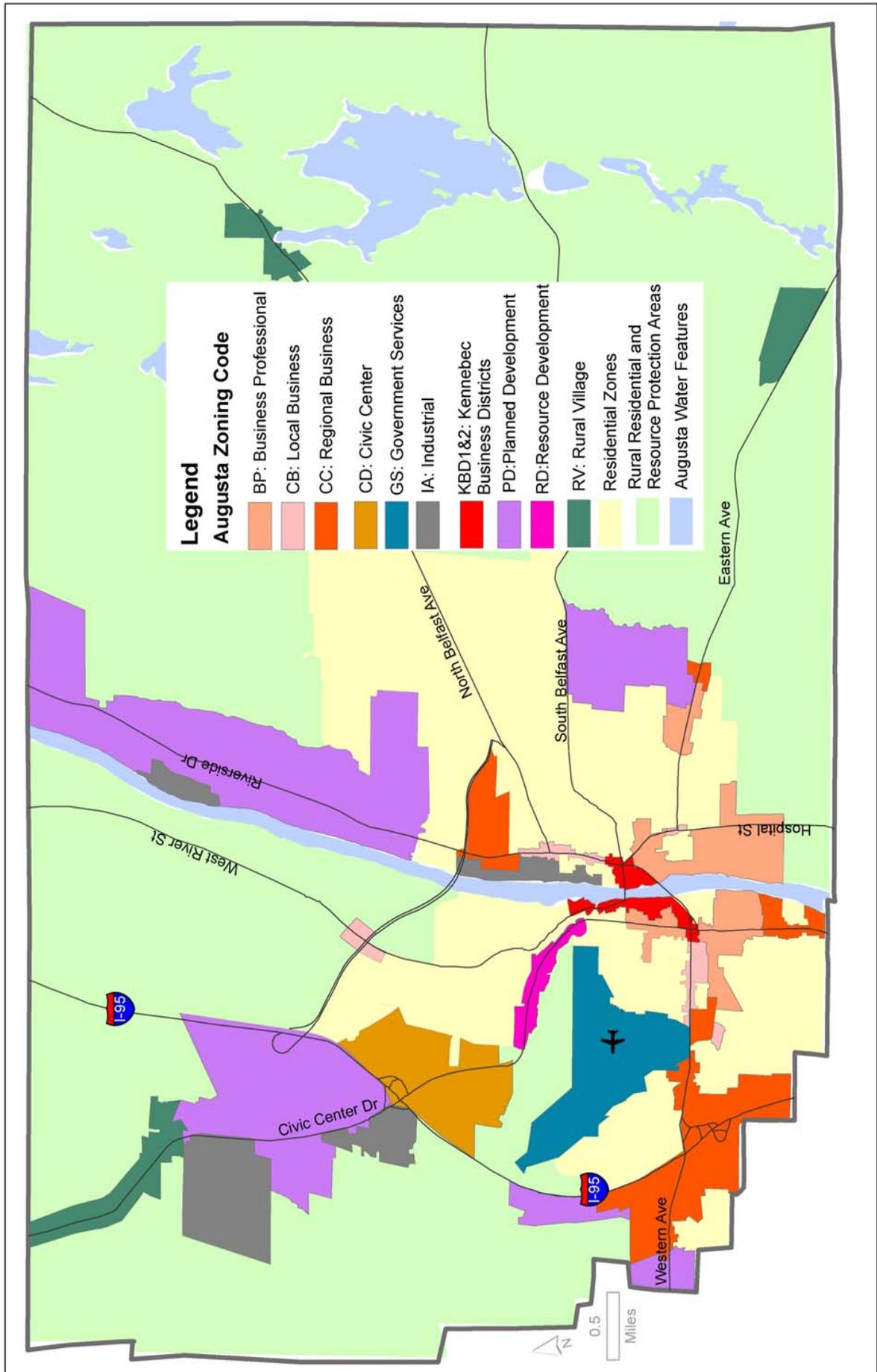
With respect to economic development, there are several zoning issues that the City must address. While existing commercial/industrial zoning districts appear to be in the appropriate location, there are several places where land use changes may require zoning reconsideration:

- ⇒ For the next phase of the Marketplace at Augusta to be built, it will need to connect to Old Belgrade Road; this will raise the issue of the rezoning of the Old Belgrade Road area to allow more commercial uses; and,
- ⇒ The Augusta Tissue Mill site is currently zoned industrial (IA); the site is likely to be re-used for residential and office purposes, and the zoning will need to be changed to make this workable.

ORGANIZATIONAL CAPACITY AND TOOLS

The City has an Office of Economic and Community Development that engages in a variety of activities to promote the city’s growth. Its mission is to provide services and programs that attract investment, enhancing the city as a place to live and conduct business. These include financial/incentive/project packaging, direct business assistance, site search assistance, research, grant applications, administering

Exhibit D11: Augusta's Commercial Zoning



Source: Augusta GIS

housing programs, and acting as a liaison to neighborhood organizations.

The Office coordinates with other partners in economic development in the region, including the Kennebec Valley Chamber of Commerce, and the Augusta Board of Trade.

The Office administers and/or coordinates applications for the following business assistance programs:

- ⇒ Job Retention Program – The JRP is designed to provide existing companies that are considering relocating outside of the City with financial assistance towards the relocation costs involved in moving the company to another location within the city. Up to \$25,000 deferred loan.
- ⇒ Business Assistance Program – A CDBG grant for a loan or grant of up to \$400,000 to qualified businesses to finance fixed assets such as capital equipment, buildings, fixtures or property improvements. The project must benefit a percentage of low and moderate income persons.
- ⇒ Economic Development Infrastructure Grant – A CDBG grant to communities for up to \$400,000 for the construction of public infrastructure projects such as roads, water lines, utilities, and publicly owned facilities (buildings, waste water treatments, rail spurs). Project must benefit a percentage of low and moderate income persons.
- ⇒ Development Fund – up to \$200,000 in flexible gap financing for up to 40% of a business' development activities, e.g. fixed asset investments or working capital. The project must benefit a percentage of low and moderate income persons.

The City of Augusta established a TIF Policy back on July 19, 1999. As a rule, the City will entertain any TIF proposals that propose to create at least \$500,000 of new taxable value. It prefers that all TIF proposals be 'Credit Enhancement Agreement' programs, whereby the applicant will receive a portion of tax revenues that are generated from the increase in value on their project.

In addition, the applicant can propose up to 100% of the additional tax value generated by the proposed project for up to 20 years. The funds can be applied to construction, improvements, and site work; demolition, repair, and remodeling; acquisition of machinery and equipment; financing costs; professional and administrative services; relocation and organizational costs; and training costs up to 20% of the total project. However, the City prefers shorter terms and reserves the right to negotiate with the applicant as to the percentage of revenues to be paid back to the applicant. The amount of revenues to be provided to the applicant are also subject to the City Council's ranking of such factors as the number of jobs created, the quality of the jobs, and public benefit. The City also insists on a contractual agreement that benefits will be recaptured by the City should the project be moved to another municipality prior to the conclusion of the TIF program.

All Tax Increment Financing deals must be approved by the State to ensure the project is eligible under state law and that the City is not "overusing" the tool by putting too much of its land and property value under sheltered status. State law limits a municipality to having no more than 5% of its entire total valuation, and 2% of its total land area, within TIF districts. This is not a problem for Augusta, which currently has only .004% of its total valuation, and .005% of its total land area, within TIF districts.

As of January of 2007, the City of Augusta had seven (7) established Tax Increment Financing (TIF) Districts (see Exhibit D12). One of these TIF districts, Cloutier (workforce housing on Water Street), falls under the Affordable Housing TIF program. This is a new program and differs slightly from the traditional 'commercial' TIF program.

Exhibit D12. TIF Projects in Augusta

Name of TIF District	Date Established	Total Acreage	Original Assessed Value (OAV)	Projected Net Savings with TIF	TIF end date
Marketplace at Augusta Phase I	Feb-90	156.5	\$ 3,040,200.00	\$ 3,523,320.00	2010
Phase II	2000	NA	NA	\$ 4,292,340.00	2020
Old City Hall	Aug-00	0.94	NA	\$ 422,540.00	2020
J.S. McCarthy	Mar-01	1.02	\$ 2,949,700.00	\$ 352,806.00	2020
NRF Distributors	Nov-02	29	\$ 262,600.00	\$ 290,989.00	2012
Downtown TIF	Jul-02	53.65	\$ 30,377,100.00	\$ 1,550,177.00	2022
Cloutier - 90 Water Street	Nov-05	0.23	\$ 336,800.00	\$ 105,546.00	2020
Arsenal	Sep-06	22	NA	\$ 2,196,054.00	2031

Source: City of Augusta

Another, the Downtown TIF District, falls under a special section of the TIF statute that is exempt from the acreage and valuation calculations discussed above.

TIF revenues can be used to provide benefits to the city beyond the individual project. For example, sheltered tax revenues from the Marketplace TIF program are being directed to pay for the debt of the downtown parking garage. Sheltered tax revenues for the Marketplace are also covering the expenditures of the City’s Office of Economic and Community Development, which otherwise would have to be paid from the City’s general fund.

TIF arrangements also preserve state school aid and revenue sharing that would otherwise be lost. City staff estimates this advantage to be approximately 40%, which means that the seven TIF districts will save Augusta property tax payers approximately \$13,000,000 million over their collective lives.

Comprehensive Economic Development Strategy (CEDS)

The City of Augusta participates in the Kennebec Valley Council of Governments’ Comprehensive Economic Development Strategy (CEDS) program sponsored by the federal Economic Development Administration (EDA). The planning done under this program creates the priorities that the federal EDA uses to distribute loans and grants.

Augusta has three priorities listed in the 2002 CEDS plan:

- ⇒ Extend sewer service to the Riggs Brook;
- ⇒ Provide roads and utilities to the Quimby Loft parcel Business Park; and
- ⇒ The purchase of a 90-acre parcel within the Central Maine Business Park, and installing roads and utilities to serve the parcel.

Pine Tree Zones

A key economic tool in the Baldacci Administration is called Pine Tree Development Zones (PTDZ). Businesses locating in PTDZ can receive many benefits depending on the level of new qualified business activity conducted. The tax burden of qualified businesses in these zones may be reduced through the following exemptions, reimbursements, and credits:

- ⇒ Corporate Income and Insurance Premium Tax Credits (100%, Years 1-5; 50%, Years 6-10): tax credit benefit derives from net new PTDZ payroll and property as a percentage of all Maine payroll and property;
- ⇒ Income Tax Reimbursement (80%, Years 1-10): tax reimbursement benefit derives from income taxes withheld for net new jobs created, i.e. those qualified employees hired above the “old” employment baseline that existed in Maine prior to the expansion may be eligible for Employment TIF;

- ⇒ Sales and Use Tax (100% Personal Property Exemption, Years 1-10): tax exemption benefit derives from the qualified business paying no tax on all new tangible personal property purchases for its qualified business activity;
- ⇒ Sales and Use Tax (100% Real Property Reimbursement, Years 1-10): tax reimbursement benefit derives from paying no tax on all new tangible property purchases that are to be physically incorporated in, and become a permanent part of, real property of a qualified business and used in its qualified business activity;
- ⇒ Property Tax Reimbursement (up to 100% and 30 years): tax reimbursement benefit derives from local incremental taxes on new real and personal property investments that may be returned to a business as Municipal Tax Increment Financing if approved by the host municipality; and,
- ⇒ Access to reduced electricity rates as requested by Central Maine Power, Bangor Hydro Company and Maine Public Service and approved by the Public Utilities Commission.

The following lots within the City of Augusta are designated as Pine Tree Zones:

- | | |
|---|---|
| <ul style="list-style-type: none"> • Ludger Dr. (#6, 7, 8, 9A); • Gabriel Dr. and #10A; • 500 Civic Center Dr.; • North Belfast Ave.; • Churchill Development, LLC Map 7 Lot 6 (3.66 acres); • Map 7 Lot 5 (.28 acres); • Map 7 Lot 3B (2.6 acres); • Johnson, Charles and Ruth Map 7 Lot 7 (4.75 acres); • East Side Development, LLC Map 7 Lot 3 (16.24 acres); • Oakland Rd. | <ul style="list-style-type: none"> • Jolicoeur Map 1 Lot 209A (1.93 acres) • Priest and Priest, LLC Map 2 Lot 31 (44.70 acres); • Priest and Priest, LLC Map 2 Lot 32 (8.0 acres) • Civic Center Dr. • 9 Industrial Dr. • 55 Industrial Dr. • Industrial Dr. • 15 Darin Dr. • 60 Darin Dr. |
|---|---|

KEY ISSUES

- (1) Along with Central Maine, Augusta has experienced above state average percentage loss of people from the ages of 25 to 34.
 - ⇒ This has a direct bearing on the City’s ability to attract and grow employment in industry sectors where this age category is critically important: higher technology related ventures, information technology, financial services, etc. These coincidentally are the ‘new economy’ companies.
- (2) Augusta experienced a high level of job loss from 2001 to 2004 in manufacturing businesses that contributed to diversifying the economy.
 - ⇒ Although many of these jobs occurred in wood product related businesses in Somerset County, Augusta itself lost quite a few jobs; 435 (SCI/Sanmina), 175 (Kirschner), 35 (Adelphia), 50 (CMP). The highest employment losses were SCI/Sanmina and Kirschner, in the ‘commodity’ manufacturing sector.
- (3) With approximately 25-30% of the Augusta state workforce turning over in the next 5-8 years, the City must ensure that every potential new state employee has at least considered relocating to the city, regardless of their ultimate decision.
- (4) From 1990 to 2000, the city lost a significant amount of population.
 - ⇒ The loss accounted for a 13.0% loss of the population (from 21,350 to 18,560). Spurred in part by lower taxes in the outlining communities, this exodus was ‘fueled’ by state funding policies for new school development and road construction, both of which penalized hub communities.

It is interesting to note here that Augusta has actually made small annual gains in population since 2000.

(5) Central Maine, Augusta's labor area, has the second-lowest educational attainment level of all regions in the state.

⇒ Although the number of individuals holding bachelor's degrees in Kennebec County is higher than other counties (at 22.7 percent), combining Somerset County in the calculation lowers the 'region' to 19.7 percent.

(6) Augusta does not have many industries in 'key traditional clusters', the part of the state's economy that has grown significantly.

⇒ Industries and businesses in tourism, healthcare, non-store retailing, and finance and insurance have experienced very strong growth in Maine. Augusta doesn't have many companies in these 'innovative industry clusters'.

⇒ Much of this appears to be a function of the city being formed from dominant and 'old industry' clusters: state government, CMP, poultry, paper, etc.

(7) There has been a very tenuous relationship between commercial projects and residential neighborhoods in close proximity to one another.

(8) Augusta's economy has changed and continues to change. Major employers of the past that are still in Augusta (State Government, CMP, Maine General Medical Center, Pine State Tobacco and Candy Company, etc) continue to shrink, while other employers are growing and new employers enter the market. Augusta's Office of Economic Development continues to work on this issue and anticipates the trend will continue. However the long term outlook employment in Augusta is good.

HOUSING, NEIGHBORHOODS, & QUALITY OF LIFE

The City of Augusta is a small, human-scale city within which one can see and feel the influences of surrounding rural areas as well as Augusta's roles as a regional commercial hub and the legislative seat of Maine. The neighborhoods are compact, each with an individual flavor. Views of wooded hillsides and the Kennebec River provide a green, open atmosphere. The wooded hillsides, the river, the compact neighborhoods and the recreational pockets close to the center of town all contribute to the small-town feeling of Augusta, despite its standing as a commercial and governmental center.

The heart of any community is its residents. They create the character of neighborhoods and bring vitality and life to the city. Key to a successful urban environment is a diverse and engaged residential population. For people to thrive in the city, they need to feel safe, be able to reach basic services, and have a variety of well-maintained housing options available to them. These options must include everything from affordable rental/owner units to market rate condos and houses to high-end luxury developments. Such diversity in housing is what makes Augusta unique.

This chapter examines both Augusta's current housing stock and its affordability. The housing stock inventory has an impact on many aspects of comprehensive planning. Availability of housing affects the community's ability to retain and attract businesses, and the ability of those who work in the community to live there. Housing has an impact on the degree of diversity of a community's population, and strongly affects quality of life.

HOUSING INVENTORY

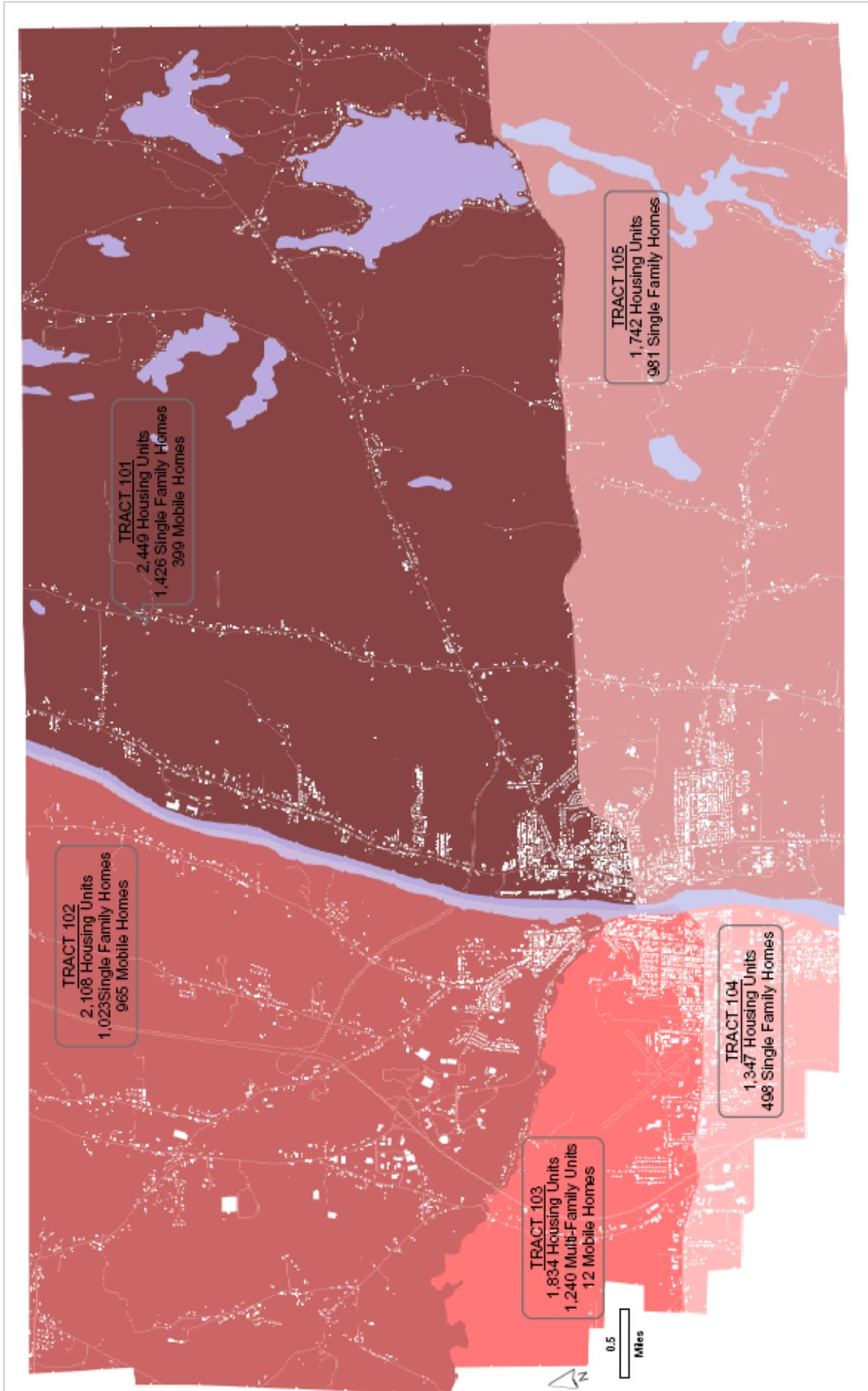
This section contains an analysis of data from the 2000 U.S. Census, highlights of housing characteristics in 2000, and changes between 1990 and 2000 in Augusta, Kennebec County, and the State of Maine. Recent data on new housing units added in Augusta since 1996 is also included.

Current Housing Location by Census Tract

Augusta's housing is spread out from a dense urban core to sparse rural residences along its many traffic corridors. The map on the following page delineates the 2000 U.S. Census tracts and shows the housing development pattern as it stands today (See Exhibit E1).

- ⇒ Tract 101, on the east side north of South Belfast Avenue, has 2,449 housing units, making it the largest of Augusta's tracts. It is also the least dense area, with only 1.75 housing units per acre. Tract 101 has the highest number of single-family homes (1,426) and mobile homes (399).
- ⇒ Tract 102, with 2,108 housing units, is on the west side of the Kennebec River north of Bond Brook. Tract 102 is the second largest tract, and has slightly more multi-family units (1,023) than single-family (965). Though higher in density (3.6 units per acre) than Tract 101, it still has a relatively suburban-rural feel.
- ⇒ Tract 103, between Western Avenue and Bond Brook, contains 1,834 housing units, of which 1,240 are multi-family – the highest number of any tract. This is the second most densely populated area in Augusta, with 7.5 units per acre.
- ⇒ Tract 104, south of Western Avenue, is the smallest geographic neighborhood and has the fewest housing units – 1,347 – as well as the fewest single-family homes – 498. Tract 104 is, however, the most densely populated tract in Augusta, with just under 11 units per acre.
- ⇒ Tract 105, on the east side of the river below North Belfast Avenue, has 1,742

Exhibit A1



housing units. It is similar in character to Tract 101, with 2.5 units per acre.

Housing Occupancy

The proportion of occupied housing units has gradually declined in Augusta over the last twenty years (see Exhibit E2). Augusta has a higher overall occupancy than the surrounding county and the state, however, because there are fewer seasonal units in Augusta than in rural areas.

It is important to note that vacant units are not necessarily available for potential owners or renters to occupy. Some are in seasonal use or are off the market for repairs, while others are held in family trusts. The proportion of vacant available units in Augusta in 2000 was 2.2% for owner housing and 10.3% for rental housing. These were up from 1.3% and 8.6%, respectively, in 1990. This indicates that demand for housing in Augusta has decreased over the past decade.

Housing Tenure and Vacancy

Tenure identifies a basic feature of the housing inventory – whether a unit is owner or renter occupied. Owner-occupied housing in

Augusta is declining while renter-occupied housing is increasing slightly (see Exhibit E3 — on the following page).

In 2000, the number of units occupied by owners in Augusta was 4,665, 7% less than in 1990, when there were 5,016. During the same period, the number of renter-occupied housing units in Augusta rose by 1.6% from 3,840 to 3,900.

The tenure housing picture for Kennebec County and the state as a whole looks different than for Augusta. Owner and renter-occupied units have increased during the past decade for the county and for the state. Further, the proportion of owners is much higher in both areas – about 71% in 2000 – compared to only 54.5% in Augusta.

Age and Condition of the Housing Stock

Augusta has a comparably older housing stock (see Exhibit E4 — on the following page). As of 2000, only 5% of its housing stock was built in the 1990s. Almost 85% of Augusta’s housing is 30 or more years old and, of that, about 32% was built prior to 1940. The housing stock in Kennebec County and statewide, in comparison, is relatively new.

Exhibit E2. Housing Occupancy in Augusta, Kennebec County & Maine, 1980 - 2000

	Occupancy Status	1980		1990		2000		% Change
		Units	%	Units	%	Units	%	1990 - 2000
Augusta:								
	Total	8,974		9,572		9,480		-1.0%
	Occupied	8,405	94%	8,856	93%	8,565	90%	-3.3%
	Vacant*	569	6%	716	7%	915	10%	27.8%
Kennebec County:								
	Total	41,114		51,648		56,364		9.1%
	Occupied	38,579	94%	43,889	85%	47,683	85%	8.6%
	Vacant*	2,535	6%	7,759	15%	8,681	15%	11.9%
Maine:								
	Total	428,245		587,045		651,901		11.0%
	Occupied	395,184	92%	465,312	79%	518,200	79%	11.4%
	Vacant*	33,061	8%	121,733	21%	133,701	21%	9.8%

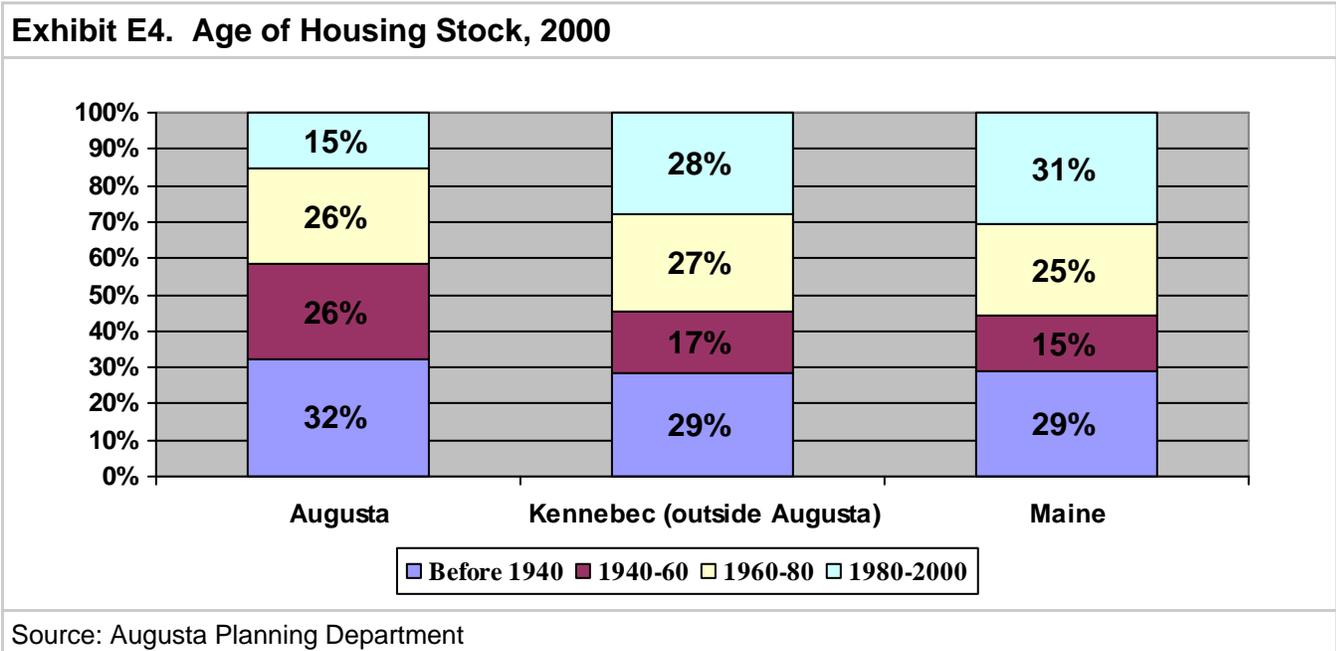
The fact that Augusta’s housing stock is old, including an older rental stock with low rent revenues, suggests deterioration and safety concerns. There are a variety of grants available to help the City work with low-income property owners to clean up their properties and improve the quality of their structures.

Source: U.S. Census
*includes seasonal Housing

Exhibit E3. Housing Tenure, Augusta, Kennebec County & Maine, 1980 - 2000

		1980		1990		2000		% Change
		Units	%	Units	%	Units	%	1990 - 2000
Augusta:								
	Total	8,405		8,856	100%	8,565	100%	-3.3%
	Owner-occupied	4,770	57%	5,016	57%	4,665	54%	-7.0%
	Renter-occupied	3,635	43%	3,840	43%	3,900	46%	1.6%
Kennebec County:								
	Total	38,579		43,889	100%	47,683	100%	8.6%
	Owner-occupied	28,265	73%	31,098	71%	33,933	71%	9.1%
	Renter-occupied	10,314	27%	12,791	29%	13,750	29%	7.5%
Maine:								
	Total	395,184		465,312	100%	518,200	100%	11.4%
	Owner-occupied	291,475	74%	327,888	70%	370,905	72%	13.1%
	Renter-occupied	100,000	25%	137,424	30%	147,295	28%	7.2%

Source: U.S. Census



Housing Stock: Share of Market Area Growth

There were 92 fewer total housing units in Augusta in 2000 than in 1990. This drop from 9,572 to 9,480 was due primarily to a reduction in the number of mobile homes – which fell from 798 in 1990 to 653 in 2000. Augusta’s housing stock was made up of slightly more single-family units (47%) than multi-family units (46.1%) in 2000. Both single-family units (+0.8%) and multi-family units (+0.4%) in Augusta increased slightly from 1990 to 2000. The trend and composition of housing stock in Augusta differ sharply from Kennebec County and the state (Exhibit E5).

While Augusta’s housing stock was declining, Kennebec County’s rose by 9.1% and the state’s by 11%. These increases were largely attributable to growth in single-family homes, which jumped by 15.7% in the county and 16.3% statewide. Single-family homes in Kennebec County (65.7%) and in the state (69.6%) comprised a much larger proportion of the 2000 housing stock than in Augusta.

Augusta’s 9,480 housing units in 2000 consisted of 9,325 year-round and 155 seasonal units. In 1990, there had been more year-round units (9,497), but fewer seasonal units (75).

Another way to look at the data is to look at Augusta’s “market share.” What proportion of the housing stock in the region was in Augusta in 1990? What percent of the new construction in the 1990s did Augusta capture? And how does this compare to other service centers?

Augusta had 18.5% of Kennebec County’s housing units in 1990, and captured 6.1% of the county’s new housing construction during the 1990s (about a third of its initial share). Lewiston had a higher proportion to start with, and captured 17.3% of Androscoggin County’s new housing in the 1990s (about 45% of its initial share). Portland started from a higher base than Augusta, but ended up capturing about a third as many new housing units as its initial proportion, the same as Augusta (see Exhibit E6 - on the following page).

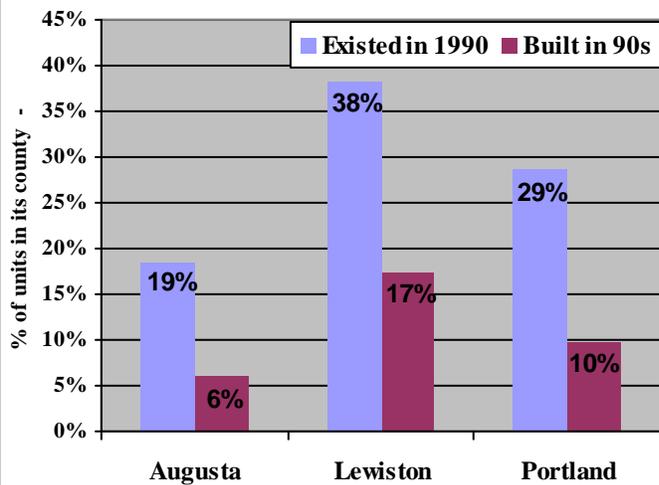
Looking at the type of housing construction can also be helpful. Exhibit E7 (on the following page) shows that Augusta captured a similar proportion of single-family, multi-family, and mobile homes as were added in its market area (Belgrade, Chelsea, China, Gardiner, Hallowell, Manchester, Readfield, Sidney, Vassalboro, West Gardiner, Windsor, and Winthrop).

E5. Housing Unit Availability, Augusta, Kennebec County & Maine, 1980 - 2000

Type of Unit		1980		1990		2000		% Change
		Units	%	Units	%	Units	%	1990- 2000
Augusta:								
	Total	8,974		9,572		9,480		-1.0%
	Single-family	4,350	48%	4,415	46%	4,452	47%	0.8%
	Multi-family	4,202	47%	4,359	46%	4,375	46%	0.4%
	Mobile homes	422	5%	798	8%	653	7%	-18.2%
Kennebec County								
	Total	41,114		51,648	100%	56,364	100%	9.1%
	Single -amily	25,409	62%	32,003	62%	37,036	66%	15.7%
	Multi-family	12,380	30%	13,123	25%	13,007	23%	-0.9%
	Mobile homes	3,325	8%	6,522	13%	6,321	11%	-3.1%
Maine:								
	Total	428,220		587,045	100%	651,901	100%	11.0%
	Single-family	282,539	66%	390,166	66%	453,846	70%	16.3%
	Multi-family	110,576	26%	128,860	22%	132,342	20%	2.7%
	Mobile homes	35,105	8%	68,019	12%	65,713	10%	-3.4%

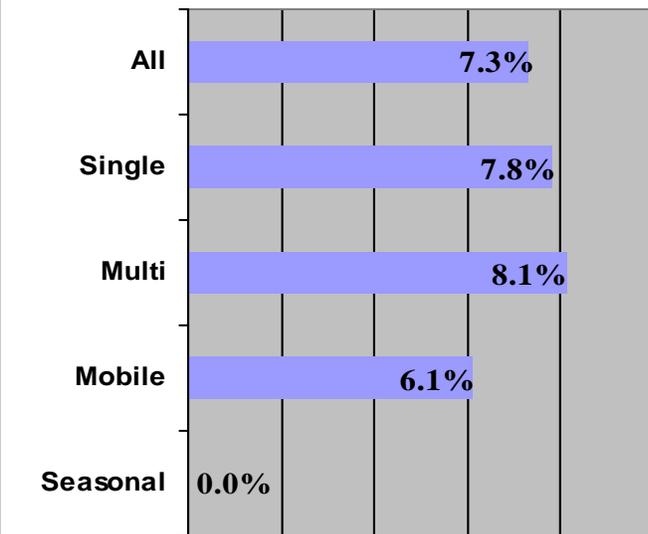
Source: U.S. Census

Exhibit E6. Market Share of Service Centers



Source: Augusta Planning Department

Exhibit E7. Augusta's % of New Construction in 1990s in Market Area



Source: Augusta Planning Department

Recent New Construction

Data on annual new housing units added since 1996 can be used to analyze residential development trends. Data on new housing was obtained directly from the City of Augusta's Code Enforcement Office and is listed below (see Exhibit E8). This local data differs from the Census data because it does not take into account those homes lost to fire and demolition or replacement homes.

The Census data shows a loss of housing units in Augusta between 1990 and 2000, while the local data shows a relatively steady

addition of housing units annually. Between 1996 and 2005, Augusta added 506 new housing units, of which 224 were stick-built and 282 were manufactured homes.

Although the housing market is currently in a cooling-off period, there are approved plans on the books that will assure continued new residential construction. The following large housing developments have been approved in the past five years:

- ⇒ Cony Village - a 43 unit affordable new-urbanist style, single and multi-family unit neighborhood on Cony Road – no units under construction - 2006
- ⇒ Windy Acres - 10 single-family residential lots off Windy and Glen Streets - 2 units under construction - 2006
- ⇒ Fieldstone Place (aka Kieltyca) - 54 single-family residential lots off South Belfast Ave next to Cony HS – no units under construction - 2006

Exhibit E8. Permits for New Housing Units, Augusta, 1996-2005

Year	Stick Built/ Modular Homes*	Manufactured Homes**	Total New Housing Units
1996	11	41	52
1997	13	34	47
1998	15	34	49
1999	18	24	42
2000	24	25	49
2001	29	22	51
2002	24	30	54
2003	22	23	45
2004	31	25	56
2005	37	24	61
Total	224	282	506

Source: City of Augusta Planning & Codes Departments

*Modular Home - a manufactured home that does not have a chassis and has to be placed on a foundation

**Manufactured Home" - a mobile home that is either single, double, or triple wide and is built on its own chassis

- ⇒ Paradis - 20 condominium units in 2 buildings (8 units + 12 units) off North Belfast Ave – building permits issued and construction has started - 2007
- ⇒ Cloutier - 24 affordable rental units in 1 building on the north end of Water Street, right next to the railroad trestle - all units completed - 2007
- ⇒ Capital Village - 30 affordable rental units on Leighton Road - all units under construction or done - 2005
- ⇒ Blais Apartments - 20 upscale market rate apartments off Old Winthrop Road, across from the old CMP offices - all units done - 2004
- ⇒ Marvin Towers - 32 affordable elderly rental units off Townsend Street next to Chateau Cushnoc - all units done - 2004
- ⇒ Maine Veterans Home - 30-bed Alzheimer wing on Cony Road - all units done – 2002

The following large housing developments have been discussed by the developer with the City and are publicly known:

- ⇒ Windy Acres on Windy Street - 26 condominium units in 1 building - market rate
- ⇒ Capital Village on Leighton Road - 20 affordable elderly rental units - Phase 2 - not yet submitted for planning board review.

There are other developers with whom staff have had discussions about potential projects, as well several who have not yet formally submitted proposals. If submitted, these developments would add on the order of 100 to 150 new lower to moderate income rate units.

The cost of new construction in Augusta

Residential development in Augusta is expensive. The city is a geographically challenging place with hills, wetlands, and ledges, all of which reduce the available locations for development and drive up its costs. High costs may also be due to the city’s infrastructure requirements, particularly in the urban areas, including paved roads, sidewalks, street lighting, and other municipal services such as sewer and water.

One factor that was repeatedly mentioned as possibly making development in Augusta more expensive than surrounding towns was road standards (see Exhibit E9). The Housing Subcommittee considered four neighboring communities: Manchester, Sidney, Readfield, and West Gardiner. One of the four, West Gardiner, had no local road standards beyond the minimum required by the state (with which all communities must comply). The other three comparison communities had standards that were roughly comparable to Augusta’s with regard to paving, widths, and sidewalks. The one difference is that the other communities do not have an urban core where sidewalks are absolutely required. This exercise demonstrated that “conventional wisdom” is not always true with regard to development costs.

Exhibit E9. Road Standards Compared

	Augusta	Manchester	Sidney	Readfield
Private roads?	Anywhere	Anywhere	Anywhere	Anywhere
Paving required?	Yes - if public or in urban compact area	Yes - if serves more than 5 homes	Yes - for subdivision No - if private	Yes - if public No - if private
Minimum width (private)	18' 2' shoulders	20' 4' shoulders	18'	14' 2' shoulders
Minimum width (public)	20' 2' shoulders	20' 4' shoulders	20' 4' shoulders	20' 2' shoulders
Sidewalks	Yes - on public streets in urban area, varies in other cases	Discretion of planning board	Not required	Discretion of planning board

Source: Augusta Planning Office

Increasing the density of new development can be one way to reduce infrastructure cost and may work in Augusta's more urban areas. There was a sense however, among the realtors on the housing subcommittee, that many clients, particularly middle and upper income, are looking for larger residential lots and more privacy. It is not clear what is driving people's decisions in this matter, whether it is a preference for large lots or a desire for privacy, the latter of which can be met at higher densities with good design.

HOUSING AFFORDABILITY

The incomes of Augusta residents are rising more slowly than those of residents in surrounding towns (see Exhibit E10). For this reason, problems of affordability rise to the surface more quickly in Augusta. Also, Augusta, as a regional service center, tends to attract more housing development at the lower end of the price scale, while the surrounding towns often attract more development at the upper end of the scale.

Maine law defines "affordable housing" as a decent, safe, and sanitary dwelling, apartment or other living accommodation for a household whose income does not exceed 80% of the median income for the area. For Augusta, the "area" is defined as Kennebec County. In 2005, the median household income was

\$40,670 in Kennebec County (estimates developed by the Maine State Housing Authority and Claritas, Inc).

The City should assure a supply of housing that is affordable in three income groups:

- ⇒ "Very low income" households, with incomes that do not exceed 50% of the median income in the county (under \$20,335 in 2005);
- ⇒ "Lower income" households who have incomes of between 51% and 80% of the county median income (between \$20,335 and \$32,536 in 2005); and
- ⇒ "Moderate income" households who have incomes of between 81% and 150% of the county median income (between \$32,536 and \$61,005 in 2005).

This section presents data on the affordability index and examines the pricing levels and availability of affordable housing.

Affordability Index

Affordability is a question of household income versus the cost of housing. Maine law stipulates that, to be affordable, housing costs should not exceed 30% of the inhabitant's income. Using this criterion to compare median incomes to median housing costs, the Maine State Housing Authority has developed an affordability index.

An index value of 1.00 means that the household with a median-income can afford the median-priced home in the community. An index value of less than one means that the median priced home is too expensive for the median-income household. The 2006 index for homes in Augusta is 0.79. Roughly 60% of households cannot afford median-priced homes in the city.

Exhibit E10. Income changes in Augusta Market Area

		1989	1999
Augusta	Median Household Income	\$25,790	\$29,921
	% Increase		16%
Chelsea	Median Household Income	\$26,271	\$40,905
	% Increase		56%
Hallowell	Median Household Income	\$31,161	\$36,058
	% Increase		16%
Manchester	Median Household Income	\$37,750	\$52,500
	% Increase		39%
Sidney	Median Household Income	\$35,123	\$42,500
	% Increase		21%
Vasslboro	Median Household Income	\$28,820	\$37,923
	% Increase		32%
Whitefield	Median Household Income	\$28,272	\$38,477
	% Increase		36%
Windsor	Median Household Income	\$29,327	\$40,039
	% Increase		37%

Source: U.S. Census

Exhibit E11. 2006 Housing Affordability Index for Augusta, Augusta's Market Area, Maine and other Service Centers

	Affordability Index	Median Home Price	Median Income	% of Households unable to afford Median Home Price
Augusta	0.79	\$125,000	\$33,734	59.8%
Augusta Market Area	0.91	\$144,200	\$43,680	55.0%
Brunswick	0.60	\$220,000	\$46,498	75.3%
Lewiston	0.59	\$147,500	\$32,659	72.8%
Auburn	0.74	\$149,000	\$40,525	64.1%
Waterville	0.68	\$118,500	\$30,418	66.3%
Maine	0.73	\$185,000	\$44,488	66.5%

Sources: Maine State Housing Authority

prices were highest for three-bedroom units (+38.4%), followed by two-bedroom units.

Pricing Levels and Availability of Affordable Housing

It has been noted previously that housing – both owned and rented – has become less affordable in Augusta during the past five years. To be considered affordable, housing costs should not exceed 30%

This is less affordable than the rest of the Augusta Market Area (index of 1.30), but more affordable than the state as a whole, as well as other service centers (see Exhibit E11).

Over the last five years the affordability index for Augusta has gone from 1.03 in 2001 to 0.79 in 2006. Housing has become increasingly unaffordable in Augusta. The increase in median home prices (73.7%) between 2000 and 2006 considerably outpaced the increase in median incomes (only 15.8%).

Rental Costs

According to estimates developed by the Maine State Housing Authority, in 2006 the average monthly rent (including utilities) for a two-bedroom unit in Augusta was \$712. This is below the \$720 average for the Augusta Market Area, and the \$844 cost statewide.

Six-year trends in two-bedroom rental costs indicate that these apartments have become less affordable in Augusta (see Exhibit E12 — on the following page). As with median home prices, rental costs rose faster (+43.6%) from 2000-2006 than did median incomes (+11.3%).

Average monthly rental prices in Augusta, including utilities, rose generally between 2001 and 2005, except for a drop in one-bedroom units in 2002. Percent increases in

of the inhabitant's income.

At what prices should housing be considered affordable in Augusta? As of 2005, affordable monthly rents ranged from \$508 to \$1,525 depending upon income; affordable housing prices ranged from \$49,000 to \$216,000 depending upon income. Are there housing units available within these price ranges?

A review of the Maine Multiple Listing Service, Inc. data revealed that there were up to 195 housing units available for sale that met the affordability price levels for some income levels in Augusta as of September 2006.

Of the 195, only one was considered affordable for households with very low incomes, and only 44 were considered affordable for households with low incomes (see Exhibit E12).

According to the Multiple Listing Service, Inc. home prices fell under the moderate income range for each housing unit sold in Augusta in 2005.

However, this data also indicates that higher end housing is not being sold in Augusta.

Exhibit E12. Housing Units Available by Sale Price, Augusta, September 2006

Sale Price	Single-Family	Condo/Townhouse	Multi-Family	Mobile/Manufactured	Total
<u>Under \$50,000</u> (\$49,600 for very low income)	0	0	1	0	1
<u>\$50,000 - \$100,00</u> (\$49,600 - \$97,100 for low income)	18	14	10	2	44
<u>\$100,000 - \$225,000</u> (\$97,100 - \$216,000 for moderate income)	115	1	31	3	150
Total	133	15	42	5	195

Source: Maine Multiple Listing Service, Inc.

Very low income households face difficulties in affording adequate housing – and very few non-elderly multi-units have been added to the Augusta market. This impacts the ability of these families and individuals to stay in the city.

For renters, estimates for 2006 developed by the Maine State Housing Authority reveal that almost 59% of all households cannot afford the average two-bedroom rent of \$712 in Augusta. This would appear to have more of an adverse impact on very low income households since the affordability amount for this group would be under \$508, and less of an impact for low-income households who would be able to afford rentals as high as \$813.

Some renters, particularly those with very low or low incomes can take advantage of subsidized housing. In Augusta, there are 1,232 housing units available that include both publicly funded project and non-project housing (Section 8 vouchers). The Maine State Housing Authority’s First-Time Homeowners program provided 34 housing units in 2003 in Augusta. In addition, there are approximately 139 affordable units in the process of being built or in the planning stages throughout the city.

HOUSING SUMMARY

While Augusta’s housing stock dropped from 1990 to 2000, projections indicate that Augusta can anticipate about 500 new households between 2005 and 2015. This translates into a need for more housing – with a goal of about 50 units per year for the next 10 years.

Augusta has an older housing stock compared to other areas. This and the growing proportion of elderly create a need for various types of housing.

Most Augusta dwellings use oil for fuel. Spikes in oil costs in recent years have made housing less affordable for many – impossible for others.

Augusta’s economic history is one of industry along the Kennebec. The cost associated with dealing with environmental issues may affect the ability to rehab industrial buildings into housing.

The ability to develop housing is further limited in the downtown area by space, flooding issues, and steep hillsides.

NEIGHBORHOOD QUALITY OF LIFE

Neighborhood quality of life is a key factor in making Augusta attractive to new residents. It is important to remember that neighborhoods and expectations evolve. Mayfair was an upscale neighborhood 40 years ago; today it’s solidly middle class. Ganneston is moving in the same direction. The City needs to recognize that there are evolving expectations by homebuyers and help create a financial and regulatory climate in sections of Augusta that will allow today’s desired neighborhoods to be built.

Neighborhood Definition: *A residential community within a geographic area that shares common interests or elements.*

Quality of Life Definition: *Living a peaceful life where there are friendly, common bonds within a diverse and vibrant culture with feelings of pride and fulfillment and where opportunities for personal growth and prosperity are bountiful.*

Here are some words that come to mind to describe quality of life:

- ⇒ Safe / Secure
- ⇒ Bond / Attachment
- ⇒ Friendly
- ⇒ Fulfillment
- ⇒ Pride
- ⇒ Belonging
- ⇒ Common Bond
- ⇒ Sense of Community
- ⇒ Accomplishment
- ⇒ Peaceful
- ⇒ Tranquil
- ⇒ Healthy
- ⇒ Mobility
- ⇒ Self-worth
- ⇒ Social Network
- ⇒ Harmony
- ⇒ Cultural
- ⇒ Prosperity
- ⇒ Opportunity
- ⇒ Personal growth
- ⇒ Diversity
- ⇒ Vibrancy
- ⇒ Balance
- ⇒ Hope
- ⇒ Support
- ⇒ Compassion
- ⇒ Unity

Quality of life was viewed as the key to reversing the trend of population loss in Augusta. Ways to improve the quality of life in the city discussed by the subcommittee included:

- ⇒ Augusta should take advantage of its urban feel and maintain walkable and attractive neighborhoods. Its zoning regulations should consider the way an area looks, feels, and functions rather than strictly “uses.”
 - Develop mixed uses of a scale that make sense (for example, through housing in the upper floors of downtown buildings) and buffer uses where they may conflict (such as housing adjacent to active quarries, industrial parks, or big box stores).
 - Encourage new development that fits into its surroundings and a mix of housing types that reflect the character of the neighborhoods in which they are built.

- Embark on a city-wide sidewalk building / re-building effort — a good-quality pedestrian transit system that moves people through the urban core and to surrounding amenities.
- Protect neighborhood and city core streets from increased traffic. Mid-block street closures and other traffic calming measures should be considered for this purpose.
- Connect neighborhoods with walking trails and encourage connected streets designed to discourage cut-through traffic.
- Protect existing neighborhoods from commercial encroachment. Ensure that commercial development fits in with a neighborhood’s size and character.
- Reduce crime.
- ⇒ Increase cultural and social activities. Increasing social and cultural interaction will improve the city’s ability to grow (see History and Culture chapter for more detail).
- Create indoor public markets in the downtown to draw people back to the city.
- Create more public gathering places. Particularly in dense urban environments, residents need common green space to enjoy nature and to interact with their neighbors. Parks and trails are critical parts of a vibrant urban fabric (see Leisure and Recreation chapter for more information).
- Develop a clear identity unrelated to Augusta’s status as the State Capital. The city will always be the capital, but it needs to be more in order to attract people to live here.

ISSUES AND IMPLICATIONS

- (1) The need for new housing in Augusta.
 - ⇒ Augusta has not had a new development since Ganneston approximately 20 years ago. Surrounding towns have seen a boom in residential development and Augusta has not had a share of this development. New development should be carefully considered and should seek to broaden the range of Augusta’s housing stock to better serve all income levels.
- (2) The need for Augusta to be prepared for the aging baby boomer population.
 - ⇒ Augusta should anticipate an influx of baby boomers as they age in the next 20 years and move to be closer to services such as hospitals, grocery stores, etc.
 - Housing should be developed to accommodate this sector’s needs, including single-story homes, condos with elevators, etc.
- (3) The need to take advantage of the Kennebec River.
 - ⇒ For decades, Augusta has had its back to the river; going forward, the City needs to face and embrace the river, promote development near the river and encourage its recreational use.
- (4) The importance of the walkability of neighborhoods.
 - ⇒ Augusta needs to focus on pedestrians, adding sidewalks and trails that connect to neighborhoods and services and focusing on the walkability of new developments.
- (5) The importance of beautification such as trees etc. to enhancing green space and improve quality of life in Augusta neighborhoods.
- (6) The importance of ensuring the safety and privacy of residents.
- (7) The importance of obtaining the intangible sense of community to neighborhoods and the city as a whole.
 - ⇒ Helping to foster a sense of pride for where you live.

- (8) The need for a much better PR campaign “selling” Augusta to the general public
 - ⇒ example - the “LA: It’s happening here” campaign.
- (9) The need to identify specific locations in the city for new housing developments.
 - ⇒ The city should be a financial participant in housing projects through Affordable Housing TIFs, sewer and water line extensions, road construction assistance, etc.
 - ⇒ The development review process should be streamlined and creative development standards should be designed to entice developers to build housing.
- (10) The city expects to need approximately 500 new homes over the next decade and is committed to ensuring that at least 10% of those homes are affordable.
 - ⇒ The city will continue to work with developers such as Bread of Life, KVCAP, and private developers to develop projects like Cony Village, LLC, the Leighton Road affordable rental units, or the 65 unit expansion of the Riverside Land Lease Community on Riverside Drive. Each of these projects is affordable housing for a variety of income categories. These three projects alone will account for 30 new affordable units constructed within the last two years and another 100 affordable units approved and expected to be constructed within the next five years. We predict Augusta will need only 500 new units this decade. With 130 of those already approved and slated to be in the “affordable” category, Augusta expects that it will be able to ensure that nearly 25% of the new homes constructed in the planning period are affordable.

COMMUNITY DEVELOPMENT

Community development can mean many things, but in the context of city planning it often refers to revitalization of old neighborhoods and commercial districts. This involves the activities of rehabilitating and reusing old buildings, updating streets and sidewalks, assisting small locally-owned businesses, building housing and parks and stores on vacant lots, improving public safety, and expanding educational opportunities for youth and adults.

The Community Development Block Grant (CDBG) program is an important tool in helping cities fund community development efforts. This program provides grants for building rehabilitation, business assistance, and infrastructure assistance in neighborhoods where the majority of residents are defined as “low and moderate income” (i.e., below 80% of the median area income).

Section A below discusses critical community development issues in Augusta as identified by the Community Development Subcommittee. Section B provides neighborhood information that will be helpful to grant writers in establishing Augusta’s eligibility for state and federal community development dollars.

PART A: KEY COMMUNITY DEVELOPMENT ISSUES IN AUGUSTA

Revitalizing Existing Neighborhoods

Some neighborhoods in Augusta are in decline. The reasons for decline vary from place to place, but include:

- ⇒ Old multi-story housing stock, without elevators, that is no longer very attractive or marketable;
- ⇒ Lack of repairs and maintenance - a problem exacerbated in some cases by absentee landlords;
- ⇒ Encroachment on the neighborhood by busy streets and/or commercial development;

⇒ Poor street layout, making walking and sometimes driving difficult;

⇒ Social changes that make a given neighborhood predominantly low-income.

The City needs to work with neighborhoods to create buffers, improve lighting, maximize public transportation use, clean up the streets, and so forth.

Developing Downtown & the Riverfront

Critical to the success of this effort will be:

⇒ The creation of upstairs housing in commercial buildings on Water Street. Downtown housing creates customers for local shops and stores and restaurants, and contributes to making the downtown safe at night;

⇒ Cleaning up and marketing the Statler Tissue site to potential developers;

⇒ Promoting the redevelopment of the Flatiron Building (old Cony High School);

⇒ Finding ways, such as historic ordinances, to preserve the best of Augusta’s old buildings and neighborhoods.

Creating a Sense of Place and Marketing the Augusta Story

Communities that are successful have a strong “sense of place.” When you visit, you know where you are, and you know that no other place is quite like it. This requires:

⇒ Marketing that highlights in the public mind what a community is about – for example, establish an identifying theme for the city such as “Augusta on the Kennebec,” and then build pride in the community by marketing the slogan;

⇒ Creating visual cues throughout the city, such as gateways, signs, light fixtures, and sidewalks;

- ⇒ Beautifying the city through landscaping, high quality architecture, and sign standards;
- ⇒ Creating public spaces that provide tourist information and create sight lines to key buildings such as Fort Western, the Capitol, etc.;
- ⇒ Attracting businesses that reinforce and build upon the city's brand.

Building a Sensible Transportation Network

Augusta's main east-west arteries and both traffic circles are overburdened. Speeding and traffic flow are a concern throughout the city. It is not always easy or safe to walk or ride a bicycle within the city because of the lack of sidewalks and high traffic volumes – thus more people drive for these short trips, aggravating the traffic congestion. Public transportation is spotty and unavailable on weekends. Meanwhile, new development is continually increasing traffic demands.

Solutions need to be found, in cooperation with neighboring communities and the Maine Department of Transportation, that:

- ⇒ Encourage walking and biking through connected, safe pathways;
- ⇒ Control traffic in the city's core; and
- ⇒ Expand public transportation.

Planning a Sensible Government Structure for the Future

Augusta is the state capital, the county seat, and the service center for surrounding towns. In all of these roles, it provides government services. Demands for these services are changing. Augusta needs to plan, along with neighboring communities, for:

- ⇒ The continued expansion of government services, and therefore the need for new government buildings (such as a county prison) – to be paid for in ways which share the burden among the region's taxpayers;
- ⇒ the possible consolidation of the school district with neighboring districts;

- ⇒ the potential for collaboration with neighboring communities in providing municipal services; and
- ⇒ the potential to have a payment in lieu of taxes scheme to help pay for the municipal services demanded by nonprofit and government providers.

Attracting, Serving, and Retaining a Diverse Citizenry

Augusta's population should reflect the diversity of the region. In recent years, many middle class families have left Augusta. Augusta needs attractive housing alternatives for all population segments, including:

- ⇒ New middle class housing in Augusta;
- ⇒ Housing that addresses the needs of retirees and older citizens;
- ⇒ Housing that attracts young single people and families to live in Augusta.

Preserving Open Space

Augusta has considerable open and undeveloped land, particularly on the east side. On the west side, the maintenance of quality parks within built-up areas is crucial. The City needs to work with neighboring communities to address issues involving open space, gateways, and scenic vistas.

PART B: NEIGHBORHOOD DATA

The previous section identifies community development issues present in Augusta. This section provides data that can be used by grant writers who are seeking funds to address these issues.

Household Characteristics

1. Household Income

Eligibility for programs administered by the U.S. Department of Housing and Urban Development (HUD), such as Community Development Block Grants (CDBG), is often determined by the proportion of households in a neighborhood with incomes below 80% of the median. HUD’s map for Augusta’s neighborhoods (see Exhibit F2 — on the following page) indicates that much of Augusta’s urban west side has over 50% of its households in this category. About 40% of households in Augusta overall have incomes below 80% of the median. Exhibit F1 from the Maine Housing Authority showing this data for the city as a whole:

Exhibit F1: Households by % of Median Income in Augusta

	2005 Households	Income	% of Households
<30% (Extremely Low)	1,222	\$10,087	13.90%
<50% (Very Low)	2,192	\$16,812	24.90%
<80% (Low)	3,544	\$26,898	40.20%
<150% (Moderate)	6,014	\$50,435	68.30%
Total/ Median	8,809	\$33,623	

Source: Maine State Housing Authority 2005, Claritas

At the end of this section (see Exhibit F8), there is detailed information on the age of head of households by neighborhood and by income from the 2000 U.S. Census.

Housing Characteristics

1. Age of Housing Unit

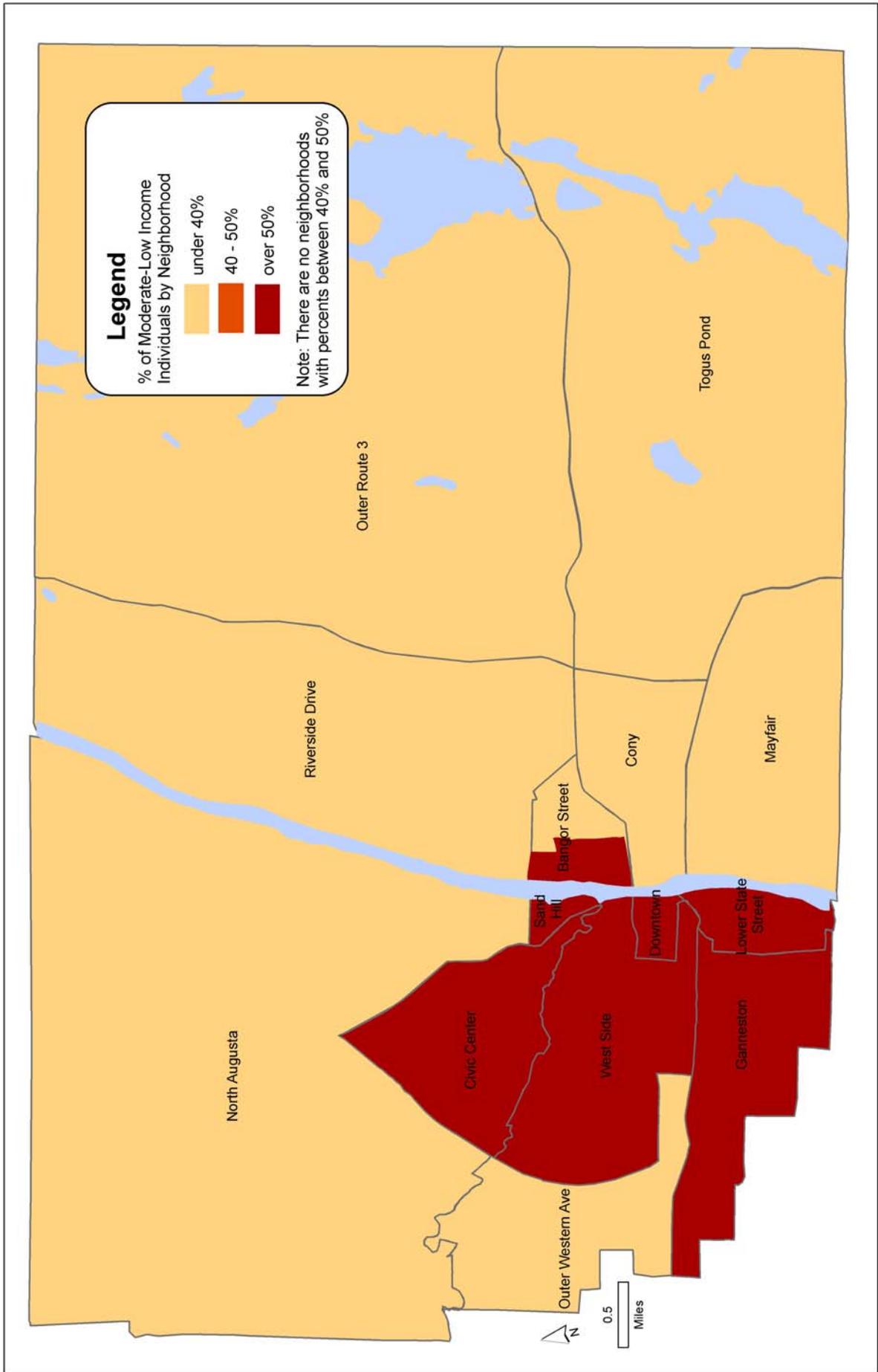
The older a house is, the more likely it is to need work. There is anecdotal evidence supporting the notion that many older homes generate a low rent or low sales price and have an increased chance of being in substandard condition. Below are charts which show the age of housing in different neighborhoods in Augusta. In some neighborhoods, such as Lower State Street and Sand Hill, no new owner-occupied development has occurred since the 1970s. The housing stock in Northern Augusta (including North Augusta, Outer Route 3, and Riverside) saw a marked increase in owner-occupied housing development in throughout the 1980s and 1990s (see Exhibit F3). In terms of rental housing, the majority were built either in the 1960s and 1970s or prior to 1940 (see Exhibit F4). As was seen in the land use history chapter, little development has occurred anywhere in Augusta since 2000.

Exhibit F3: Year Structure Built -- Owner Occupancy, Augusta

Owner Occupied	1980 - 2000	1960 - 1980	1940 - 1960	Before 1940
Bangor St	17	63	190	182
Civic Center	78	86	95	55
Cony	6	32	105	142
Downtown	7	13	12	86
Ganneston	95	66	70	61
Lower State St	0	11	68	111
Mayfair	28	219	166	21
North Augusta	195	294	62	130
Outer Route 3	123	133	90	62
Outer Western Ave	6	23	42	7
Riverside	225	169	194	103
Sand Hill	0	0	21	50
Togus	87	70	62	41
Westside	32	38	88	227
TOTAL # of UNITS	899	1,217	1,265	1,278

Source: 2000 U.S. Census

Exhibit F2: Augusta Neighborhoods Low to Moderate Income Concentrations



Source: U.S Census

Exhibit F4: Year Structure Built -- Renter Occupancy, Augusta

Renter Occupied	1980-2000	1960-1980	1940-1960	Before 1940
Bangor St	60	76	129	126
Civic Center	77	64	112	100
Cony	6	40	60	100
Downtown	14	42	20	255
Ganneston	127	296	73	60
Lower State Street	12	12	38	90
Mayfair	41	229	76	26
North Augusta	24	95	57	37
Outer Route 3	24	40	7	15
Outer Western Ave	17	62	30	7
Riverside	25	59	65	16
Sand Hill	29	50	69	155
Togus	6	7	40	13
West Side	26	28	137	405
TOTAL # of UNITS	488	1,100	913	1,405

Source: 2000 U.S. Census

2. Issues of Overcrowding

As rents rise and people cannot afford separate apartments, overcrowding becomes an issue. A household with more than 1 occupant per room is considered overcrowded. The most overcrowded housing in Augusta occurs in the poorest neighborhoods, including Cony, Downtown, Lower State Street, Mayfair, Sand Hill, and Civic Center.

Exhibit F5: Persons per Room in Renter Occupied Housing

Occupants per Room	0.5 or less	0.51 to 1	1.01 to 1.5	1.5 to 2
Bangor St	328	63	0	0
Civic Center	260	81	12	0
Cony	161	37	0	8
Downtown	223	88	20	0
Ganneston	410	139	7	0
Lower State Street	130	16	6	0
Mayfair	277	72	23	0
North Augusta	139	74	0	0
Outer Route 3	64	22	0	0
Outer Western Ave	105	11	0	0
Riverside	131	34	0	0
Sand Hill	195	85	23	0
Togus	66	0	0	0
West Side	415	181	0	0

Source: 2000 U.S. Census

3. Lack of Basic Household Facilities

Another way to look at substandard housing is whether a household lacks complete plumbing or kitchen facilities, or telephone access¹. Complete plumbing facilities include: (1) hot and cold piped water; (2) a flush toilet; and (3) a bathtub or shower. All three facilities must be located in the housing unit to be considered “complete”. In regards to complete kitchen, a unit must include: (1) a sink with piped water; (2) a range, or cook top, and oven; and (3) a refrigerator. These problems are no longer major concerns, as Exhibits F6 and F7 show.

Exhibit F6: Lack of Plumbing Facilities, Kitchen Facilities and/or Phone in Owner-Occupied Units

Owner Occupied	Lack Complete Plumbing Facilities	Lack Complete Kitchen Facilities	Lacking Phone
Bangor St	0	0	0
Civic Center	0	0	0
Cony	0	0	0
Downtown	0	0	0
Ganneston	0	0	0
Lower State Street	0	0	7
Mayfair	0	0	0
North Augusta	0	0	17
Outer Route 3	0	0	0
Outer Western Ave	0	0	6
Riverside	0	0	10
Sand Hill	0	0	0
Togus	6	6	0
West Side	5	0	0
TOTAL	11	6	40

Source: 2000 U.S. Census

Exhibit F7: Lack of Plumbing Facilities, Kitchen Facilities and/or Phone in Renter-Occupied Units

Owner Occupied	Lack Complete Plumbing Facilities	Lack Complete Kitchen Facilities	Lacking Phone
Bangor St	0	0	9
Civic Center	0	0	0
Cony	0	0	0
Downtown	0	0	7
Ganneston	0	0	0
Lower State Street	0	0	0
Mayfair	0	0	7
North Augusta	0	0	9
Outer Route 3	0	0	9
Outer Western Ave	0	0	0
Riverside	0	0	0
Sand Hill	0	0	11
Togus	0	0	0
West Side	13	6	53
TOTAL	13	6	105

Source: 2000 U.S. Census

¹It is important to note that lack of telephone data can be misleading. The 2000 U.S. Census considers landline telephones only; an individual or family solely dependent on a cell phone is considered to be “lacking a telephone.”

Exhibit F8: Head of Household Income by Age Cohort and by Neighborhood (Source: 2000 U.S. Census)								
Head of Household (HH) Income	Less than \$10,000	\$10,000 to \$19,999	\$20,000 to \$29,999	\$30,000 to \$39,999	\$40,000 to \$49,999	\$50,000 to \$99,999	\$100,000 and above	Total HH in age cohort
Bangor St								
Under 25	11	11	14	12	11	0	0	59
25-34	7	24	17	18	9	30	0	105
35-44	43	8	37	28	18	43	10	187
45-54	41	11	30	24	26	68	0	200
55-64	21	20	9	0	40	16	19	125
65+	295	14	54	52	60	16	62	553
Total HH in income bracket	418	88	161	134	164	173	91	1229
Civic Center								
Under 25	0	11	2	0	0	0	0	13
25-34	13	38	28	47	0	0	0	126
35-44	15	13	0	14	14	22	6	84
45-54	4	33	34	9	7	34	6	127
55-64	37	10	13	0	8	35	10	113
65+	57	74	25	18	9	0	0	183
Total HH in income bracket	126	179	102	88	38	91	22	646
Cony								
Under 25	7	11	7	0	5	5	0	35
25-34	11	17	9	10	12	15	0	74
35-44	15	0	19	9	0	33	17	93
45-54	20	0	18	8	6	48	17	117
55-64	0	5	0	6	0	21	0	32
65+	62	11	29	19	0	11	0	132
Total HH in income bracket	115	44	82	52	23	133	34	483
Downtown								
Under 25	6	0	0	0	0	0	0	6
25-34	19	3	24	0	38	19	0	103
35-44	9	22	21	16	18	6	7	99
45-54	17	12	17	29	4	0	0	79
55-64	56	21	0	21	0	0	0	98
65+	30	5	6	8	6	5	9	69
Total HH in income bracket	137	63	68	74	66	30	16	454

Exhibit F8: Head of Household Income by Age Cohort and by Neighborhood (Source: 2000 U.S. Census)								
Head of Household (HH) Income	Less than \$10,000	\$10,000 to \$19,999	\$20,000 to \$29,999	\$30,000 to \$39,999	\$40,000 to \$49,999	\$50,000 to \$99,999	\$100,000 and above	Total HH in age cohort
Ganneston								
Under 25	10	19	0	14	6	0	0	49
25-34	10	26	17	6	16	14	0	89
35-44	29	21	5	6	13	16	0	90
45-54	6	8	6	44	5	30	19	118
55-64	22	12	11	5	18	35	12	115
65+	163	87	79	11	16	10	6	372
Total HH in income bracket	240	173	118	86	74	105	37	833
Lower State Street								
Under 25	4	0	6	8	0	0	0	18
25-34	5	6	0	6	14	33	0	64
35-44	8	18	28	0	0	0	0	54
45-54	4	0	18	6	0	13	13	54
55-64	15	11	12	5	13	6	0	62
65+	59	25	0	17	0	0	17	118
Total HH in income bracket	95	60	64	42	27	52	30	370
Mayfair								
Under 25	28	21	8	0	0	0	0	57
25-34	25	44	25	7	23	29	0	153
35-44	6	16	6	9	30	45	11	123
45-54	29	5	7	27	30	68	5	171
55-64	0	19	7	17	0	50	0	93
65+	159	16	36	34	12	35	28	320
Total HH in income bracket	247	121	89	94	95	227	44	917
North Augusta								
Under 25	17	5	0	18	0	0	0	40
25-34	0	27	18	24	0	12	11	92
35-44	5	22	35	14	48	63	7	194
45-54	9	0	21	49	12	97	20	208
55-64	10	0	21	12	39	57	0	139
65+	251	22	0	79	0	18	132	502
Total HH in income bracket	292	76	95	196	99	247	170	1175

Exhibit F8: Head of Household Income by Age Cohort and by Neighborhood (Source: 2000 U.S. Census)								
Head of Household (HH) Income	Less than \$10,000	\$10,000 to \$19,999	\$20,000 to \$29,999	\$30,000 to \$39,999	\$40,000 to \$49,999	\$50,000 to \$99,999	\$100,000 and above	Total HH in age cohort
Outer Route 3								
Under 25	9	10	0	0	0	0	0	19
25-34	0	0	8	14	32	43	0	97
35-44	6	14	0	28	17	39	0	104
45-54	0	10	8	0	31	29	18	96
55-64	7	10	7	0	0	47	8	79
65+	65	7	28	7	15	0	0	122
Total HH in income bracket	87	51	51	49	95	158	26	517
Outer Western Ave								
Under 25	0	0	0	0	0	0	0	0
25-34	0	0	0	0	0	11	0	11
35-44	0	8	0	5	5	10	0	28
45-54	6	0	0	12	0	19	0	37
55-64	0	0	24	0	9	33	11	77
65+	35	5	13	22	6	6	6	93
Total HH in income bracket	41	13	37	39	20	79	17	246
Riverside								
Under 25	0	9	28	8	0	9	0	54
25-34	7	7	13	14	39	9	0	89
35-44	0	15	33	8	45	26	22	149
45-54	16	11	36	18	17	56	0	154
55-64	0	7	46	17	22	51	0	143
65+	111	34	8	41	13	14	14	235
Total HH in income bracket	134	83	164	106	136	165	36	824
Sand Hill								
Under 25	21	26	44	0	0	0	0	91
25-34	9	39	32	7	0	7	0	94
35-44	7	14	9	0	5	10	0	45
45-54	7	21	8	6	0	0	0	42
55-64	0	23	12	6	8	0	0	49
65+	36	14	12	0	7	0	0	69
Total HH in income bracket	80	137	117	19	20	17	0	390

Exhibit F8: Head of Household Income by Age Cohort and by Neighborhood (Source: 2000 U.S. Census)								
Head of Household (HH) Income	Less than \$10,000	\$10,000 to \$19,999	\$20,000 to \$29,999	\$30,000 to \$39,999	\$40,000 to \$49,999	\$50,000 to \$99,999	\$100,000 and above	Total HH in age cohort
Togus								
Under 25	0	0	9	0	7	0	0	16
25-34	0	18	0	0	7	0	0	25
35-44	0	0	18	26	0	27	18	89
45-54	0	0	13	14	8	52	6	93
55-64	6	0	22	6	0	18	6	58
65+	70	0	6	0	15	19	7	117
Total HH in income bracket	76	18	68	46	37	116	37	398
West Side								
Under 25	21	33	41	0	0	0	0	95
25-34	26	53	27	23	8	12	4	153
35-44	66	48	27	45	17	57	9	269
45-54	40	9	30	28	5	46	15	173
55-64	37	11	4	4	0	23	10	89
65+	202	12	84	62	12	0	32	404
Total HH in income bracket	392	166	213	162	42	138	70	1183

STATE GOVERNMENT AND NON-PROFITS

Rumford and Millinocket have their mills. Augusta has state government. State government and its many related nonprofit advocacy and service organizations are the principal employers in Augusta. In addition, Augusta has a strong health services sector that is comprised in large part by nonprofit hospitals and clinics.

Augusta's role as the state capital and the region's service center is both good and bad. On the positive side, these sectors provide good-paying jobs that have relative security (compared to the private sector). On the negative side, state government and nonprofit organizations are often exempt from paying property taxes. As these organizations require the same fire and police and road maintenance services as private businesses, their lack of a contribution towards the property tax makes it necessary for other taxpayers to make up the difference.

State government, by virtue of its office locations, also has a major influence on traffic and land use patterns in the city. Therefore, it is key that state government and the city of Augusta coordinate their plans.

This chapter will examine:

- ⇒ Previous plans for integrating the City with the state government
- ⇒ The types of state government and non-profit jobs in Augusta
- ⇒ The issue of tax-exemption
- ⇒ the impact of the government and non-profit employment on the local economy

PREVIOUS PLANS

In 1996, the City created The Capital Action Plan. Its goals included "Empowering People," "Strengthening Quality of Life," and "Supporting Economic Growth". While the plan did not specifically look at how state government and the City should interact — many of the actions recommend strong communication between the two parties.

In the spring of 2000, the State of Maine produced the Augusta State Facilities Master Plan. The plan inventories all buildings and land that the State owns or leases within the City of Augusta. Its goals are to decrease auto use, increase pedestrian traffic between offices, and improve facility design. The long-term direction of the plan is to consolidate all State facilities onto its two major campuses.

STATE GOVERNMENT AND NON-PROFIT FACILITIES

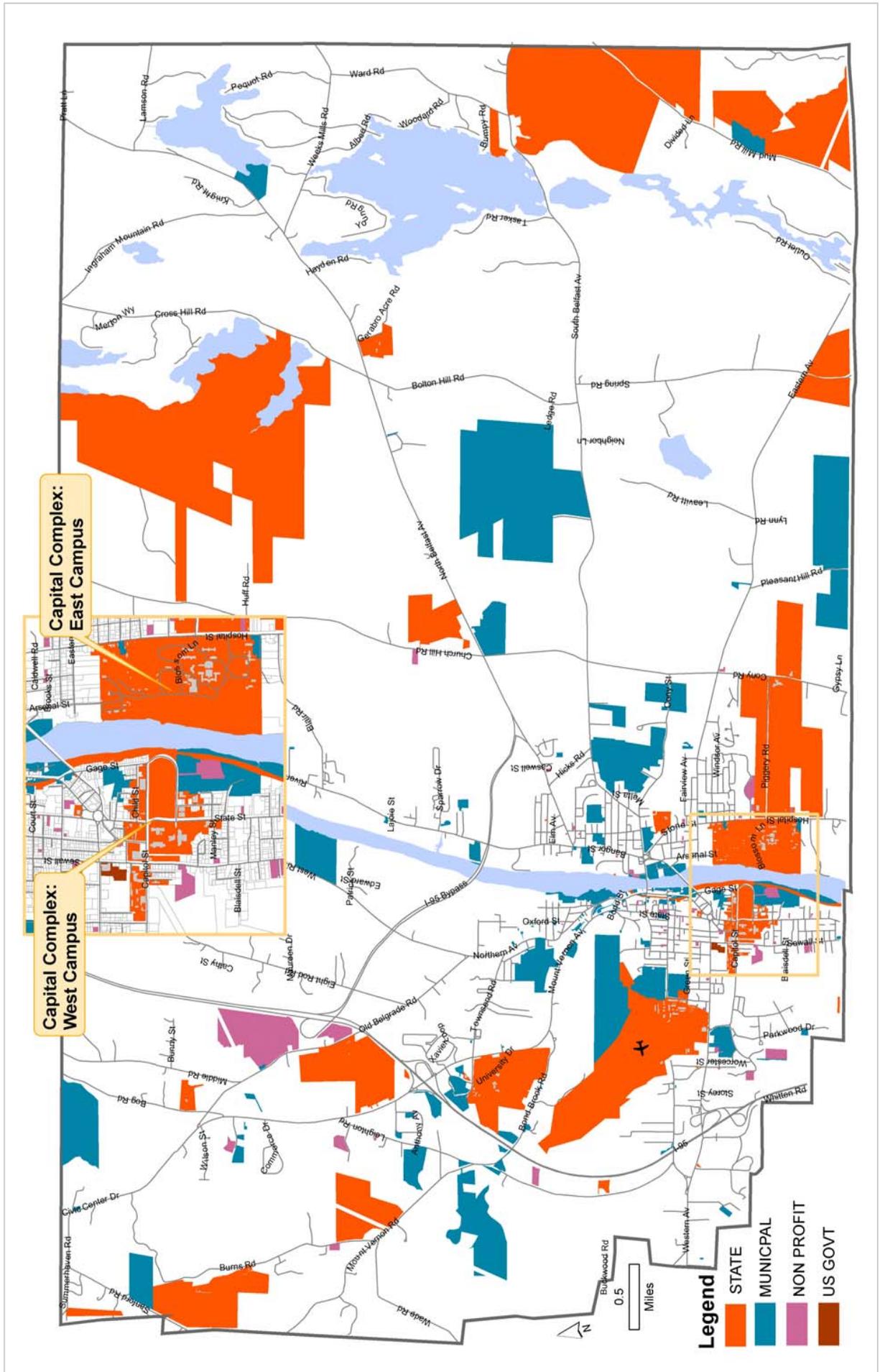
State, federal, municipal, and nonprofit entities own 4% of all of the parcels in the Augusta (see Exhibit G1). These parcels total 6,307 acres, or roughly 16% of total parcel acreage in the City. Among them are key sites on the Kennebec River which help shape the City's overall image. Most parcels are owned by the City (195) and State (85), but local nonprofits (61 parcels) are increasingly important.

These facilities have great impact on Augusta. They provide important regional services, well-paying jobs, and shoppers for local stores. They also create commuter traffic on the area roadways and are a property tax burden since they require municipal services but in many cases may not pay for them.

State Facilities

There are 88 parcels listed in the City Assessor's office as being owned by state or federal entities. Of these, almost all (85 parcels totaling 4,023 acres) are the property of the State of Maine. Eighteen of the state parcels are listed as resource protection lots, including the Alonzo Wildlife Preserve, Capitol Park, and area cemeteries. Most of the state property is in the center of the city, on either side of the Kennebec River.

Exhibit G1: Location of Federal, State, Municipal and Non-Profit Property in Augusta



Source: Augusta Assessor's Database

The East Campus is comprised of the historic Augusta Mental Health Institute (AMHI) buildings, today converted into state offices, as well as the new Riverview Psychiatric Center. The site has a spectacular setting on the Kennebec River, with large areas of green space and excellent views of the State House. The East Campus employed roughly 1,400 individuals in the year 2000, making it one of the largest employment hubs in the city.

The West Campus incorporates the State House, The Maine State Museum and Maine State Library, Capitol Park, adjacent state offices, and state-owned property along Capitol and State Streets. Among them are many historic buildings of architectural significance, including Bullfinch’s State House, the Blaine House, and other converted residences. In 2000, the West Campus included over 3,600 employees.

Non-profit Institutions and Organizations

Augusta is the state capital, the county seat, and a service center. In all of these roles, it houses a variety of government and nonprofit organizations. They include federal, state, university, county, municipal, and school units; lobbying and professional organizations; hospitals and medical institutions; and social service agencies.

A number of the latter are inventoried in the Health and Welfare section of this report.

Economic benefit of state and nonprofit employees

Collectively, state and nonprofit organizations employ over a third of workers within Augusta, a far higher proportion than for Kennebec County or the state as a whole (see Exhibit G2).

These employers provide income that is spent in local stores and restaurants, employees who’s families populate Augusta’s neighborhoods and schools, and volunteers that support local arts and sports and religious organizations.

TAX-EXEMPT PROPERTY

Many state and nonprofit entities are not required to pay property taxes to the municipal government. However, a number of nonprofit organizations and state agencies make voluntary “payments in lieu of taxes” to the municipality. Others rent space from private landlords who do pay property taxes. Thus, there is much more of a contribution to the local property tax by state and nonprofit agencies than it would first appear.

Data from the State of Maine Municipal Valuation Return provides a snapshot of the value of tax exempt properties in the city in 2003 (see Exhibit G3). The State is the largest exempt property holder, holding roughly 12% of the City’s total valuation. Nonprofits and other tax-exempt institutions make up 8% of the total valuation of property in Augusta, double the state average of 4 %.

In comparison to other state service centers, such as Lewiston, Waterville and Bangor, Augusta has a much higher proportion of state-owned property but a smaller proportion of nonprofit-owned property.

Exhibit G2: Class of Workers in Augusta , Kennebec County and Maine

	Augusta		Kennebec County		Maine	
Total Civilians Employed 16 and over	8,777		57,050		624,011	
Private Non-profit wage & salary workers	826	9%	6,220	11%	63,603	10%
Local Government	701	8%	4,560	8%	47,389	8%
State Government	1,316	15%	5,965	10%	26,534	4%
Federal Government	364	4%	1,692	3%	16,465	3%

Source: U.S. Census

Exhibit G3: 2005 Municipal Valuation Returns for Augusta, Other Service Centers, and the State												
	Augusta	%	Lewiston	%	Auburn	%	Bangor	%	Waterville	%	Maine	%
Total Property Valuation 2005	\$928,172,900		\$1,443,535,075		\$1,319,998,400		\$1,992,304,600		\$586,036,700		\$112,201,532,850	
Exempt Public Property												
Federal	\$6,711,600	0.7%	\$3,218,350	0.2%	\$4,099,500	0.3%	\$21,488,300	1.1%	\$1,952,300	0.3%	\$3,296,649,226	2.9%
State	\$130,524,200	14.1%	\$5,418,800	0.4%	\$969,500	0.1%	\$95,269,000	4.8%	\$1,318,300	0.2%	1,397,294,470	1.2%
Municipal	\$75,760,200	8.2%	\$125,000,000	8.7%	\$89,527,700	6.8%	\$157,344,600	7.9%	\$24,593,400	4.2%	\$3,512,046,103	3.1%
TOTAL	\$212,996,000	22.9%	\$133,637,150	9.3%	\$94,596,700	7.2%	\$274,101,900	13.8%	\$27,864,000	4.8%	\$8,205,989,799	7.3%
Exempt Institutions & Organizations												
Benevolent & charitable	\$25,638,100	2.8%	\$175,000,000	12.1%	\$15,441,800	1.2%	\$174,607,200	8.8%	\$44,140,800	7.5%	\$1,456,880,067	1.3%
Literary and scientific	\$10,765,000	1.2%	\$160,000,000	11.1%	\$6,892,000	0.5%	\$44,154,700	2.2%	\$54,222,800	9.3%	\$1,238,135,675	1.1%
Veterans Organizations	\$573,400	0.1%	\$2,000	0.0%	\$626,900	0.0%	\$12,786,600	0.6%	\$457,300	0.1%	\$47,862,679	0.0%
Churches & parsonages	\$19,519,100	2.1%	\$46,759,650	3.2%	\$15,821,100	1.2%	\$50,892,300	2.6%	\$13,889,400	2.4%	\$793,335,443	0.7%
Chamber of Commerce, Bds of Trade	\$230,000	0.0%	\$20,000	0.0%	\$0	0.0%	\$202,500	0.0%	\$0	0.0%	\$2,703,140	0.0%
Fraternal Organizations	\$1,888,300	0.2%	\$3,901,500	0.3%	\$1,315,300	0.1%	\$3,717,200	0.2%	\$674,800	0.1%	\$80,913,405	0.1%
Property Leased by Hospitals	\$21,725,800	2.3%	\$0	0.0%	\$0	0.0%	\$21,661,200	1.1%	\$0	0.0%	\$340,427,561	0.3%
TOTAL	\$80,339,700	8.7%	\$385,683,150	26.7%	\$40,097,100	3.0%	\$308,021,700	15.5%	\$113,385,100	19.3%	\$3,960,257,970	3.5%

Source: State of Maine 2005 Municipal Valuation Return Statistical Summary

The State of Maine leases many properties in Augusta. The annual cost of the state's leased space in Augusta is \$7 million, which is 40% of the total lease bill for all of the state government's leased space in Maine. If the state follows through on its long-range plan to consolidate offices onto state property, such lease payments would be reduced; at the same time, traffic demands on the city would also decrease.

COORDINATION WITH AREA GOVERNMENTS

The presence of so many government agencies in Augusta provides an important asset for the City in communicating and coordinating key issues. For example, there are regular meetings among local legislators, City Councilors, and County Commissioners to discuss riverfront development strategies. Augusta has been fortunate to have legislators serving in leadership posts in municipal government, which has made possible innovative projects such as the Capital Riverfront Improvement District and the conversion of the old City Hall into elderly housing.

City officials work with state, county, and other municipal organizations through bodies such as the Capital Riverfront Improvement District (CRID), the Kennebec Valley Council of Governments (KVCOG), and the Maine Municipal Association (MMA).

⇒ The Capital Riverfront Improvement District (CRID) was established by Private & Special Law 1999, chapter 58, to encourage increased access to and public use of the Kennebec River and revitalization of downtown Augusta and to foster a local-state partnership that coordinates and shares these resources.¹

⇒ The Kennebec Valley Council of Governments (KVCOG) is a regional member-owned municipal services corporation. KVCOG works on issues such as river development and smart growth, and provides economic development and planning services.

¹ <http://www.mdf.org/crid/cridhome.html>

² <http://www.kvco.org/>

KVCOG covers all of Kennebec and Somerset, and part of Waldo Counties. It is also a federally designated Economic Development District and a state designated Regional Planning and Development District.²

KVCOG works closely with:

- the Maine State Planning Office,
- Department of Transportation,
- Department of Economic and Community Development (CDBG),
- the Finance Authority of Maine,
- The US Department of Commerce (EDA),
- the US Department of Agriculture, Rural Development, and
- the US Small Business Administration

⇒ The Maine Municipal Association (MMA) is a non-profit, non-partisan organization with the voluntary membership of all but one of the State's 493 cities, towns, plantations and organized townships. The goals of the organization are "to provide a unified voice of Maine's municipalities and to promote and strengthen local government". Its staff frequently appears before state agencies and legislative committees to testify on rules, regulations, and proposed legislation affecting municipalities.³

KEY ISSUES

- (1) Figuring out ways to lessen the property tax burden of state and non-profit agencies through increased use of Payments in Lieu of Taxes or other property tax-paying arrangements.
- (2) Creating a better public understanding of the true costs and benefits of non-profit and state government agencies in the community.

³ <http://www.memun.org/public/MMA/default.html>

ENVIRONMENT AND NATURAL RESOURCES

Understanding the natural resources of Augusta and the forces that created them serves two purposes in this comprehensive plan. Natural resources have inherent values for the community. They perform essential functions such as storage of water, filtering of pollutants, providing habitat for plants and animals, and enhancing the city’s viewshed. Secondly, they help to shape the existing and future patterns of development, limiting growth in some areas while accommodating it in others. This chapter examines the existing environmental and natural resources in Augusta and provides some ideas for their future use and protection.

NATURAL FEATURES

Augusta’s geologic history is complex and includes rock formations which predate the dinosaurs by hundreds of millions of years. Its current topography is tied to glacial actions, which shaped the landforms and unconsolidated, surficial deposits seen today. These landforms, in combination with surficial deposits and bedrock formations, determine groundwater characteristics and aquifer sites. The melting glacier provided deposits of sands and gravel that created prime aquifer recharge areas.

Surficial deposits are the parent materials for the city’s soils. Augusta’s surficial deposits include¹:

- ⇒ Shallow deposits of till, an unstratified sediment that contains clay, sand, gravel, rock and boulders located in the higher elevations of Augusta’s hills;
- ⇒ Large deposits of silt and sand along the Kennebec River and in its ravines made up of stream alluvium that accumulated as part of post-glacial flooding and the Presumscot Formation, composed of marine-glacial silt and clay; and
- ⇒ Accumulations of organic matter in the form of swamp deposits located in the interior areas of the city.

¹Data from the 1988 Growth Management Plan

Soils

Soil types influence the development of a parcel of land. They often determine the feasibility of installing on-site sewage disposal systems and septic systems. For example, Maine State Plumbing Code does not allow new septic systems on slopes steeper than 20% and requires a minimum of 12 inches between the bottom of each leech field and the seasonal high water table or bedrock.

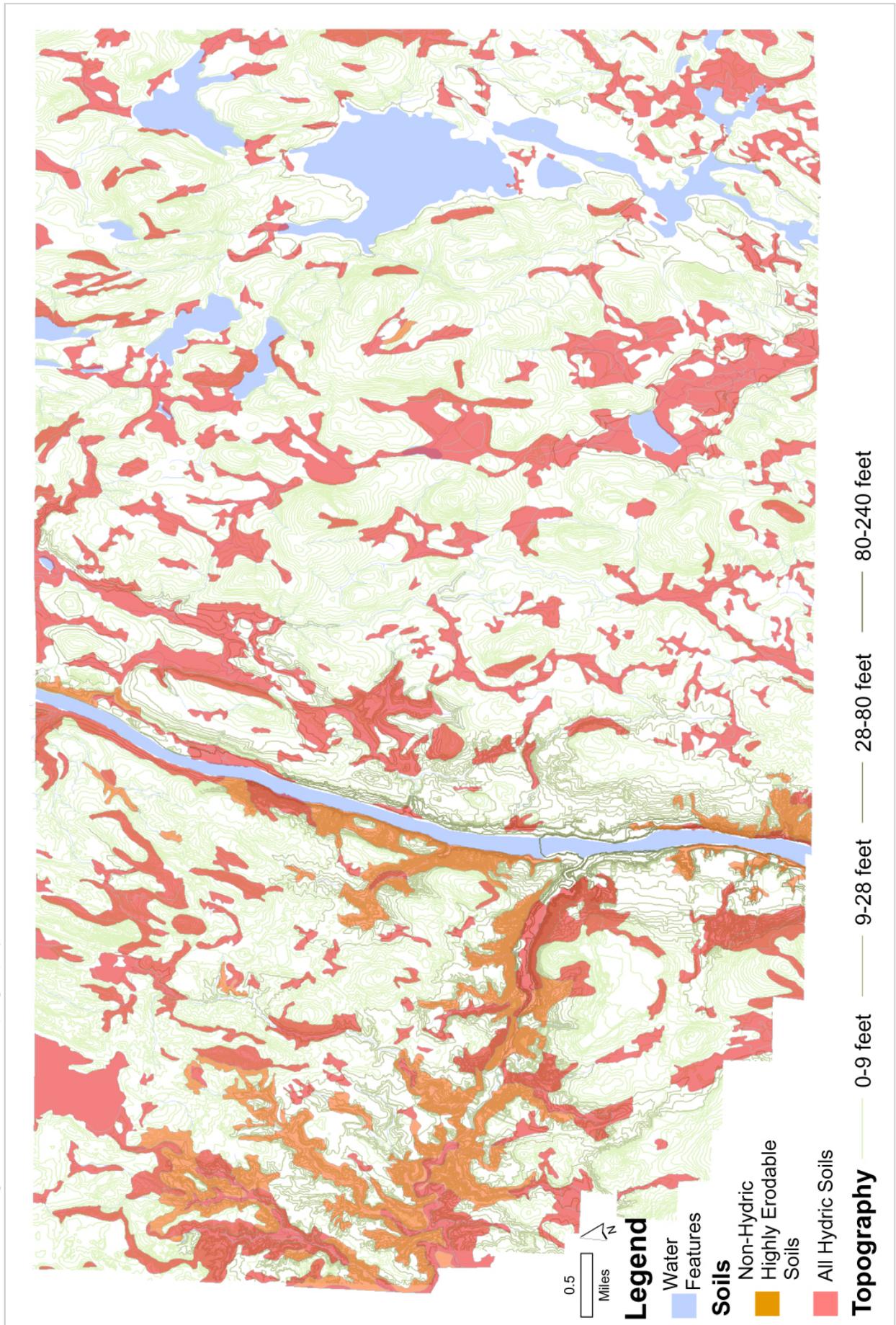
The dominant soil types in Augusta include:

Buxton	Paxton-Charlton
Deerfield	Ridgebury
Hadley	Scantic
Hartland	Scio
Hinckley	Suffield
Hollis	Windsor
Limrick	Winooski
	Woodbridge

In addition, there are a series of mucky peat soils such as Biddeford, Rifle, Scarborough, as well as Togus and Vassalboro fibrous peat.

Each type of soil is made up of a series of characteristics that make it more or less suitable for different land uses. These characteristics include: texture, or mixture of clay, silt and sand; depth to bedrock; height of the water table; the percolation rate of water through the soil; and its load bearing capacity. Some soils in Augusta that are considered inappropriate for development by the Maine Department of Environmental Protection (MDEP) are shown on Exhibit H1. These areas are located predominately along waterways and in areas of very steep slopes.

Exhibit H1: Augusta Soils and Topography



Topography

Topography is the general lay of the surface of the land. Augusta's elevation ranges from 10 to 450 feet above sea level, with steep banks bordering both sides of the Kennebec River and Bond and Whitney Brooks. These slopes create scenic hilltop vistas throughout the city core. In the eastern portion of Augusta, the land rises more gently and is home to a myriad of ponds and wetlands.

Slope is the amount of rise or fall in elevation for a given horizontal distance. For example, a 10% slope means that for a 100 foot horizontal distance, the rise or fall in height is 10 feet. Slopes are considered steep if they have a grade of 15% or higher.

Steep slopes in Augusta are located predominantly along the Kennebec River and are highly susceptible to erosion (Exhibit H1). Due to the nature of the soil and the grade of the slopes, development in these areas can be costly. Additional costs of initial construction include site preparation, building roads, and erosion control. Long-term costs include stormwater and runoff management, road maintenance and snow and ice removal.

Watersheds

All surface water in Augusta eventually flows into the Kennebec River, primarily through a series of tributaries, ponds, and watersheds. A watershed, or drainage basin, is an area through which precipitation drains into a particular watercourse or body of water. Watersheds are separated by naturally occurring divides created by high points of land. The interconnected system of surface water begins as tiny brooks in the upper reaches of the watersheds and flows through the system of streams, ponds and wetlands, ultimately reaching the Kennebec River. As a result, action taken in and around upstream tributaries affects water quality throughout the watershed.

The City of Augusta is served by eleven watersheds (Exhibit H2).

⇒ The Bond Brook Watershed serves roughly two-thirds of the City's west side and is characterized by steep slopes and erodible soils. The area provides a myriad of wildlife habitats including spawning for Atlantic Salmon and trout and deer wintering areas. Underlying this area is the Bond Brook aquifer used by the Augusta Water District. Because of steep slopes, the floodplain is confined and there are few wetlands.

⇒ The Riggs Brook Watershed is located east of the city core along the Church Hill road. There are a number of small wetlands located throughout this area as well as several deer wintering areas.

⇒ The Sevenmile Brook Watershed includes drainage from the Tolman, Dam and Spectacle ponds and outflows from Webber pond in Vassalboro. The State's Alonzo H. Garcelon Wildlife Management Area manages one thousand acres of this watershed. Much of the soil is erodible and shallow.

The other watersheds include:

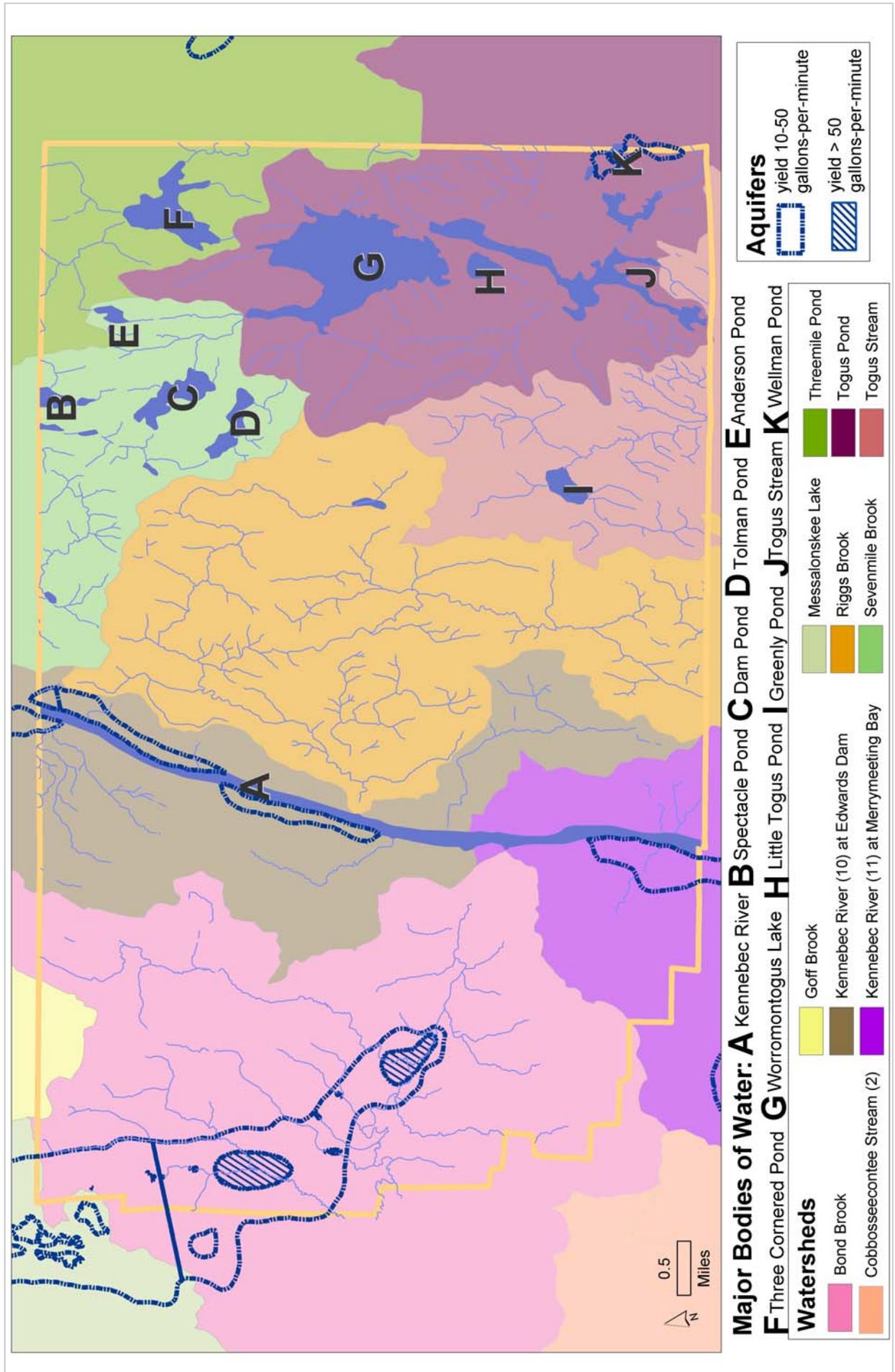
- Kennebec River at Edwards Dam
- Kennebec River at Merrymeeting Bay
- Togus Pond
- Togus Stream
- Three-Cornered Pond
- Goff Brook
- Cobbosseecontee Stream
- Messalonskee Lake

Surface Water

The brooks, ponds, lakes and river that serve these watersheds are key features of Augusta's natural resources. They serve as recreational locations, as back-up drinking water sources, and as habitat for countless fish and wildlife.

⇒ The Kennebec River spans 140 miles from Moosehead Lake to Merrymeeting Bay where it joins the Androscoggin River and moves out to the Atlantic Ocean.

Exhibit H2: Augusta Hydrological Features: Watersheds, Aquifers, Rivers, Ponds, and Brooks



The Kennebec is a significant location for fish such as Atlantic salmon, alewives, shad, sturgeon and striped bass². North of Augusta the river passes through a series of dams and industrial areas which restrict the flow of water. With the removal of the Edwards Dam in Augusta, the Kennebec head of tide now occurs between Augusta and Sidney. Though affected by the tide, the Kennebec River remains fresh water.

The Kennebec River has access points along Augusta’s waterfront including from both sides of the river in the heart of downtown; at the Mill Park; and from the Arsenal.

⇒ Augusta has eight major brooks that flow throughout its fifty-five square miles and into its eight major ponds or the Kennebec River.

The majority of the ponds are located in the eastern portion of the city and many are under the protection of the Alonzo-Garcelon Wildlife Management Area. Wetlands abound in areas around the ponds and they are home to numerous inland waterfowl and wading bird and waterfowl habitats. These areas are protected under state and local shoreland protection guidelines

Lakes/Ponds

- Little Togus Pond
- Anderson Pond
- Lily Pond
- Three-Cornered Pond
- Togus Pond
- Dam Pond
- Greeley Pond
- Lower Togus Pond

River/Brooks

- Whitney Brook
- Brann Brook
- Bond Brook
- Riggs Branch
- Rockwood Brook
- Stickney Brook
- Stone Brook
- Stony Brook

Dam and Tolman ponds are predominantly home to warm water fish such as bass, pickerel and perch. Spectacle pond supports brown trout.

²<http://mainerivers.org/kennebec.html>

Groundwater and Aquifers

Groundwater, also known as subsurface water, is water that is stored below the water table typically in cracks in bedrock or within pores between individual grains of unconsolidated sediments (e.g., sand and gravel aquifers). Precipitation, such as rain and snow melt, percolates into the ground and flows downhill at very slow rates.

Both urban and rural residents in Augusta rely on groundwater for use as potable water. In rural areas the water is pumped directly from wells on the property. Urban areas are dependent on high-yield aquifers (areas where the ground water can be pumped to the surface fast enough to make it economical to harvest large quantities) that are pumped by the Augusta Water District. More information on aquifers and the Augusta Water District is available in the Transportation and Infrastructure Chapter.

Typically, small individual wells are supplied by bedrock aquifers which pump on average 10 gallons per minute and are often interconnected. High yield aquifers tend to be made of sand and gravel deposited thousands of years ago by meltwater from glaciers. The sand and gravel act as natural filters and store water in pores between their grains. These aquifers can transport water at a rate of up to 50 gallons per minute. The major aquifers in Augusta are located under the Bond Brook watershed and alongside the Kennebec River (Exhibit H2). They serve the majority of Augusta’s urban residents.

Wetlands

The U.S. Army Corps of Engineers (ACOE) and the U.S. Environmental Protection Agency (EPA) define wetlands as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas”³.

Wetlands have both ecological and economic benefits, which can be grouped into three broad categories:

- ⇒ Biological benefits include fish and wildlife habitat (feeding, nesting, breeding, and cover) and travel corridors.
- ⇒ Water quality benefits include ground-water recharge and discharge, stream flow maintenance, flood prevention, water quality maintenance, and shoreline protection from erosion.
- ⇒ Human benefits include recreational uses such as hunting, birding, fishing, boating, and hiking. The aesthetics and open space values of wetlands are important to communities.

In order for a wetland to qualify for protection, one of more indicators of wetland vegetation, hydric soil, and wetland hydrology must be present. There are several standardized approaches to assessing the functions and values of wetlands and although there is overlap, they do vary by agency (i.e. ACOE, EDP and Federal Highway Administration, individual state Department of Protections). The ACOE’s assessment is dependent on the following criteria:

- Sediment retention
- Floodflow alteration
- Finfish habitat
- Plant and animal habitat and
- Educational/cultural value.

³<http://www.epa.gov/owow/wetlands/what/definitions.html>

For each function a wetland provides, it is given one (1) point. If a wetland provides all five functions, it is given five points. Wetlands with more points are considered to provide more benefit for a community than those with lower points. In Augusta, the highest ranking areas provide four out of the five functions and include the Sidney Bog and the majority of large wetlands throughout the eastern portion of the City (Exhibit H3).

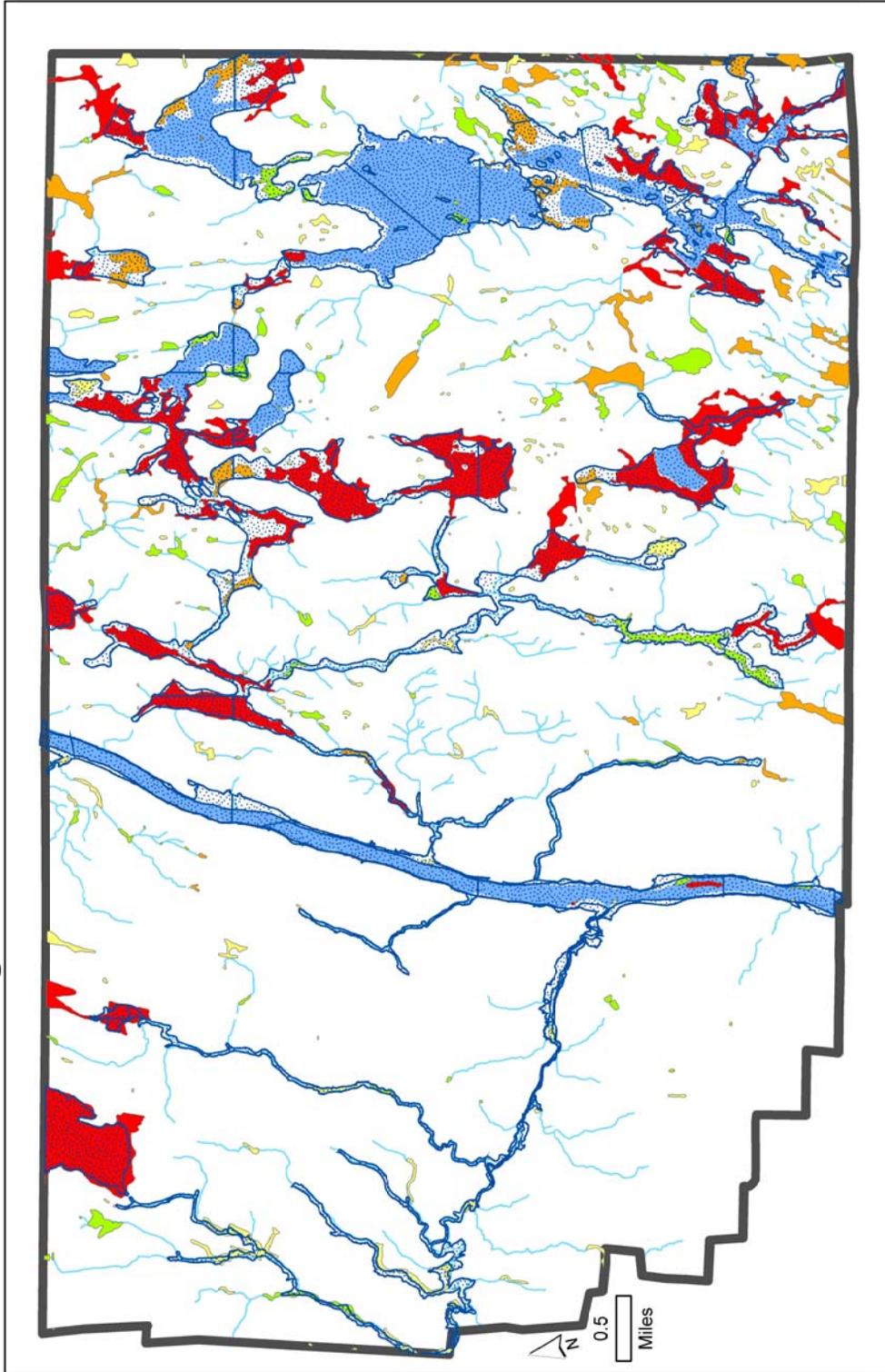
A vernal pool. Also referred to as a seasonal wetland or spring pool, is a wetland that usually only contains water for part of the year. In Maine, vernal pools can provide important habitat for wood frogs and salamanders as well as valuable habitat for other plants and wildlife, including several rare, threatened and endangered species. Significant vernal pools are regulated as significant wildlife habitat by Maine Department of Inland Fisheries and Wildlife (IFW) and are protected under federal and state law.

Federal and state laws and regulations that apply to wetlands in Maine include:

- Executive Order 11990—“Protection of Wetlands”
- Section 404 of the U.S. Clean Water Act
- Section 10 of the U.S. Rivers and Harbors Act
- Natural Resource Protection Act of Maine
- Chapter 310 Wetlands Protection rules of Maine.

Exhibit H3: Augusta Wetlands and Floodplains

Augusta Wetlands and Flood Plains



**Wetlands Ranked by the number of characteristics of use met
(1 being lowest; 4 being highest)**

1	2	3	4
Yellow	Light Green	Orange	Red

Area within 100 year flood plain Hydrological Features

Source: Maine OGIS

Floodplains

Floodplains are categorized as low-lying flat land areas adjacent to rivers, streams, and ponds that are periodically flooded. Along major rivers, such as the Kennebec, the floodplain is separated into three areas: the stream channel, the floodway and the floodway fringe. Stream channels carry the average high water flow; the floodway includes the area necessary to carry the floodwaters; and the fringe stores rather than distributes the floodwaters.

The Federal Emergency Management Agency (FEMA) maintains detailed maps of all 100-year flood plains throughout the country. A 100-year floodplain is a designated area that has a 1% chance of being flooded in any given year.

The floodplains within Augusta are well-defined and exist along the Kennebec River, its major tributaries and ponds (see Exhibit H3). The city has a floodplain ordinance based on state standards which regulates development in these areas. Development is typically restricted in floodplains due to cost and dangers associated with flooding and flood-proofing. In general, these areas contain sensitive vegetation and soils that are susceptible to pollution problems if developed. Filling or improper or high volume uses within floodplains increase the potential for property damage, downstream contamination, and flooding.

Farmland and Forests

Farmlands and forests provide large expanses of undeveloped space and may contain critical wildlife habitats in urban communities like Augusta. Forest land provides some jobs through commercial forestry but mainly offers rural recreational opportunities for the city's residents. Both agricultural and forest land are important pieces of Augusta's history, culture, character, and quality of life and are declining in Augusta. forest management difficult and economically infeasible, leading landowners to develop or sell the land.

Farms are being subdivided and sold for residential and commercial development. Forested land is being parceled into smaller lots, making forest management difficult and economically infeasible. Some landowners may then choose to develop or sell the land.

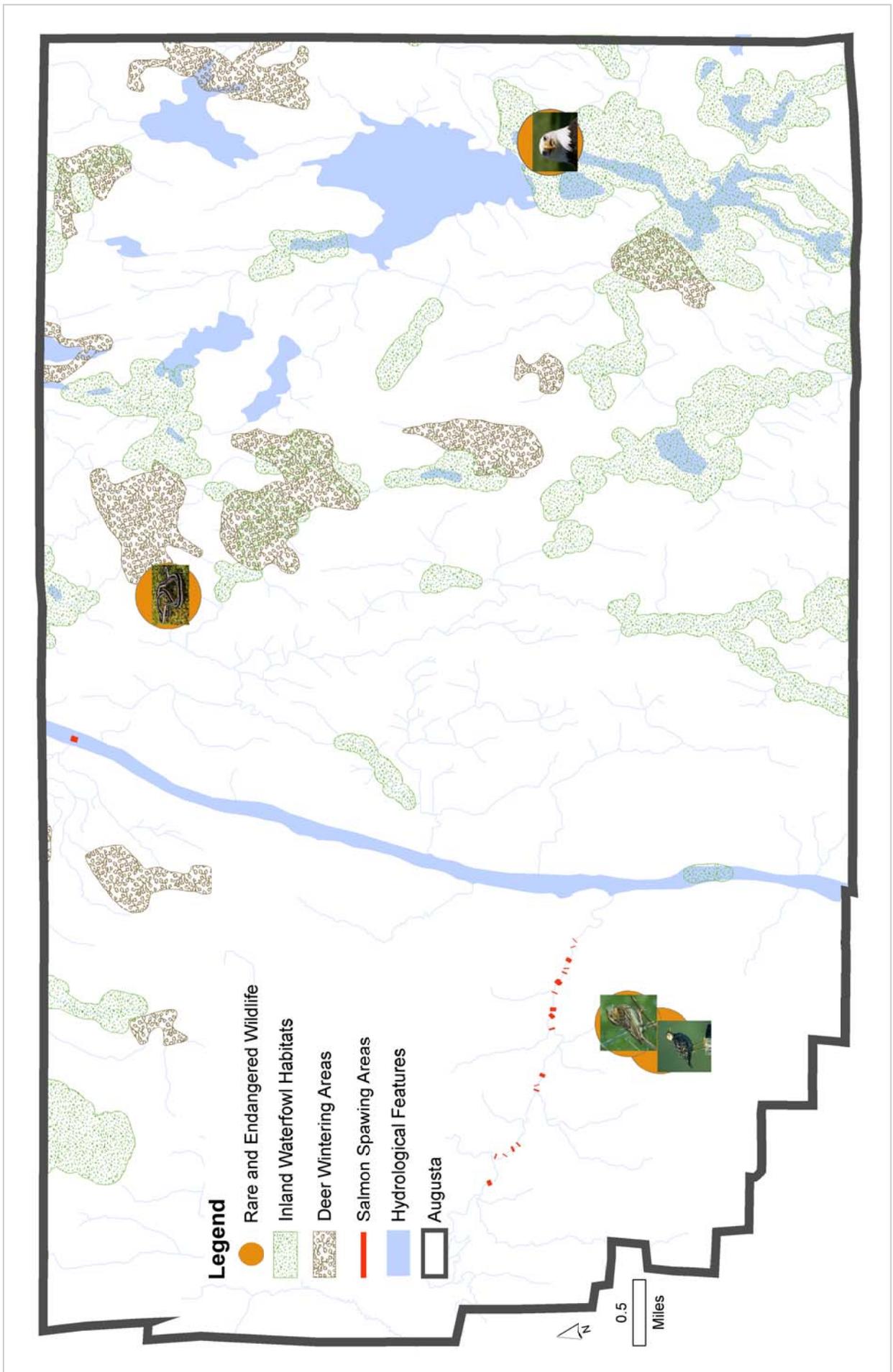
Only a few large areas of soils classified as prime farmland soils⁴ still exist in Augusta. Of these, the largest, located off of Bolton Hill Road, remains mostly undeveloped and is currently utilized as active farmland with some residential development. The second largest area of prime farm soil is located on Augusta's west side and is already largely developed.

Other areas with concentrated amounts of prime farmland soils include open/active farmland on Spectacle Pond and off the Cross Hill Road. Undeveloped forest areas are found off of Church Hill Road, between Townsend Road and Old Belgrade Road, and along the eastern portion of Bond Brook. Many of the underlying zones in these areas however limit or actively prohibit agricultural uses.

Clear-cutting of forest land in preparation for land development is occurring throughout Augusta, in particular along Civic Center Drive and Western Avenue. The issues raised by clear-cutting include: increased impervious area and stormwater runoff; a loss of undeveloped land in the central areas of the city; a loss of buffering between commercial and residential areas; and a loss of rural gateways in high-profile areas.

⁴The Natural Resources Conservation Service of the U.S. Department of Agriculture classifies as prime farmland soils as those that provide the best combination of physical and chemical characteristics to raise crops or support certain types of vegetation including those used for fiber and forage. The U.S. Farmland Protection Act protects those lands from unnecessary or irreversible conversion to non-agricultural uses—even if the lands are not currently being used for agricultural purposes.

Exhibit H4: Unique and Critical Natural Resources



Farmland in Augusta is protected through the city's soils ordinance provision which requires the clustering of development and prohibits soil removal in areas of ten acres or more of prime farm soils.

State farm and open space law taxation and Tree Growth tax law programs also help to preserve farmland and forests by offering tax incentives to land owners and farmers.

A total of four Augusta farmland owners (9 parcels and 147 acres) take part in the farm law taxation program. 4,644 acres and 80 parcels of forest are currently enrolled in the Tree Growth program, an increase of 12 parcels since 1999.

Wildlife Habitats

Augusta's many wetlands, ponds, and waterways are home to significant wildlife habitats. (Exhibit H4 and H4a; Source: Maine Department of Inland Fisheries and Wildlife.)

⇒ Deer wintering areas are critical to maintaining deer populations. The deep snow and frigid temperatures of Maine's harsh winters put extreme stress on deer populations. During these conditions, deer move to wintering areas or "yards" that provide winter forage and thermal protection. A typical deer yard is sheltered from snow and wind.

There are 10 significant deer wintering areas within Augusta. The majority are located on the east side of the City in the Outer Route 3 and Togus Pond neighborhoods and range in size from 40 to 400 acres.

⇒ Inland wading bird waterfowl and habitats include areas used for breeding, migration and wintering. In Augusta, these habitats are found throughout the eastern part of city, in particular around Togus, Greeley, and Dam ponds. The Sydney bog is also a significant bird habitat.

⇒ Atlantic Salmon spawning and rearing areas are important for maintaining healthy salmon populations. Bond Brook's riffles and pools have historically been significant locations for salmon spawning and rearing. The removal of the Edwards Mill Dam has possibly led to a change in the fish migration as few salmon have returned to Bond Brook since its demolition.

⇒ Augusta provides critical habitats for state and/or federally defined rare and endangered animals: the bald eagle, the grasshopper sparrow, the ribbon snake, and the upland sandpiper.



Bald Eagle habitats are found along shorelands in areas that include large trees (in particular white pine) within one mile of a water source. The birds often mate for life and return to the same nesting area year after year. Typically their territory is a 1- to 2- mile radius from their nest.

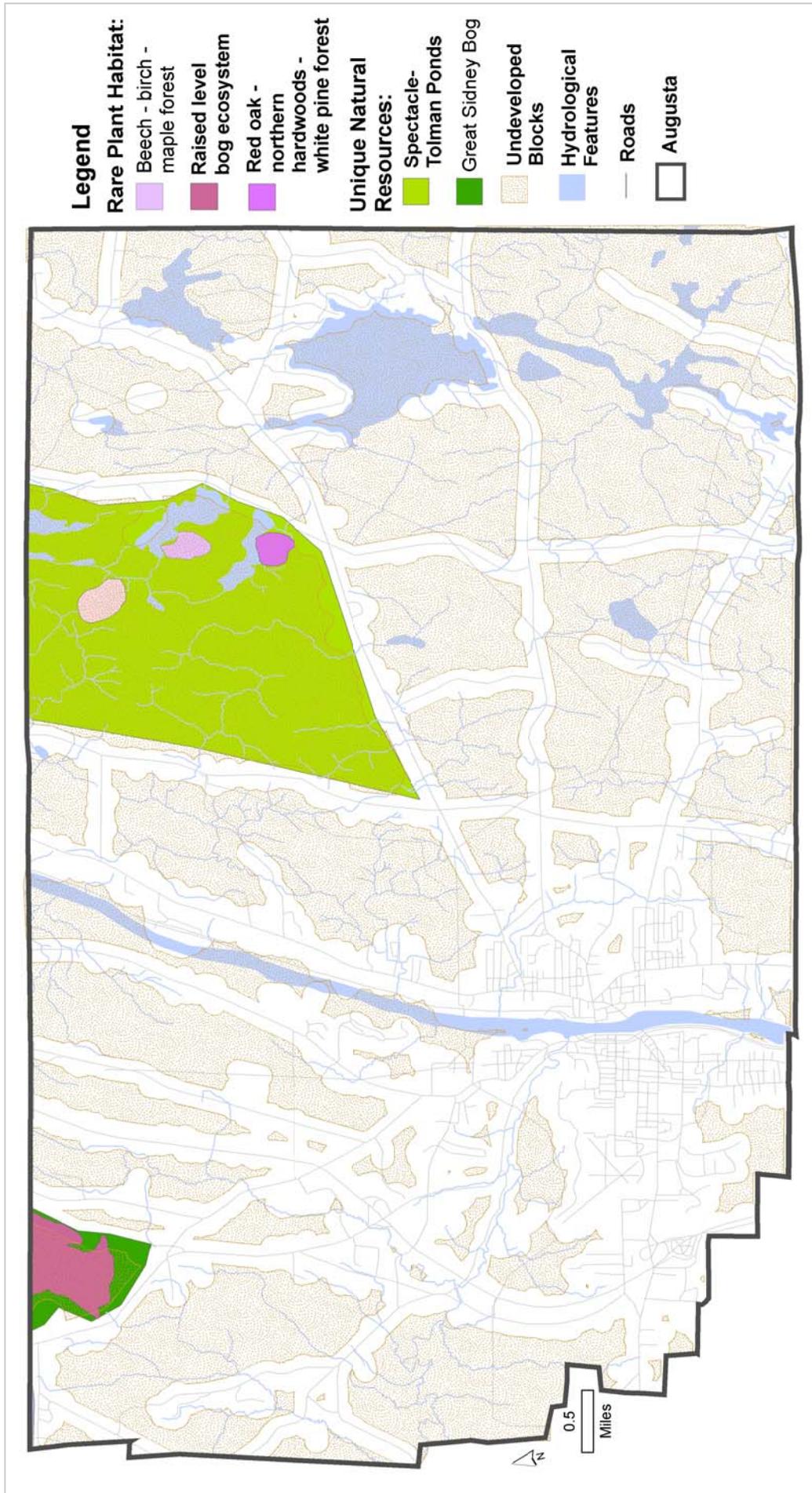


Grasshopper Sparrows live in grassland habitats and are found in a variety of tall- and mixed-grass habitats including native prairies, hayfields, pastures and grassy fallow fields. The bird forages on the ground and its primary diet is grasshoppers. The nests are located on the ground and typically are a cave-like structure made up of tall grasses.



Ribbon Snakes are in the same family as garter snakes. These reptiles are under special consideration in Maine because their habitat is threatened by development. The snakes live in boggy, bushy habitats and typically feed on tadpoles, salamanders, small fish, and a variety of frogs.

Exhibit H6: Unique and Critical Natural Resources





Upland Sandpipers are a shorebird of grasslands and inhabit native prairie and other open grassy areas. These birds feed on the ground and can often be found around airports. The birds nest is a scrape in the ground which may be lined with grasses.

Other rare wildlife species have also been sighted in Augusta’s habitats, including Common Musk Turtles, also known as Stinkpots. These turtles prefer permanent bodies of water such as lakes, ditches, ponds and quiet streams, where they tend to dwell on the bottom, and consume a carnivorous diet dominated by crayfish, freshwater clams, snails and various insects.

Unique and Critical Natural Resources

The Maine Natural Areas Program (MNAP) maintains information on the status and location of rare plant and animal species as well as exemplary natural communities in Maine (Exhibit H5).

⇒ The Great Sidney Bog is a 605-acre Raised Level Bog. Much of the bog is covered by abundant rhodora and sheep laurel. Spruce Larch Wooded Bog, Red Maple Wooded Fen, and Bog Moss Lawn communities make up the remainder of the peatland.

Small streams drain into the bog from the north and west, and exit the bog on the northeast and south sides.

The bog encompasses 14 lots in the towns of Sidney and Augusta. As of 1990, Augusta held one lot, and Sidney another; the remainder were in private ownership. Peat mining rights are held on several of the lots by General Peat Resources.

⇒ The Spectacle Tolman Pond Area encompasses Spectacle, Dam and Tolman Ponds and their upland wetlands, wildlife habitats, and forests. The three ponds are considered one wetland complex. There are vast stretches of cattail marsh and mixed shrub marsh along the streams west of Tolman Pond and north of Dam Pond. Acidic fen communities occur along pond shores, especially near outlets and inlets, and some stream sides. The forest types include Appalachian oak, boreal, red oak – northern hardwood, white oak – red oak, and hemlock forests. Many of these forests have not been cut in over 50 years, and some of the red oak are more than 20” in diameter and over 60’ tall.

Exhibit H5. Unique and Critical Natural Resources

Species, Natural Community	Rarity	Status	Location
Beech - Birch - Maple Forest	S4		Spectacle Tolman
White Oak - Red Oak Forest	S3		Spectacle Tolman
Red Oak-Northern Hardwoods-White Pine-Mixed Forest	S3/S4		Spectacle Tolman
Stinkpot	S3		Spectacle Tolman
Raised Level Bog Ecosystem	S4		Sydney Bog
Ribbon Snake	S3	Special Concern	Spectacle Tolman
Bald Eagle	S4	Threatened	See Exhibit H4
Grasshopper Sparrow	S3	Endangered	See Exhibit H4
Upland Sandpiper	S1	Threatened	See Exhibit H4

Rarity: S1- imperiled in Maine because of rarity or other factors that make it vulnerable to decline
 S3 - rare in Maine
 S4 - apparently secure in Maine
 Status: Endangered: rare, in danger of being lost in Maine in the future, or federally listed
Threatened: rare and, with further decline, could become endangered or federally listed
Special Concern: rare in Maine, but not sufficiently rare to be considered endangered or threatened

Source: Beginning with Habitat

Large Undeveloped Blocks

Large undeveloped blocks of land are found in undeveloped portions of the city. These provide continuous habitat for wide-ranging animals with large home areas such as deer, bear and moose (See Exhibit H6). Land areas greater than 2,500 acres have the potential to provide for these large species while small blocks (less than 250 acres) support typical suburban species such as raccoons, skunks, squirrels and songbirds. The MNAP identifies large undeveloped blocks in Maine. The location of these tracts and their significance as wildlife corridors can help define patterns of future development.

Conservation and Municipal Lands in Augusta

- ⇒ The Alonzo H. Garcelon Wildlife Management Area (WMA) incorporates 1,900 acres of open space and is located in the northeastern side of the city and is also part of the towns of Windsor and Vassalboro. The WMA offers a variety of outdoor activities including canoeing on all three ponds, freshwater and ice fishing, hunting, and wildlife watching. Garcelon WMA is managed by the State Department of Wildlife and Inland Fisheries, which intends to expand the park by 93 acres through a Land for Maine's Future grant.
- ⇒ Pleasant Hill Road Conservation Area is a 200-acre conservation area located on the southeast side of Augusta at the intersection of Route 17 and Route 9. It is all forestland with interconnecting trails.
- ⇒ The Mall Mitigation Wetland is roughly nine acres of wetlands owned by the City of Augusta. It is located to the west of I-95 and is a conservation exchange for the development of the mall area.
- ⇒ The Governor Hill Fish Hatchery is located on the western border of Augusta. The hatchery rears brook trout, lake trout, and splake.

- ⇒ The Pine Tree State Arboretum encompasses 244 acres in southeastern Augusta at 153 Hospital Street. The five-mile trail system is open year-round to hiking, jogging, bird watching, non-motorized biking, horseback riding, and cross-country skiing. A number of trails have surfaces suitable for wheelchair access. The Arboretum is a non profit corporation that works to provide outdoor education and scientific research as well as recreational activities. The land is leased from the State of Maine.
- ⇒ Tyler Pond Wildlife Management Area is located across the town lines of Augusta and Manchester (with the majority of the area in Manchester). It is approximately 128 acres of upland forests and inland wetlands surrounding Messalonskee Lake. Recreational activities in the area include boating, canoeing, ice fishing, hunting, fishing, and wildlife watching.

ENVIRONMENTAL PROTECTION AND ADVOCACY

Water Quality

Water quality is ranked by the Maine Department of Environmental Protection (MDEP) into three classes - A, B, and C, with Class A representing the most pristine. The section of the Kennebec River that runs through Augusta is divided into Class B and Class C. The City's other major streams and ponds are listed predominantly as Class B.

Class B waters are general purpose waters that have good water quality and allow for well-treated discharges of amply diluted pollutants. Class C waters are managed at a minimum allowable rate to attain the fishing/swimming goals of the Clean Water Act and maintain the structure and function of the biological community allowing for well-treated discharged pollutants.

There are two major types of pollutants that affect water quality: point and non-point.

- ⇒ Point Source Pollutants can be traced to one location, or point, such as a factory or treatment plant. Since these pollutants come from a direct source, they are easy to identify and manage. Some point source pollutants in the Kennebec River come from areas upstream of Augusta including six paper mills; one tannery; two now closed textile mills; and eighteen municipal waste treatment facilities.
- ⇒ Non-Point Source Pollutants cannot be traced to one source and are often known as stormwater runoff. Stormwater can come from anywhere within the a watershed and includes any water that does not soak into the ground during a storm but rather "runs off" to a given water body such as a river, lake or stream. Often this water runs over a myriad of local pollutants such as fertilizers, pesticides, manure, and petroleum products, which originated from places such as farm fields, driveways, roads, golf courses, and lawns.

Water Quality Protection

The Augusta Water District maintains the quality of all commercially and residentially utilized water in the City. They also provide detailed yearly reports on the quality of aquifers and surface reservoirs used to meet the City's needs (for more information see the Transportation and Infrastructure Chapter). In addition to this quasi-municipal corporation, there are a myriad of non-profit and state agencies working in Augusta to protect local and regional water quality. Organizations such as the Friends of the Cobbossee Watershed, the Kennebec County Soil and Water Conservation District and the Maine Atlantic Salmon Commission provide education, outreach, and restoration programs throughout the region. The Youth Conservation Corps and the Hussey Middle School incorporate outdoor classes and restoration activities which highlight water conservation and preservation.

Local shoreland protection ordinances also help to preserve area water quality by providing restrictions and guidelines for development in and around critically sensitive waterbodies.

Air Quality

Air quality is a critical issue for both the health of the citizens of Augusta as well as the natural environment. The protection of this resource is chartered under the Federal Clean Air Act and monitored in Maine by the Bureau of Air Quality (DEP), which examines state air quality for specific pollutants.

The City of Augusta falls under the Western Interior range and air is monitored from the Gardiner Pray Street School. Higher pollutants in the air are typical in the winter and summer due to increase in traffic and engine idling. Augusta is working to adopt a No-idling Guideline for school buses in order to limit the output of harmful air emissions.

Natural Resources Protection

Augusta uses State Shoreland Zone regulations to protect rivers, streams, and wetlands and a Rural Ponds Zone (RPZ) to protect water quality and wildlife habitat in areas of highly erodible soils and steep slopes. All new development and conversions in the RPZ are expected to (1) prevent additional phosphorous loading of Togus and Three Cornered Ponds, (2) protect the water quality of all ponds, and (3) protect areas of wildlife, fish, scenic, and forest value. Clustering and retention of open space is favored but not required. Minimum lot sizes are determined on a watershed basis using soil type and number of lots to determine the minimum lot sizes required to control expected phosphorous loading from each development.

Augusta has a wealth of private non-profit organizations focused on various aspects of natural resource protection including land trusts and grass-roots citizen organizations. Several State environmental regulatory and resource agencies are located in Augusta, including the Maine Department of Inland Fisheries and Wildlife (IFW), the Maine Department of Environmental Protection (DEP), the State Planning Office (SPO), and the Department of Conservation (DOC). Each of these agencies has programs specifically related to the promotion of natural resource protection.

As natural resource protection is broader than city boundaries, Augusta has partnered with many regional organizations to promote and protect the environment throughout the Kennebec Valley. One such effort is the Kennebec River Initiative.

Specific organizations working on protecting natural resources in and around Augusta include:

⇒ The Kennebec Land Trust (KLT), a non-profit organization formed in 1988, works with landowners and communities to protect the Kennebec Valley's natural features, working landscapes and fragile ecosystems. Many of the properties protected by the KLT are open to the public.

The KLT preserves natural resources through:

- Land Protection
- Stewardship
- Education
- Advocacy
- Cooperation

⇒ The Kennebec Coalition is made up of Trout Unlimited, American Rivers, the Atlantic Salmon Federation, and the Natural Resources Council of Maine. The coalition was formed in 1989 to secure the Edwards Dam removal and restore the Kennebec River. With the dam's removal, Atlantic sturgeon, salmon and eight other species of migratory fish are able to reach historic spawning areas on the river that have been unavailable since the dam was built in 1837. In addition to a restored aquatic community, communities along the Kennebec anticipate increased opportunities for sport fishing, boating and other forms of recreation.

KEY ISSUES**(1) Suggested land use regulation changes that would promote natural resource protection**

- ⇒ Expand the Shoreland Zoning Ordinance to include wetlands under 10 acres in size with high function and value rankings and significant vernal pools.
 - ⇒ Increase zoning protection for certain undeveloped areas, including limiting removal of trees/disruption of soil around ponds to reduce runoff.
 - ⇒ Encourage the use of Best Management Practices with respect to erosion control, water quality and stormwater run-off within the vicinity of sensitive resources, such as along the steep slopes of the river or within aquifer recharge areas.
 - ⇒ Promote on-site mitigation of wetlands rather than off-site mitigation.
 - ⇒ Create an incentive for the protection of natural corridors to connect wildlife habitats through buffering.
 - ⇒ Draft scenic vista protection provisions to preserve the views of rural and natural areas along major corridors.
 - ⇒ Create clear-cutting limits in designated areas to protect forest and habitats.
 - ⇒ Give additional deference to large undeveloped blocks and deer wintering areas to protect wildlife habitats and natural resources.
 - ⇒ Increase natural buffers between residential/commercial and rural/urban areas to help reduce noise, light, and air pollution.
- (2) Incentives to promote development that is sensitive to resource protection**
- ⇒ Efforts should be made to promote low-impact development, smart growth development and cluster development, to allow for economical use of the land while protecting watersheds, streams, significant wetlands, and significant vernal pools.

⇒ A City-wide natural resources baseline map should be created to aid in planning and development efforts, and to delineate the most environmentally sensitive areas within Augusta.

⇒ Implement tax or other incentives to encourage landowners to preserve environmentally-sensitive areas. Implement a transfer of development program (TDR), open space (OS) fund and/or impact fee schedule. Impact fees could be structured to discourage shoreline disturbance while encouraging landowners to preserve land around significant water bodies and wetlands without creating economic hardship.

(3) Promote continued regional cooperation for protecting natural resources

⇒ Connect Augusta's open and undeveloped spaces with those of neighboring towns through habitat corridors.

⇒ Work with the towns of Hallowell, Readfield and Winthrop to protect potential water supplies such as Cobbossee Lake.

⇒ Work with neighboring towns to protect Sidney Bog.

(4) Protect water sources from invasive plant species and non-point source pollution

⇒ Increase landscape buffer requirements for seasonal conversions/new developments around large wetlands, streams, or great ponds so as to help reduce soil and phosphorus run-off into the water. Excessive phosphorus is known to cause algal blooms and promotes growth of invasive plants.

⇒ Limit boat access on ponds or provide courtesy boat inspections to reduce the likelihood of invasion by non-native aquatic plants.

LEISURE AND RECREATION

Augusta is more than a place to live and work; it is also a place to play and relax. Leisure and recreation opportunities are important for the community's health, economy, and sense of place.

Augusta has a wide variety of recreational resources. These resources are provided by municipal, state, and federal governments, local and regional non-profit organizations, and private businesses. Facilities include: ball fields, gymnasiums, courts, tracks, trails, biking, cross-country skiing, snowmobile trails, skate parks, and swimming pools. Other resources include forest, campground, and numerous wildlife areas as well as private clubs and associations (see Exhibit I1). This chapter inventories the various leisure and recreation facilities available in Augusta and discusses some trends affecting their use.

CITY OF AUGUSTA RECREATION

Augusta has long given priority to recreation and open space. This priority is reflected in the City's decision in the summer of 2007 to purchase 168 acres in the Bond Brook area for a park. Trail links, open space, and access to water have repeatedly been highlighted in previous plans, most recently the City's *2000 Public Recreation and Property Facilities Inventory*. That plan assessed all City sites and identified high-use areas that need a variety of improvements, including resurfacing basketball courts; connecting trails; installing fences; improving drainage; and replacing lighting, wiring, and sprinklers.

The City of Augusta has three departments that provide leisure and recreation services and care.

⇒ The Bureau of Parks and Cemeteries maintains the land - 160 acres of neighborhood parks, public grounds, city trees, green spaces, flower beds, and athletic fields at the city's seven schools.

⇒ The Bureau of Recreation provides the programs and manages the facilities. The City offers more than 50 programs, with 5,000 participants, including:

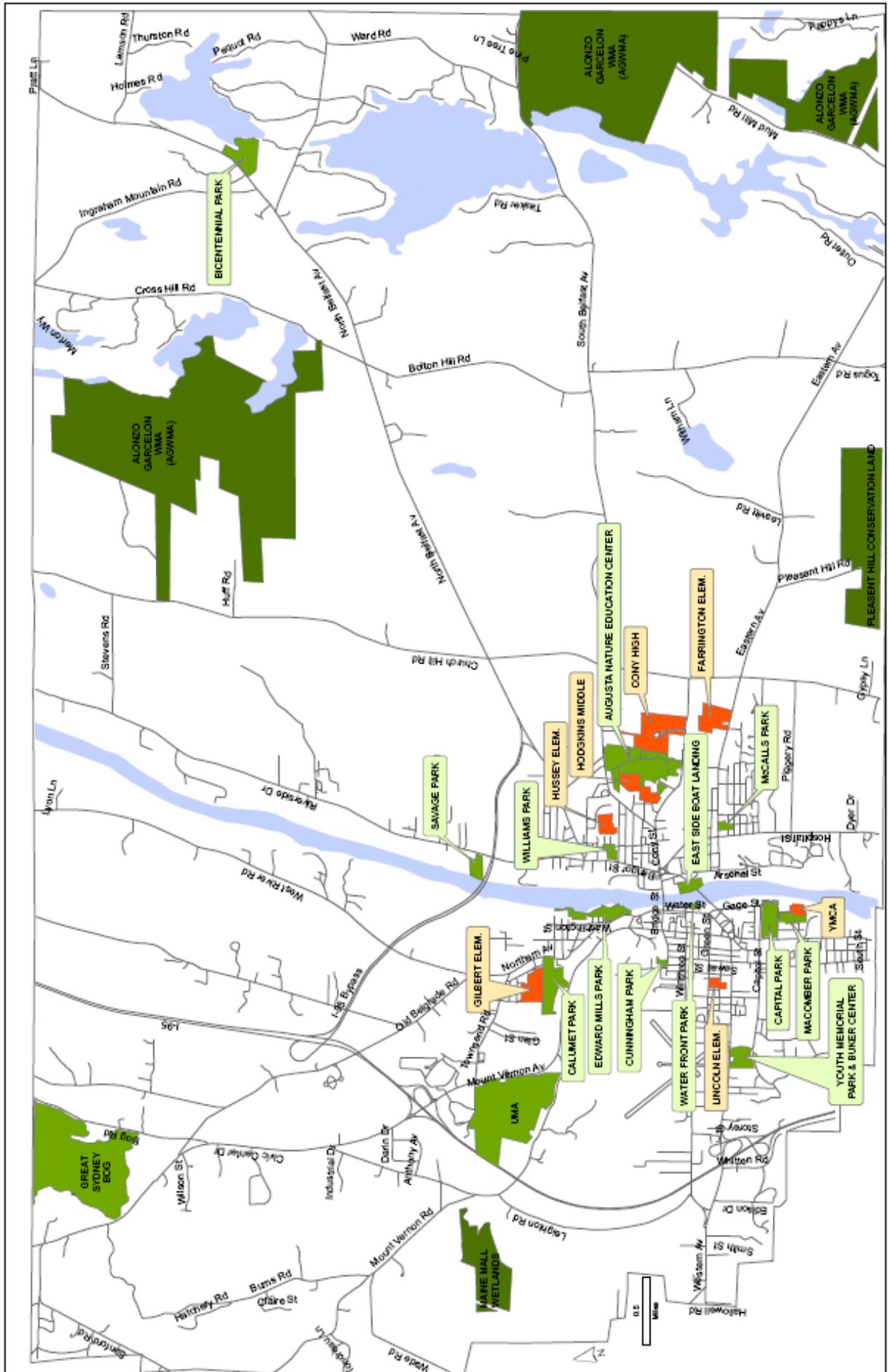
- Tournaments,
- Sports clinics,
- Concerts,
- Field trips, and
- Playground activities.

Recreation programs are offered during the school year and during the summer months; a brochure is published several times a year advertising the offerings. Most programs are conducted at the former Buker Elementary School. This Bureau also manages municipal facilities including:

- Community gardens,
- Tennis and basketball courts,
- Swimming pools,
- Softball fields,
- Winter skating rinks, and
- Boat facilities on the Kennebec River.

⇒ The City Arborist along with The Tree Board regulate the planting, maintenance, and removal of public trees. The Program includes Integrated Pest Management, monitoring, care, and maintenance of trees on City-owned property.

Exhibit H4: Unique and Critical Natural Resources



Source: Maine OGIS

PUBLIC PARKS & RECREATION FACILITIES

Augusta is home to a significant number of municipal parks and recreation facilities maintained by the Bureau of Parks and Cemeteries.

- ⇒ Capitol Park is a twenty (20) acre park on the east side of the State Capitol building. The park was originally designed by famed landscape architect Frederick Law Olmstead. The park has two (2) multi-purpose sports fields and is connected to the Kennebec River via the new Kennebec River Rail Trail (KRRT). It is the official beginning of the Capitol #22 bike trail which offers 21, 33, 42, and 59-mile loops through the city and surrounding areas. The park is jointly funded by the State and the City.
- ⇒ Bicentennial Park is comprised of twenty seven (27) acres of woodland adjacent to Three-Cornered Pond. It includes nature trails, a picnic area, and limited boat (maximum 8 non-motorized boats) and swimming access to the pond. Overnight use is limited to educational purposes and takes place in the park’s Learning Center.
- ⇒ Savage Park is located in northeast Augusta along the Kennebec River. The wooded seven (7) acre park includes a .25 mile recreation trail to the river. There are picnic tables, a log amphitheatre, and one and a half (1.5) acres of open lawn.
- ⇒ The Youth Memorial Park is located in southwest Augusta, in the Westside neighborhood. The park includes twenty four (24) acres with picnic tables, six (6) tennis courts, a playground, amphitheatre, basketball court, and two (2) field hockey fields.
- ⇒ Macomber Park is a two (2) acre park located on Gage Street. It includes the Gage Street Playground, a picnic area, a basketball court, and a skateboard/BMX bike track.
- ⇒ McCall’s Park encompasses three (3) acres in the Mayfair neighborhood. It includes a basketball court, a softball/baseball field, a 40’ by 60’ swimming pool playground, and a picnic area.

⇒ Williams Park is located in the Bangor Street neighborhood. It is a four (4) acre park including a playground, two (2) basketball courts (one with lights), a 40’ by 60’ swimming pool, an ice skating rink, a multi purpose field, a sledding hill, and a picnic area.

⇒ Calumet Park is a twenty seven (27) acre park located on Northern Avenue in the Sand Hill neighborhood. It includes a playground, basketball court, tennis court, wooded area, multi-purpose field, ice skating rink, 40’ by 60’ swimming pool, and a picnic area. The ice skating rink is lighted and open in the evenings.

⇒ Mt Vernon Park is located on Mount Vernon Avenue in the Civic Center neighborhood. This eight (8) acre park includes a lighted ball field and playground.

⇒ Cunningham Park is a two (2) acre park located in the West Side neighborhood and includes the North Street playground, a half size basketball court, a “sprinkler pool”, and a picnic area.

⇒ Pocket Parks – In addition to the facilities listed above, there are a range of pocket parks in the city, located predominantly in the Sand Hill and West Side neighborhoods. These parks are all less than one acre and have limited amenities, such as benches and play areas.

- Front Street Park
- Gingras Park
- Northern Avenue Mini Park
- Bond Street Mini Park
- Rines Hill Park
- Father Curran Area (Water Street)
- Peachey Lot
- Waldo Park

School grounds maintained by the Bureau of Parks and Cemeteries include:

⇒ Lincoln Elementary School is located in the West Side neighborhood and has a playground on the campus.

- ⇒ Gilbert Elementary School is located in the Sand Hill neighborhood and has a playground, a softball/baseball field, and one (1) full and three (3) half-size basketball courts.
- ⇒ Hussey Elementary School is located in the Bangor Street neighborhood and has a playground on campus.
- ⇒ Farrington Elementary School is located in the Cony neighborhood and includes a playground and a trail connection to the Augusta Nature Education Center.
- ⇒ Hodgkins Middle School is located in the Cony neighborhood includes two (2) softball/baseball fields, a basketball court, a soccer field and a trail connection to the Augusta Nature Education Center.
- ⇒ The Cony High School and Capital Area Technical Center Campus is located in the Cony neighborhood and is home to Alumni Field; the complex includes a 400-meter track, a football field, a softball field, a lacrosse field, multiple trail heads, and three (3) lighted tennis courts.

Public Recreation Services & Programs

The City of Augusta Recreation Bureau is part of the Community Services Department. It provides year-round activities for residents of Augusta and the surrounding areas. The quarterly list of activities for youth includes workshops, field trips, sports groups and day camps. The cost of these programs varies depending on the location, length and activity, with waivers and reductions available to those who qualify. For adults, the bureau provides field trips to local and statewide arts and culture events (such as museums and plays), as well as “mystery luncheons” and musical events. The Bureau also supports events such as the Sunset Concert Series at Waterfront Park and the Whatever Festival. In addition, they provide adult sports activities including basketball, football, softball, and open gym times.

Activities are held at local schools and parks, with many youth activities at the Buker Center.

STATE OF MAINE RECREATION FACILITIES

The State of Maine owns and operates several parks, museums, and historical landmarks in Augusta.

- ⇒ Memorial Park is a one (1) acre park adjacent to the Westside rotary. It was once a gathering ground for young men heading off to the Civil War. Today the park has monuments commemorating veterans of the Civil War, World War I, World War II, the Korean War, and Vietnam.
- ⇒ The Blaine House Gardens are located on the grounds of the Blaine House Mansion, at the corner of State and Capitol Streets. The Olmstead Brothers landscape architectural firm designed the original gardens in 1920.
- ⇒ The Blaine Memorial Park is located at Blaine Avenue and Green Street. The three (3) acre park designed by the Olmstead Brothers in 1920 features a horseshoe-shaped drive edged by an allée of trees, views to the State Capitol, the Kennebec River, and the grave site of Gov. & Mrs. James G. Blaine.

NONPROFIT RECREATIONAL FACILITIES

- ⇒ The Children’s Discovery Museum offers a myriad of hands-on learning experiences for children of all ages. It hosts birthday parties, provides summer camps, and runs special family events. The Museum is located in downtown Augusta.
- ⇒ The Kennebec Valley YMCA (KVYMCA) serves roughly 16,000 people yearly through a variety of programs and services. KVYMCA’s Augusta campus is adjacent to Capitol Park. The new 42,000 square foot YMCA features:

- An 8-lane lap pool,
- Therapy/family pool,
- Childcare,
- Aerobics/dance/gymnastics space,
- Gymnasium,
- Childcare play area,
- A computer lab,
- Fitness center, and
- Racquetball space.

The KVYMCA serves kids, ranging from infants to pre-teens, with a focus on swim lessons, dance classes, martial arts and a variety of sports teams.

In addition to childcare and youth camps, the Augusta Y provides a variety of adult and senior activities including swimming, weight training, exercise classes, racquetball, indoor track, and sauna.

- ⇒ Augusta Boys and Girls Club offers activities for area kids and teens. It is sponsored in part by VISTA and Project Hope, and has several locations. The Boys and Girls Club provides both drop-in hours offering billiards, movies, computer activities, and structured programs such as summer arts camps. The Club hosts roughly 100 kids per month in both structured and unstructured activities. The Club includes the Edge teen center, which focuses on the youth music scene. The Edge produces concerts and dances, and provides recording and performing space for young artists.
- ⇒ Capital Area Recreation Association (CARA) is a non-profit association located in the Mayfair neighborhood. It manages two (2) little league fields, two (2) softball fields, a horseshoe pit, two (2) Babe Ruth fields, and three (3) soccer fields.
- ⇒ The Augusta Nature Education Center is located immediately adjacent to the Cony High School complex. The Center is comprised of 175 acres, with 5 miles of undeveloped natural habitat trails including a meadow, a forest, historic granite quarries, small waterfalls, lily ponds, and beaver ponds.

The trails are accessible from Cony High School, Cony Street extension, Haskell Street, Hodgkins Middle School, Hicks Street, South Belfast Avenue, and Murray Street. The park is managed by The Augusta Nature Club.

- ⇒ The Pine Tree State Arboretum encompasses 224 acres in the Mayfair neighborhood. The five (5) mile, year-round trail system is open to hiking, jogging, bird watching, non-motorized biking, horseback riding, and cross-country skiing on groomed winter trails. A number of trails have hard-packed surfaces suitable for wheelchair access. The Arboretum provides outdoor education and scientific research as well. The grounds include The Johnson Outdoor Education Center and the Viles Visitors Center.
- ⇒ Lithgow Library offers arts and literary programming, access to electronic resources, and reference services to all Augusta residents. The library has almost 60,000 books, periodicals, and audiovisual items, along with access to Maine Info Net. Lithgow hosts community events throughout the year, including computer and reading groups.

FOR PROFIT RECREATIONAL ENTITIES

For-profit recreational activities in Augusta include:

- ⇒ An ice arena
- ⇒ Movie theaters
- ⇒ Batting cages
- ⇒ Mini golf

ACCESS TO NATURAL AREAS & RESOURCES

In addition to parks and fields, Augusta is home to a wide variety of natural areas and resources. This includes the parks and boat launches along the Kennebec River as well as trails, wetlands, and resource-protected areas. More information on these areas is provided in the environmental chapter.

Water Features

Augusta has a range of water-based recreation opportunities, the most visible being the Kennebec river. It can be accessed by several parks along its banks. Besides the river, there are eight (8) brooks and seven (7) ponds (listed below), many of which provide areas for swimming, boating, fishing, and other outdoor water-based recreation.

Lakes/Ponds

- Little Togus Pond
- Anderson Pond
- Lily Pond
- Three-Cornered Pond
- Togus Pond
- Dam Pond
- Greenly Pond
- Worromontogus Lake

River/Brooks

- Kennebec River
- Whitney Brook
- Brann Brook
- Bond Brook
- Riggs Branch
- Rockwood Brook
- Stickney Brook
- Stone Brook
- Stony Brook

- ⇒ Augusta Waterfront Park lies on the west side of the Kennebec river and is accessible from Water Street. It is a part of a green corridor which includes the East Side Boat Landing, Kennebec Greenway, and Fort Western. The park stretches for two (2) acres behind the downtown, has a gazebo and sitting area, and provides dock access to the river.
- ⇒ The East Side Boat Landing is located in downtown Augusta on the east side of the Kennebec river. It provides direct access to the river, with docks and fishing areas. The park covers eight (8) acres and includes a boat launch, playground, benches, and a picnic area.
- ⇒ Edwards Mill Park is a seventeen (17) acre site located along the northwest side of the Kennebec river at the base of the Sand Hill neighborhood. The park includes fishing areas, picnic tables, and open space along the river's edge. In addition, the park hosts an open-air/seasonal farmers market from June through September.

Trails

- ⇒ Kennebec River Rail Trail (KRRT) is a 6.5 mile path linking Gardiner, Hallowell, Farmingdale and Augusta. The first section of the Trail goes 1.6 miles from the Waterfront Park in Augusta to the Hallowell's downtown. There are two trail heads in Augusta: one at the Maine State Housing Authority parking lot (beneath Memorial Bridge), the other behind Capitol Park, adjacent to the YMCA.
- ⇒ Bike Trail Capitol #22 is a Bicycle Coalition of Maine-identified trail that runs along existing roadways for 59 miles from the State Capitol to the scenic lakes region west of Augusta. It goes through the communities of Augusta, Hallowell, Manchester, Litchfield, Winthrop and Monmouth.
- ⇒ Nature Trail at the University of Maine at Augusta includes eighty (80) acres of designated open space and a four (4) mile fitness trail with exercise stations.
- ⇒ The Kennebec Greenway is a one (1) mile riverside walking/bike trail which runs from Old Fort Western to the Arsenal and AMHI.
- ⇒ Augusta is home to a myriad of snowmobile clubs that maintain 39 miles of ATV — Snowmobile — mountain bike trails that run through Augusta and Vassalboro.

Wildlife Habitats and Preserves

- ⇒ The Great Sidney Bog covers one hundred and fifty (150) acres - of which Augusta owns 100 acres- and is located along the northern edge of the city border with Sidney.
- ⇒ The Alonzo H. Garcelon Wildlife Management Area incorporates nineteen hundred (1900) acres of State-owned open space. It is located in the northeastern corner of the city, and also covers parts of the towns of Windsor and Vassalboro.

The WMA offers a variety of outdoor activities including canoeing on Tolman and Dam Ponds, freshwater and ice fishing, hunting, and wildlife watching.

- ⇒ Pleasant Hill Road Conservation Area is a two hundred (200) acre forested wilderness area located on the southeast side of Augusta on Route 17. It contains hiking and cross-country skiing trails that connect to Pine Tree State Arboretum.

RECREATION AND LEISURE ISSUES

Because city neighborhoods have houses close together, neighborhood parks and trails and open space are particularly important to the quality of life.

While Augusta has abundant open space, it still lacks sufficient urban parks. Current residents, many of whom are low income and/or do not have large yards of their own, depend on public recreation and park facilities such as pools, playgrounds, and ball fields. They need safe environments close to their homes for their children to play as well as areas for outdoor recreation. Studies on attracting future residents to urban areas indicate that families are willing to move in-town (rather than to rural areas) provided they have access to a sense of space, greenery and privacy. In addition, Augusta’s population is aging (see Population Chapter) and, as such, there is an increased need for passive recreational opportunities — parks (with adequate benches and lighting), accessible trails, access to water — to meet their needs.

Other issues include:

- ⇒ The City Open Space Plan is over 10 years old and should be reviewed and updated. The update should include a review of completed projects and an assessment of funding and timing for completion of the remainder of the plans recommendations.
- ⇒ There is insufficient marketing for Augusta’s recreational and cultural assets.
- ⇒ There is a need for additional lighting at outdoor recreation facilities in the city.
- ⇒ Lithgow Library is overcrowded, and expansion needs to be considered.
- ⇒ Fairs, festivals, and community celebrations offer a great way for people to experience Augusta – they should be expanded.

EDUCATION

The quality of education in any city or town is one of its greatest assets for attracting families and businesses which help to keep that city or town vibrant and fiscally sound. Augusta is no exception. One way to build the city’s tax base and stabilize, if not reverse, the flight of residents to surrounding communities is to strengthen educational services.

The goal of public school education is to prepare students to be fully functional and contributing members of society, to be good citizens and neighbors, and to develop the skills, knowledge, and critical thinking capabilities to secure their place within the community. The students, in turn, are an asset to the city, helping to advance its economic and cultural potential.

This section addresses education in Augusta in three parts:

- ⇒ An inventory of the Augusta educational system
- ⇒ The workforce education needs of the area.
- ⇒ Key educational issues facing Augusta:
 - Attraction and retention of teachers
 - Pre-kindergarten education, and
 - Academic rigor

INVENTORY

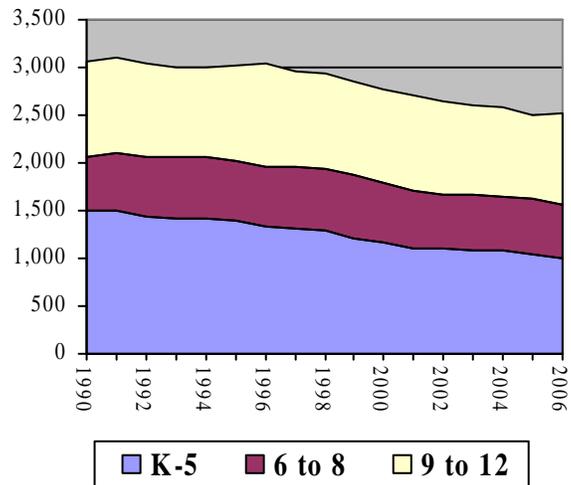
Public Schools

Augusta has one high school, one middle school, and four elementary schools. Augusta also has a regional technical high school (Capital Area Technical Center) serving a number of surrounding school districts.

Cony High School serves grades 9-12. Hodgkins Middle School serves students in 7th and 8th grades (Buker Middle School was closed in 2003 – prior to that time the Augusta middle schools served grades 6 to 8). Farrington, Gilbert, Hussey, and Lincoln Elementary Schools serve grades K-6; Gilbert and Hussey Schools also have pre-kindergarten programs.

Enrollment in Augusta public schools has been declining for the past 16 years (see Exhibit J1). This led to the closing of the Buker Middle School in 2003.

Exhibit J1: Public School Enrollment in Augusta



Source: Augusta School District

The 2006 opening of the new Cony High School, however, has already led to increased interest, and enrollment there grew by 75 students from the year before (from 888 in 2005 to 963 in 2006).

Of the remaining five public schools, two are a half-century old and in poor condition: Hodgkins Middle School and Hussey Elementary (see Exhibit J2—on the following page). PDT Architects, the consultant to the School Department, recommends that both be replaced with new facilities. The School Board is considering a variety of options for achieving this, including building a new combination elementary/middle school, and is in the process of applying for state funding.

The Education Subcommittee identified a number of major district accomplishments, including mainstreaming more children with learning and emotional disabilities,

Exhibit J2. School Building Capacity and Quality

	Lincoln	Gilbert	Farrington	Hussey	Hodgkins
Grades	K-6	Pre K-6	K-6	Pre K-6	7-8
Year built	1988	1971	1988	1953	1959
2006 enrollment	228	341	403	209	374
Optimum capacity	260	320	440	200	437
Square footage	38,000	53,000	48,000	29,000	47,000
Optimum replacement date	2038	2021	2038	2003	2009
Condition (90 pts)	80	67	78	18	21
Capacity (40 pts)	33	37	31	22	18
Learning Environment (60 pts)	45	40	45	21	21
Flexibility (10 pts)	5	5	5	2	2
Building rating (200 pts)	163	149	159	63	62

Sources: Augusta School Department, Facility Study, Augusta School Department, PDT Architects, 2005

an attractive and effective set of special education programs, a nurse and counselor in every school in Augusta, and a highly qualified and dedicated workforce including teachers, professionals, and administrators. At the elementary level, the all day kindergarten program, the beginning of a Pre-K program operated in collaboration with Head Start, and the offering of foreign languages were highlighted. In addition, the new high school, and the team approach used to build a stronger sense of belonging for students were also identified.

The New Cony High School

A 2003 study by Planning Decisions for the Augusta School Department found that the new Cony High School had the potential to:

- ⇒ Increase educational opportunities. The new high school is next-door to the Capital Area Technical Center. The only other district in the state with a combined high school/technical school is the Oxford Hills Comprehensive High School. Officials from Oxford Hills indicate that the arrangement has increased the number of “traditional” students taking technical courses, and vice versa;
- ⇒ Substantially improve the image and marketability of Augusta. Two of three homebuyers are influenced in their judgment by the perceived quality of local schools; as such the new high school could be a major attraction for new residents;

⇒ Provide overall improvement in community image. The new high school offers a safer and a better learning environment for its almost 1,000 students.

Private Schools

There are two elementary Catholic schools serving pre-kindergarten through grade 8 in Augusta, St. Mary’s (270 students) and St. Augustine’s (151 students). The schools will merge in July, 2007. The combined school will be called St. Michael School will be located on Sewall Street at the site of the current St. Mary’s School. In addition, the Christian Dirigere School serves 26 students from grades 1 through 12.

Augusta parents also send their children to Stepping Stones Montessori School in Chelsea (serving 50 Pre-K to grade 8 students); and the Kennebec Montessori School in Fairfield (serving 70 Pre-K to grade 3, students).

Homeschooling

Homeschooling is a growing practice in Maine. Over 2% of students nationally and in Maine are taught at home. There is no data readily available on home schooling in Augusta.

Local groups involved in homeschooling include:

- ⇒ Homeschool Associates (Lewiston, ME)
- ⇒ Central Maine Self-Learners
- ⇒ Capital Homeschooling Cooperative (meets at Buker Center)

Buker Center has welcomed the homeschooling community by hosting an "Open Gym" twice a week.

Higher Education

The University of Maine at Augusta (UMA) was established in 1965. In 2004-05 UMA's enrollment was 5,538. In 2005, UMA awarded 337 associate and 232 baccalaureate degrees in 17 fields. There are also aviation courses taught at the airport through the Maine Instrument Flight Inc and a number of technical and community colleges serving the greater Augusta area.

WORKFORCE EDUCATION NEEDS

Maine's Learning Results provide the standard for all Maine schools, defines student needs as "the knowledge and skills essential to prepare students for work, for higher education, for citizenship, and for personal fulfillment"¹. Nationally, No Child Left Behind states that the goal of public education is to ensure that every high school student graduates and is ready for the workplace or college.

How are the needs of Cony High School students being met? The following examines student performance data and the workforce readiness of new employees, as well as anticipated future educational requirements and opportunities in the workplace.

¹ Maine Learning Results Preface www.maine.gov/education/lres/preface.htm

Student Performance at Cony

- ⇒ High school completion rate. Student performance is often measured by the percentage of students graduating from their high school with a regular diploma. Individuals who drop out or receive a high school equivalency certificate (GED) are not included in this count. Completion rates for Cony are at about the state average, but below neighboring schools (see Exhibit J3).
- ⇒ Continuing education. Many high school students continue their education in college, university, or other institutions of higher education. An annual survey of Maine high school seniors indicates many graduates intend to continue their education primarily at the college, university, and vocational school levels (see Exhibit J4).
- ⇒ Maine Educational Assessment (MEA) The MEAs are designed to measure student and school progress in achieving the academic standards set forth in Maine's Learning Results. The grade 11 MEA has been used to measure achievement from 1999 to 2005 (see Exhibit J5-on the following page). Beginning in 2006, the MEA was replaced by the SAT (Scholastic Aptitude Test) for grade 11, testing in critical reading, writing, and mathematics. However, results for this exam are not yet available.

Exhibit J3. Public High School Completion Rates, Cony, Kennebec County, & Maine Public Schools, 2001-02 to 2004-05

School Year	Number of Cony Students Receiving a Diploma	High School Completion Rates:		
		Cony	All Kennebec County Schools	All Maine Public Schools
2004-05	193	87.7%	92.1%	87.2%
2003-04	189	85.5%	89.8%	87.5%
2002-03	177	86.3%	88.6%	87.2%
2001-02	183	92.4%	90.5%	86.4%

Source: Maine Department of Education

Exhibit J4. Graduates Enrolled in Post-Secondary Education/Training, Cony and All Maine Public Schools, 2005

Post-Secondary Type	All Maine Public Schools				Cony High School			
	Attending		Continuing Students		Attending		Continuing Students	
	In Maine	Out of Maine	Total	%	In Maine	Out of Maine	Total	%
Post-graduate course	58	0	58	1%	0.0	0.0	0.0	0%
Junior college	962	115	1,077	10%	0.0	0.0	0.0	0%
College/university	4,224	3,325	7,549	73%	70	42	112	76%
Voc/Technical	1,299	214	1,513	15%	31	4	35	24%
Other continuing	135	34	169	2%	0.0	0.0	0.0	0%
Total	6,678	3,688	10,366		101	46	147	

Source: Maine Department of Education

Exhibit J5. Maine Educational Assessment Results, Cony High School and the State, 2004-05 & 2003-04

Subject	Performance Level	2004-2005 Testing Period			2003-2004 Testing Period		
		Cony	State	Difference: Cony vs. State	Cony	State	Difference: Cony vs. State
Reading	Exceeds Standards	0%	<1%	<-1%	4%	2%	2%
	Meets Standards	37%	41%	-4%	49%	46%	3%
	Partially Meets	56%	48%	8%	40%	43%	-3%
	Not Meet	8%	11%	-3%	7%	9%	-2%
	Avg Scaled Score	537	537	0	541	539	2
Writing	Exceeds Standards	1%	<1%	<-1%	1%	2%	-1%
	Meets Standards	23%	33%	-10%	39%	34%	5%
	Partially Meets	68%	56%	12%	49%	56%	-7%
	Not Meet	7%	10%	-3%	10%	9%	1%
	Avg Scaled Score	535	536	-1	538	537	1
Mathematics	Exceeds Standards	1%	1%	0%	1%	1%	0%
	Meets Standards	20%	20%	0%	26%	23%	3%
	Partially Meets	46%	44%	2%	43%	41%	2%
	Not Meet	33%	35%	-2%	30%	34%	-4%
	Avg Scaled Score	528	528	0	530	529	1
Science	Exceeds Standards	0%	<1%	<-1%	0%	1%	-1%
	Meets Standards	7%	8%	-1%	10%	11%	-1%
	Partially Meets	61%	60%	1%	69%	58%	11%
	Not Meet	33%	32%	1%	21%	30%	-9%
	Avg Scaled Score	525	527	-2	538	527	11

Source: Maine Department of Education

MEA performance in reading, writing, mathematics, and science is measured at four levels: (1) exceeds standards, (2) meets standards, (3) partially meets standards, and (4) does not meet standards. MEA test results for Cony High School and the State as a whole are presented in Exhibit J6.

In 2003-2004, Grade 11 Cony High School students' overall scores were higher in all four subjects compared to the state, and in science in particular. In 2004-2005, scores were slightly lower than the year before, and just below state averages.

The Workplace: Employer Ratings Now and Their Jobs in the Future

⇒ Employer Ratings of Worker Skills Survey. This survey was conducted by The University of Southern Maine Center for Business and Economic Research from 1999-2001 in 17 Maine labor markets.

Employers were asked how easy or hard it was to hire skilled employees appropriate to their organizations. Numbers in the ratings scale can be interpreted as follows: ratings that are above three indicate that employers find it easier to hire workers with the skills needed; ratings below three mean that employers find it harder to hire skilled workers.

Ratings for the Augusta LMA (Labor Market Area) are reasonably representative of Augusta since employment in the city makes up the largest share (67%). Employers in the Augusta LMA expressed a concern about the lack of workers in all skill areas except analytical and mathematical. Communication and reading were the skills most lacking in newly hired workers in the Augusta area (see Exhibit J6).

⇒ Education/training requirements for future jobs. The evolving nature of Maine's economy means that workers must be able to learn and adapt quickly to be successful. The Augusta region's economy is diverse and its fundamental needs are for an educated workforce that can meet rapidly changing requirements.

While the majority of future jobs in Central Maine will require some form of on-the-job training, most of the growth in jobs is projected to be in positions that require at least some degree of post-secondary education (Exhibit J7 – on the following page). The fastest growing jobs will be those that require an Associate's degree (+0.5%), followed by Bachelor's degree (+0.2%) and Master's degree (+0.2%). The same pattern is projected for job growth statewide.

Exhibit J6. Employer Ratings of Newly Hired Workers Skills, Augusta LMA and Maine, 1999-2001

(Rating based on scale of 1 to 5, where 1 = "very hard to hire" and 5 = "very easy to hire")

Employer Rating of Newly Hired Employee's Skills in:	Rating		
	Augusta LMA	Maine	Difference: Augusta vs. Maine
Communication	2.68	2.61	0.07
Writing	2.95	2.86	0.09
Analytic & Mathematics	3.06	3.00	0.06
Reading	2.73	2.71	0.02
Computer	2.93	2.87	0.06

Source: University of Southern Maine, Center for Business & Economic Research

Note: Augusta LMA (labor market area) includes Augusta, Belgrade, Chelsea, China, Farmingdale, Gardiner, Hallowell, Litchfield, Manchester, Mount Vernon, Palermo, Pittston, Randolph, Readfield, Rome, Sidney, Somerville, Vassalboro, Wayne, West Gardiner, Whitefield, Windsor, and Winthrop.

Exhibit J7: Education/Training Requirements for Jobs in Central Maine and Maine, 2002-2012

Education/Training Requirement	Percent of Projected Jobs					
	Central Maine			Maine		
	2002	2012	Change ('02-'12)	2002	2012	Change ('02-'12)
First professional degree	1.6%	1.7%	0.1%	1.6%	1.7%	0.1%
Doctoral degree	0.5%	0.6%	0.1%	0.5%	0.6%	0.1%
Master's degree	2.0%	2.2%	0.2%	1.8%	2.0%	0.2%
Bachelor's degree + work experience	4.7%	4.8%	0.1%	4.7%	4.9%	0.2%
Bachelor's degree	9.9%	10.1%	0.2%	10.6%	10.8%	0.2%
Associate degree	4.2%	4.7%	0.5%	3.9%	4.4%	0.5%
Post-secondary vocational award	4.2%	4.3%	0.1%	4.2%	4.3%	0.1%
Work experience in related occup.	7.4%	7.4%	0.0%	7.4%	7.5%	0.1%
Long-term on-the-job training	8.0%	7.7%	-0.3%	8.0%	7.6%	-0.4%
Moderate-term on-the-job training	21.8%	20.4%	-1.4%	20.6%	19.4%	-1.2%
Short-term on-the-job training	35.9%	36.0%	0.1%	36.6%	36.7%	0.1%

Source: Maine Department of Labor, Labor Market Information Services

Note: Central Maine is comprised of Kennebec and Somerset Counties.

⇒ Future occupational shifts. Occupational shifts are projected to continue to occur as mature industries are replaced by the emerging service-producing sector. Managerial, professional, and technical jobs are increasing rapidly while blue-collar jobs stagnate (see Economic Development Chapter for more information). Central Maine is also expected to experience these occupational changes.

The occupations projected to experience the fastest growth in Central Maine are in service, professional, sales, and office occupations, all of which will see double-digit increases in job openings.

KEY EDUCATION ISSUES

The following key issues were identified by the education subcommittee.

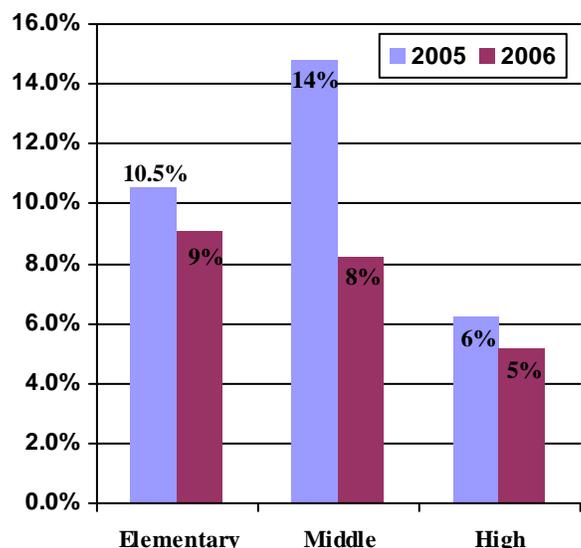
(1) Attracting and retaining quality teachers.

At the heart of education is the teaching/learning experience. Across the country there is a disturbing trend of new teachers opting out of the profession within the first five years. Augusta is no exception. The school system averages about a 10% annual turnover in teachers. As the baby boomers approach retirement,

to assist new faculty in making the adjustment from college to the classroom. Unfortunately these endeavors have not had the desired effect upon the faculty retention rates.

An issue related to teacher turnover is the use of substitute teachers in the classroom (see Exhibit J8). The more turnover and absences there are among teachers, the less continuity there is for

Exhibit J8: Percent of School Days with Substitutes, Augusta Schools



Source: Augusta School Department

(2) Expanding Pre-Kindergarten education programs.

Many of the issues schools face arise before children arrive at the school door. This is why there has been more interest in early intervention through an expanded pre-kindergarten program in Augusta, in Maine, and throughout the country.

An increasing number of Augusta's public school students are from families of lower incomes (see Community Development Chapter). Studies show that these students are more likely to have educational deficits when they begin kindergarten. To help these children learn and adapt to school life, Augusta provides pre-Kindergarten program.

In 2006, Augusta had 31 Pre-K students enrolled at Hussey School, and another 31 at Gilbert. By contrast, the kindergarten classes for all four elementary schools in 2006 totaled 176 students. This indicates that Augusta may be capturing only about a third of its potential in Pre-K classes. The Catholic schools also provide Pre-K learning; in 2004-2005 10 pre-K students were enrolled at St. Augustine's.

Maine is one of only eight states that includes support for Pre-K education as part of the school funding formulas (as of FY 2007). This means the State will pay for a Pre-K student at the same proportion as other students in the public school system. A Maine Department of Education publication entitled *Achieving Prosperity for all Maine Citizens*, states:

The first years of life are critical for later outcomes. Young children have an innate desire to learn. That desire can be supported or undermined by early experiences. High quality early childhood education can promote intellectual, language, physical, social, and emotional development, creating school readiness and building a foundation for later academic and social competence.

Too many children enter kindergarten with physical, social, emotional, and cognitive limitations that could have been minimized or eliminated through early attention to child and family needs.

Ongoing research confirms that children's readiness for school is multifaceted, encompassing the whole range of physical, social, emotional, and cognitive skills that children need to thrive. Recent brain and other child development research indicates that access to early and continuous prenatal care, well child care, mental health services, comprehensive family support programs, early intervention programs, high quality early education and economic security have a great impact on the likelihood that children will enter school ready to learn. A foundation of universal access to pre-kindergarten is critical for our young children.

For these reasons the state goal is to have all children covered by Pre-K education. National research assembled by "Pre-K Now" supports this thinking. It indicates that a community's participation in Pre-K education leads to the following benefits:

(www.preknow.org)

- higher high school graduation rates
- better performance on standardized tests
- reduced grade repetition
- reduced children placed in special education
- reduced crime and delinquency
- lowered rates of teen pregnancy
- greater employment and higher wages as adults
- more stable families

The organization estimates that for every \$1 invested in *high-quality* Pre-K education, taxpayers gain \$7 over the long term.

A quality early education program in Augusta, available to all its young, is central to the long-term success of Augusta's schools and citizens.

(3) Promoting "Academic Rigor" throughout Augusta's schools

⇒ Initiating conversations among and between Augusta school faculties.

Students in Augusta's school system make at least two significant transitions as they move from kindergarten to their senior year at Cony High School.

The first transition is from elementary to the middle school, and the second from the middle school to the high school. Seemingly, the move from elementary to the middle school is smooth. Faculty comments indicate that there may be a problem coordinating curricula between the middle and high schools.

In the past two years, conversations have been underway between the schools of the University of Maine System, the Community College System, and the state's high schools about the issue of college readiness. The discussion highlighted that there has been little to no effort to align high school graduation requirements with post-secondary admissions criteria.

As a result, high school graduates who do very well in high school often need developmental coursework when they reach college. The same kind of pattern can happen within the K-12 school system when outcomes, say, for eighth grade mathematics are not be aligned with the starting point for their ninth grade math classes.

Though the Maine Learning Results program outlines year-by-year curriculum outcomes, conversation needs to take place at the school level to address such issues.

Exhibit J9. Time in the Classroom

1	Length of the school day (in hours & minutes) for:			
	Elementary School students	6 hours	25 minutes	
	Middle School students	6 hours	40 minutes	
2	Beginning and ending times for:			
	Elementary School students	8:20	2:45	
	Middle School students	7:20	2:00	
3	Length of school year for:			
	Elementary School students	175	Aug 25th	June 12
	Middle School students	175	Aug 25th	June 12
4	Average time student spends in class (see note below)			
	Elementary School students	5 hours	15 minutes	
	Middle School students	5 hours	0 minutes	
	High School grade 9 & 10	4 hours	40 minutes	
	High School grade 11	4 hours	0 minutes	
	High School grade 12	3 hours	20 minutes	
<i>Note: Excludes time spent in homeroom, lunch, study halls etc,</i>				
5	Percentage of teaching load handled by substitute teachers for:			
	Elementary School students	10%		
	Middle School students	12%		
6	Percentage of teaching load handled by provisionally or non-certified teachers:			
	Elementary School students	7%		
	Middle School students	9%		
Source: Augusta School Department				

⇒ Lengthening the school day and school year.

Historically, the lengths of the school year and school day have shrunk. This is an important issue. If students are not in class, they cannot be taught by their teachers. To improve the educational experience one factor that can be controlled is the time spent in the teaching/learning environment. Exhibit J9 provides information on current school times.

A related topic is the starting time of the high school. Science has established that the sleep patterns of teenagers is different than when they are pre-teens or post-teens, and that a later start in their day would be more conducive to their ability to pay attention and learn in the morning. This is a subject that deserves further consideration.

⇒ Revamping school curriculum.

There is a great deal of evidence to suggest that the curricula of the nation's high schools need to be amended. Maine and Augusta are not exceptions.

The Gates Foundation Early College programs that place "at risk" students during their junior and senior years into university and college courses found that a high percentage of students who are "struggling" in high school are doing so because they are not engaged or challenged by their learning experience. When placed in a college setting, they often excel. This indicates a lack of rigorous curricula in high schools.

Another signal that the curriculum needs to be amended is visible in the numbers of high school graduates who go on to college and need developmental/remedial course work to prepare for their regular college instruction. Unfortunately, many of the students needing remediation graduated from high school with relatively high grades. Though this is the opposite of what was indicated above, it shows that the overall levels of education are not meeting students' needs.

Two publications that speak strongly to this concern are the Maine Commission on Secondary Education's 1998 report entitled *PROMISING FUTURES: A Call to Improve Learning*, and the previously cited *Achieving Prosperity for all Maine Citizens*. In the *Achieving Prosperity for all Maine Citizens* report special attention should be paid to Strategy III as it directly relates to a "college-ready curriculum."

The Education Subcommittee would like to acknowledge the following individuals who spoke to the committee on educational concerns in Augusta:

- Joan Morin, Maine Education Association District #7 Uni Serv Director
- Jeff DeJongh, Cony H.S. Biology teacher and President of the Augusta Education Association
- Connie Brown, Augusta's Superintendent of Schools
- Donna Madore, Augusta's Director of Special Education
- Jim Carignan, the Chair of the State Board of Education
- Sue Gendron, Commissioner of Education
- Duke Albanese, former Commissioner of Education and Senior Policy Advisor for the Mitchell Institute.

HISTORIC AND CULTURAL ASSETS

Augusta is rich in historic and cultural assets. Native Americans have inhabited the shores of the Kennebec for thousands of years. The first European trading post was established here in the early 1600s. During the 1800s, the city became a county seat and state capital. Augusta itself is a national historic and cultural asset.

This chapter surveys Augusta’s historical, archaeological, and cultural resources and discusses major trends that could affect future services and development.

HISTORICAL & ARCHAEOLOGICAL RESOURCES

Prehistoric Archaeological Resources

Prehistoric archaeological resources are those sites relating to Native American settlement. According to the Maine Historic Preservation Commission (MHPC), there are 30 known prehistoric archaeological sites in Augusta. The vast majority of these sites – 28 of the 30 – are along the banks of the Kennebec River above the former Edwards Dam. The other sites are Fort Western, and significant findings located around Togus and Three Corner Pond, Spring and Bond Brooks, and the Great Sidney Bog area¹ (see Exhibit K1).

An archaeological survey has been completed along the shores of the Kennebec River above the old Edwards Dam Site. Other areas that warrant additional survey, including the shores of Togus Pond, Three-Cornered Pond, Great Sidney Bog, and some areas of sandy soil in North Augusta.

¹The exact location and nature of archaeological resources are held by the Maine Historic Preservation Commission to protect landowner privacy and the sensitivity of the archaeological sites.

Historic Archaeological Resources

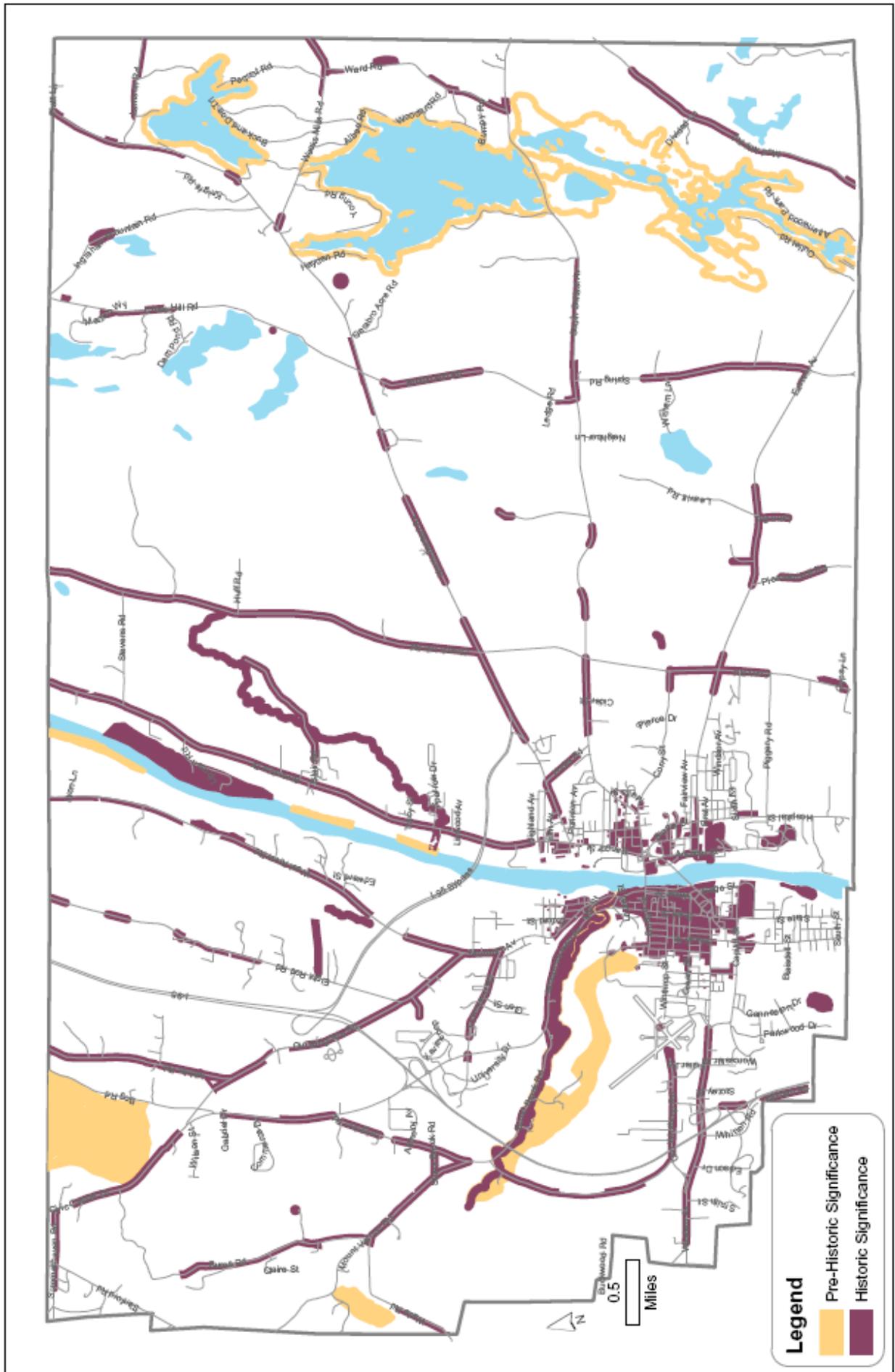
Historic archaeological sites relate to the earliest period of European settlement. According to the records of the MHPC, there are 18 known historic archaeological sites in Augusta (see Exhibit K2). To date, no city-wide archaeological survey of Augusta has ever been conducted – all previous surveys were site-specific.

Exhibit K2. Historic Archaeological Sites

Site	Description
Fort Western	English Fort
Cushnoc	English Trading Post
The “Great House”	English Domestic
Mill	American Mill
Kennebec Arsenal Dump	American Dump
Abenaki Catholic Burial Ground	Native American Cemetery
Canadian Settlement #1	French & Irish Settlement
Canadian Settlement #2	French & Irish Settlement
Canadian Settlement #3	French & Irish Settlement
J. Packard Farmstead	American Farmstead
Pierce Blacksmith Shop	American Workshop, Blacksmith
Central Park House	American Hotel
Unidentified Shed/Barn	American Unidentified Structure
H. Pierce Farmstead	American Farmstead
Dreuillette’s Jesuit Mission	Multi-ethnic Mission
Riggs Brook Dam	Anglo-American Dam
J. Robie	American Domestic
J.L. Dutton	American Quarry
Great Sidney Bog	* Added by Historic Subcommittee

Source: Maine Historic Preservation Commission

Exhibit K1: Areas Sensitive for Pre-Historic and Historic Features



Source: Augusta GIS and Maine Historic Preservation Commission

National Register of Historic Places

The National Register of Historic Places is the nation’s official list of significant cultural resources. The Register is run by the Department of the Interior which works with and supports public and private efforts to identify, evaluate, and protect significant historical and archaeological resources.

Augusta has 35 historic places on the National Register (see Exhibit K3 - on the following page). These include public and privately owned churches, parks, trails, houses, and government facilities, and even a locomotive. The majority of these historic places are clustered in urban neighborhoods in southwest Augusta.

An intensive survey conducted between 1991 and 1998 by the MHPC and stored at the Kennebec Historical Society identifies all Augusta properties by property type, architectural data, age, location and any significant historic data. While only some were eligible for inclusion in the National Register, the vast majority retain local historic importance unique to Augusta.

HISTORIC DISTRICTS

Augusta currently has five historic districts listed on the National Register of Historic Places (see Exhibit K4). These districts include:

- ⇒ KENNEBEC ARSENAL HISTORIC DISTRICT includes the 12 buildings and outbuildings on the east side of the Kennebec River. The Arsenal was established in the early 1800s to protect the city and the nation’s northeast frontier. The Arsenal’s buildings have served a variety of uses through the years, and are now undergoing a concerted redevelopment effort. A historic restoration of the waterfront improved the aesthetics of the site and added a wharf and access to the river. The Arsenal was listed on the National Register in 1970.

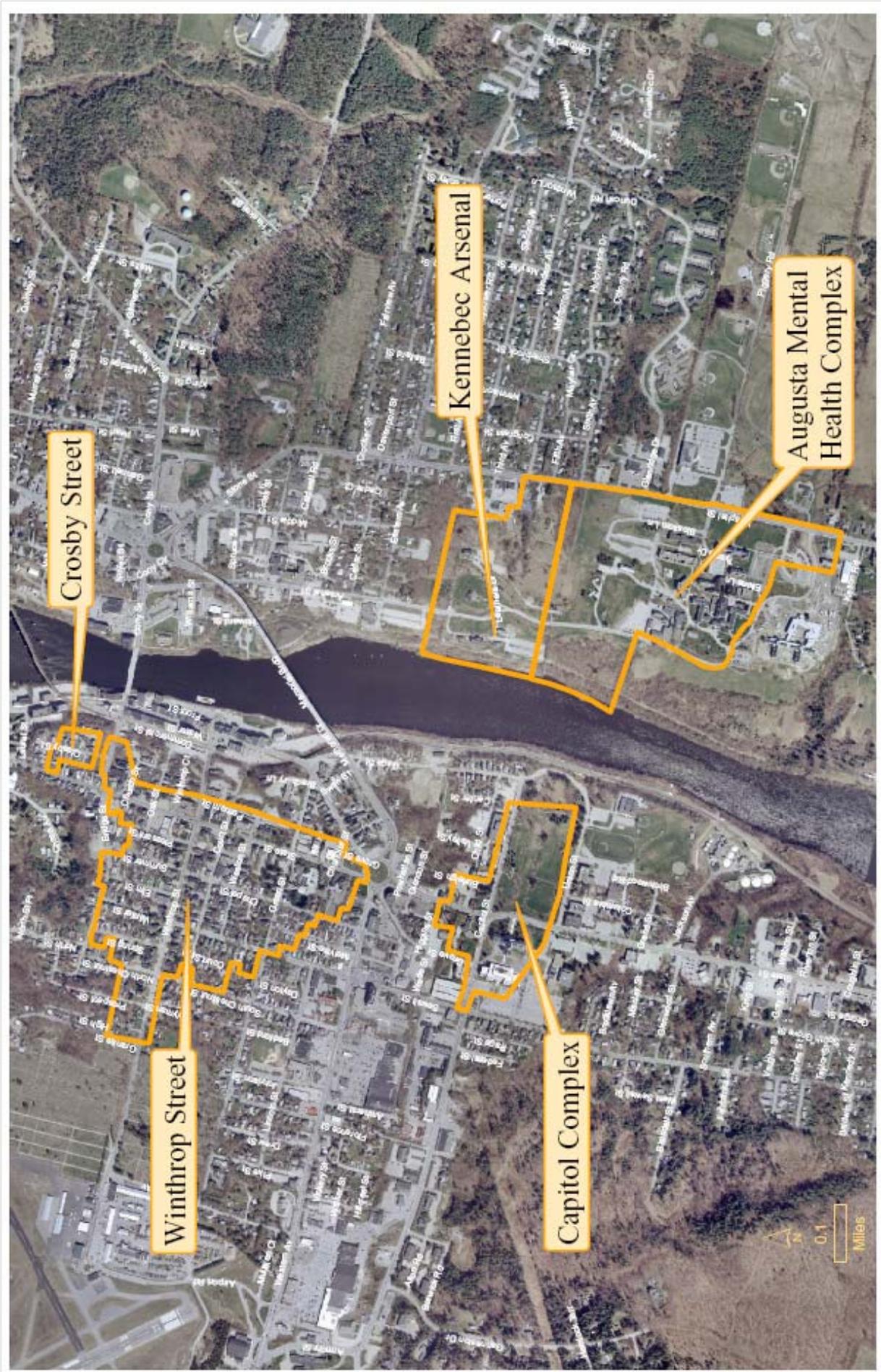
- ⇒ Crosby Street Historic District includes eight structures along Crosby Street and Crosby Lane between State Street and Northern Avenue. These early settlement structures are significant for their Federal and Greek Revival architecture.
- ⇒ AMHI Historic District includes approximately two dozen buildings surrounding the site of the former Augusta Mental Health Institute (AMHI) facility. This district is bounded by Hospital Street, the Kennebec River, and the Kennebec Arsenal Historic District. Several buildings have been recently renovated or are undergoing renovation. These buildings are largely state-owned and the site was listed on the National Register in 1982 and expanded in 2001.
- ⇒ Capitol Complex Historic District includes the buildings and grounds within and around the Capitol Complex and Capitol Park. John Calvin Stevens, Charles Bulfinch, and the Olmstead Brothers all had a hand in the design of the facilities in this area.
- ⇒ Winthrop Street Historic District is a mixed residential and commercial neighborhood roughly bounded by State, Bridge, North and South Chestnut, and Green Streets. There is a wide variety of architectural styles in this district, including buildings by John Calvin Stevens and Thomas Little.

PROTECTION OF HISTORIC & ARCHAEOLOGICAL SITES

Augusta’s archaeological sites are not only important in telling the history of Augusta, but are also significant to the history of the Kennebec Valley and the State of Maine. The artifacts collected from these sites should be made available to educators and researchers.

Exhibit K3. Historic Sites Registered on the National Register of Historic Places			
Site	Address	Significance	Year Listed
James Blaine House	Capitol Street	Government	1966
Fort Western	Cony Street	Military, Commerce	1969
Arnold Trail to Quebec	Kennebec River to Quebec	Transportation, Military	1969
Maine State House	Capitol Street	Government, Architecture	1973
Old Post Office	Water Street	Architecture	1974
Lot Morrill House	113 Winthrop Street	Architecture, Government	1974
Lithgow Library	Winthrop Street	Architecture	1974
Kennebec County Courthouse	95 State Street	Architecture	1974
“Lion” the Locomotive	Maine State Museum	N/A	N/A
Gov. John Hill Mansion	136 State Street	Architecture, Government	1977
All Souls Church	70 State Street	Architecture	1978
Dr J Ellis House	62 State Street	Architecture	1979
South Parish Church, Parish	Church Street	Architecture	1980
Tappan-Viles House	154 State Street	Architecture	1982
Algernon Bangs house	16 East Chestnut Street	Architecture, Industry	1982
Guy Gannett House	184 State Street	Communications, Arch.	1983
Fuller-Weston House	11 Summer Street	Law	1984
Vickery Building	261 Water Street	Architecture, Commerce	1984
St Mark’s Episcopal Church	9 Summer Street	Architecture	1984
Gov. Samuel Cony House	71 Stone Street	Architecture, Government	1985
D.V. Adams Company Block	190 Water Street	Architecture	1986
Doughty Block	265 Water Street	Architecture	1986
Journal Building	325-331 Water Street	Architecture	1986
Kresge Building	241–249 Water Street	Architecture	1986
Libby-Hill Block	227-233 Water Street	Architecture	1986
Masonic Hall	313-321 Water Street	Architecture	1986
Noble Block	186 Water Street	Architecture	1986
Sturgis and Haskell Block	180–182 Water Street	Architecture	1986
Whitehouse Block	188 Water Street	Architecture	1986
Williams Block	183-187 Water Street	Architecture	1986
St. Mary’s Church	39 Western Avenue	Architecture	1987
Cony High School	Cony Circle	Architecture, Education	1988
Capitol Park	Capitol Street	Landscape Architecture	1989
Cushnoc	Address Restricted	Historic, Commerce	1989
Augusta City Hall (former)	1 Cony Street	Architecture, Government	1997
Source: Maine Historic Preservation Commission			

Exhibit H4: Unique and Critical Natural Resources



Source: Maine OGIS

Currently, the major protection of archaeological sites falls under Section 106 of the 1966 National Historic Preservation Act. This section calls for archaeological mitigation on sites that are being developed by federal funds, owned by the federal government or require an Army Corps of Engineers permit. Private properties being developed using private funds that do not require Army Corps of Engineer permits do not require archaeological mitigation.

The only other source of national protection for archaeological sites is for sites connected to standing structures listed on the National Historic Landmarks Register.

Neglect and inappropriate development are the principal threats to historic and archaeological resources. Tools, other than the National Registers, to protect these resources in Augusta are modest and include:

- ⇒ The Augusta Zoning Ordinance's Performance Standards which requires that a developer seek comments from the Maine Historic Preservation Commission before the Planning Board issues a building permit on any land that might have a structure or site eligible for the National Register of Historic Places.
- ⇒ The Augusta Zoning Ordinance's Site Plan Review process which requires that a proposed development "not have an undue adverse effect on historic sites."

ORGANIZATION CAPACITY

The following organizations deal with historic preservation in the City of Augusta.

- ⇒ The Augusta Historic Preservation Commission is a five-member commission appointed by the City Council whose task is to preserve and enhance districts, sites, and landmarks in our city. Duties of the commission include working with private landowners, creating educational campaigns, supporting the Planning Board, and reviewing demolition permits in designated historic districts.

The Commission works in an advisory capacity only and lacks implementation authority. The Commission receives approximately \$5,000 in annual funding from the City of Augusta with expenditures approved by the City Manager.

- ⇒ The Old Fort Western Board of Trustees is a fifteen-member board appointed by the City Manager with the consent of the City Council. Its task is to "protect, preserve, and interpret the historic site and structures of Old Fort Western." Old Fort Western receives funding from a variety of sources, including approximately \$110,000 in annual funding from the City of Augusta.

HISTORIC RESOURCES

City of Augusta Owned

- ⇒ Old Fort Western is a living history museum along the east bank of the Kennebec River, adjacent to the City Center. Built in 1754, the 100 by 32 foot National Historic Landmark is America's oldest surviving wooden fort. The fort hosts exhibits, lectures, and interpretive events year-round. In addition, the fort is open to the general public through the summer months and hosts historical outings, apprenticeships, and summer camps for area youth.
- ⇒ The Lithgow Public Library provides a full suite of library services to the residents of Augusta and surrounding communities. The library has children, teen, and adult collections and programs. Annually approximately 110,000 patrons visit and 160,000 books circulate through the library. An evolving component of the library's services includes providing access to a range of digital media, including databases and services (about 11,000 hours of computer time are used by patrons each year). The library receives funding from several sources, including an appropriation of roughly \$560,000 in 2006 from the City.

State of Maine Owned

- ⇒ The collections at the Maine State Museum preserve and present the state's rich natural and human histories. It includes a geological collection, biological holdings and Maine-related archaeological and ethnographic collections such as materials dating from the first Native Americans in the area (circa 12,000 B.P.). The museum is located adjacent to the Capitol Complex and shares the building with the Maine State Library and the Maine State Archives.
- ⇒ The Maine State Archives is the repository for official state records deemed to be permanently valuable. Currently the archives include more than 95 million pages.
- ⇒ The Maine State Library was founded in 1836 and has two parallel roles. It serves as the official library of the State of Maine and houses collections, books, archives, and databases, while also assisting with the development of libraries around the state, running the Maine Regional Library Service and other services.

Private Non-profit Owned

- ⇒ The Kennebec Historical Society was founded in 1891. Its collections include genealogy, manuscripts, newspapers, photographs, and scrapbooks pertaining to the City of Augusta's history as well as the histories of surrounding communities. The society, located at 107 Winthrop Street, sponsors a year-round free public lecture series.
- ⇒ The Children's Discovery Museum offers a myriad of hands on learning experience for children of all ages. The museum is located on Water Street in downtown Augusta.
- ⇒ Holocaust Human Rights Center at UMA maintains an education center at the UMA Bennett Katz Library. It includes a permanent exhibit depicting the history of the Holocaust, including photographs of survivors, classroom space for seminars, workshops and lectures, a research room, and office space.

HISTORIC PRESERVATION ISSUES

- (1) The 1988 Comprehensive Plan noted Augusta's lack of viable preservation tools necessary for the protection of its historic and archaeological sites. This is still an issue today. At present, no local ordinance forbids the destruction of an historical site. At a minimum, a "demolition delay" ordinance would slow the process down enough to allow interested parties to explore alternatives for preservation.
- (2) Augusta's Historic Preservation Commission has found that the current Historic Preservation Ordinance is ineffective. They have suggested language changes to make the ordinance more effective.
- (3) The City can do more to protect and preserve known historic and prehistoric sites and artifacts.
 - It can work with representatives of the Kennebec Historical Society and the Historic Preservation Committee to establish standards and procedures for inventorying known artifacts and documents to ensure their preservation.
 - It can work with the Kennebec Historic Society and Maine Historic Preservation Commission to identify funding sources for the research and preservation of historic sites.
- (4) The City could insure that the mandate of Section 106 of the National Historic Preservation Act is complied with during the building permit process.
- (5) The City establish archaeological zones – i.e., areas of high probability for archaeological sites. In these areas the City could offer incentives for developers to conduct archaeological surveys.

- (6) The City could survey of all of its City-owned property to determine archaeological potential and degree of archaeological mitigation needed.
- Possible funding sources are State and Federal Grants, Utilization of State Resources, and working with local universities and/or high schools to offer field schools.
 - Based upon the outcome of this survey, the City should conduct detailed surveys in threatened areas.
- (7) The City of Augusta could either create a new cultural center or expand Old Fort Western's mandate to include archaeological materials from all archaeological sites within Augusta.
- The City could hire a curator to catalog, inventory, house and properly maintain all archaeological materials and to generate and post online inventories for educational and research purposes.
 - The City could apply to take ownership or custody (permanent loan) of all Augusta-based archaeological materials currently housed at the MEHPC or State Museum to be housed in the City of Augusta's official repository.

CULTURAL ASSETS

This section reviews the current state of arts and cultural resources in the City of Augusta through the lens of the "Creative Economy". The term "The Creative Economy" means those sectors of economic activity that "... specialize in creating or designing new ideas, products, services, artistic works, applications, relationships, or systems³". Included among these sectors are museums, historic sites, performance centers, art and music studios, and the like.

The "Creative Economy" concept envisions the arts and culture and their associated occupations and services as part of an economic engine whose contributions have until now been little recognized. Central to this economy are creative workers who create new ideas and products.

With these things in mind, this section assesses the current state of the arts and the "Creative Economy" in Augusta and recommends steps that would strengthen the creative sector and the community as a whole.

The analysis of current cultural conditions draws heavily upon reports and projects of importance to the development of arts and culture in Augusta such as:

- ⇒ The Discovery Research Project, conducted in Gardiner, Farmingdale, Hallowell and Augusta, and funded in part by a grant from the Maine Arts Commission. The project included interviews with arts-related individuals to determine the perceived strengths and weaknesses of the arts community.
- ⇒ Its major product was the *Kennebec Corridor Arts & Culture Directory*, available on the Maine Arts Commission's website, which lists of hundreds of area artists, historic and cultural entities, and their allies.
- ⇒ Maine's Creative Economy Community Handbook, a 2006 product of the Creative Economy Steering Committee developed under the direction of the Maine Department of Economic and Community Development and staffed by the Maine Office of Tourism. The handbook identifies 10 building blocks essential to the creation and support of a community's creative economy³:
 - Strategies
 - Creative People
 - Centers of Education
 - Cultural and Natural Amenities
 - Business Engagement
 - Infrastructure
 - Networks
 - Leadership
 - Money
 - Time

³Report of the Maine Creative Economy Council, May 2006.

An eleventh building block unique to Augusta is the relationship with state government. As the state capital, Augusta could be a showcase of Creative Economy development in Maine.

- ⇒ Charting Maine's Future: An Action Plan for Promoting Sustainable Prosperity and Quality Places – A report by Brookings Institute sponsored by GrowSmart Maine, released October 2006⁴.
- ⇒ Maine's Creative Economy Council Report – lays out the State-wide agenda for the strengthening of Maine's creative economy. It was produced by Maine's Creative Economy Council and the Margaret Chase Smith Policy Center in 2006⁵.

Present Cultural Conditions in Augusta

Augusta today lacks a cultural core. This lack of core mirrors the physical changes of the city in recent decades - a declining downtown surrounded by scattered commercial development. Compounding the problem, efforts to promote the arts within the region are fragmented and uncoordinated and end up competing with each other for funding, audiences, and other resources

According to the Brookings report, *Charting Maine's Future*, Augusta's development pattern is seen in cities and towns throughout Maine. The city is shrinking even though people are moving to the area in increasing numbers, attracted by Maine's "sense of place" and Augusta's convenient location. Many of these newcomers are retirees⁶ and many choose central Maine over coastal and southern Maine because of the affordability of housing and rural lifestyle. A vibrant downtown Augusta would serve to attract newcomers accustomed to urban amenities.

⁴Information at www.growsmartmaine.org

⁵Online at www.econdevmaine.com/resources/default.asp

⁶The Brookings report notes that this demographic is the largest segment of population influx.

To this end, Augusta stands to benefit from the examples set by successful urban revitalization efforts throughout the state and elsewhere in the nation.

The Creative Economy can be a real economic force. Not just because the presence of artists, cultural institutions, and creative businesses generates jobs and money, but also because the Creative Economy enhances a region's quality of life and sense of place. A region with a vibrant cultural life is attractive not only to potential residents, but to businesses considering relocation. Augusta has the potential to be a destination for more than just retail mall shoppers, and the city's unique artistic, cultural, and historical assets are the key to making Augusta a destination for cultural tourism as well.

With the proper public policy leadership, Augusta has all the "ingredients" necessary to benefit from the Creative Economy already in place.

ARTS AND CULTURE ISSUES

- (1) Augusta's core identity, its sense of place, is defined by the Kennebec River and the city's historic structures, neighborhoods and gathering places. The integrity and value of those assets needs to be protected from unchecked development.
- (2) Augusta's economy needs to move towards greater diversification, including but not limited to heritage tourism and the creative economy.
- (3) The cornerstone of downtown revitalization should be the adaptive reuse of our historic structures for arts, cultural, and creative economy purposes.

HEALTH AND WELFARE

The City of Augusta is a center for health and social services for people from a large region in central Maine. It also has a significant population of people who are aging or who have low incomes, and who look to city and state for health and social service assistance. This chapter highlights the issues of health and welfare development within the City of Augusta looking at:

- ⇒ Social Services Facilities
- ⇒ Social Service Issues and Priorities
- ⇒ Health Care
- ⇒ Public Health Needs

SOCIAL SERVICE FACILITIES

Augusta’s population is poorer and older than the state as a whole (Exhibit L1 – see also the chapter on Population). The City addresses its needs through the programs of its Community Services Department and the advice of its Community and Social Services Advisory Committee.

The City’s Community Services Department includes a *Health and Welfare Bureau* that administers the Municipal General Assistance Program. This program provides immediate aid to persons who are unable to provide the vital necessities of life for themselves or their families. The Bureau serves all residents

under the terms of the Augusta General Assistance Ordinance. The Bureau also tracks and monitors the need for and availability of health care, housing, jobs, and other social services. Bureau staff collaborates with area service providers and the community to address needs and problems as they arise. In addition, the Bureau represents the City in initiating and supporting state and federal legislation to improve social, health, and economic services.

The Augusta City Council is advised on social service issues by its Community and Social Services Advisory Committee (COSSAC). This is a standing advisory committee that the Council is required to consult regarding critical and emerging social issues.

SOCIAL SERVICE ISSUES AND PRIORITIES

In the spring of 2003, the Kennebec Valley United Way conducted a social services needs assessment for the region, including the City of Augusta. The study consisted of three parts: data collection, opinion-leader interviews, and focus groups with provider agencies. The study’s goal was to provide communities with a snapshot of need from which to build policies and strategies for providing critical services.

Exhibit L1. General Indicators of Need

Census Tract	101	102	103	104	105	Augusta	Maine
<i>General neighborhood</i>	<i>Eastern Ave</i>	<i>Sand Hill</i>	<i>West End</i>	<i>Capitol Area</i>	<i>Riverside Drive</i>		
Families under poverty	8%	13%	16%	14%	9%	11%	8%
Individuals with physical Disability	9%	13%	11%	13%	9%	11%	9%
Individuals over 65	17%	16%	15%	26%	18%	18%	14%
Receive Supplemental Security Income	9%	8%	11%	5%	6%	8%	5%
Receive public assistance income	3%	8%	9%	9%	5%	7%	5%

Source: U.S. 2000 Census

The priority of needs, as reported in the Interim Report: Kennebec Valley United Way Needs Assessment, were divided into three tiers of concern as follows:

Tier 1. Highest ranking concerns

- ⇒ Unemployment and jobs – This relates to the region’s loss of good-paying manufacturing jobs and a growth of lower wage retail jobs.
- ⇒ Homelessness – Homeless bed-nights nearly tripled in the valley between 1999 and 2002. A 2001 report by the “Edge” (a youth crisis organization in Augusta) estimated that there were 30 to 40 students at Cony and Gardiner High who did not know where they would spend the next night.
- ⇒ Teens – Juvenile crime, teen pregnancy, substance abuse, bullying, and young people “hanging around” with nothing to do were high-priority concerns.
- ⇒ Mental health – Agency representatives reported a growing demand for mental health services, particularly among young people.

Tier 2. Middle ranking concerns

- ⇒ Housing – The cost of housing, after being flat in the region for most of the 1990s, has increased sharply in the last 5 years. It is a challenge both for young people and the elderly.
- ⇒ Elderly – The number of elderly, especially the “very old” (over 75), is projected to increase sharply in the years ahead. Isolation, lack of transportation, and lack of affordable assisted living were all mentioned as issues.
- ⇒ Child Care – Although 2,000 children in southern Kennebec County were eligible for subsidized daycare in 2001, only 15% actually received it.
- ⇒ Health Care – Affordable health care is a problem.

Tier 3. Lower ranking concerns

- ⇒ Domestic Violence – Domestic assaults were 13% higher in Kennebec County in 2000 than in the rest of the state.
- ⇒ Substance Abuse – Although substance abuse rates were lower in the area than in the rest of Maine, still significant numbers of teens reported that they regularly used alcohol, marijuana, and illegal prescription drugs.
- ⇒ Transportation – Getting to medical appointments and shopping is a problem particularly for the elderly in Augusta as well as in rural areas.

Throughout this Comprehensive Plan there are opportunities to address all of these issues and help to make Augusta a healthy, vibrant community where the quality of life of all residents is valued and protected.

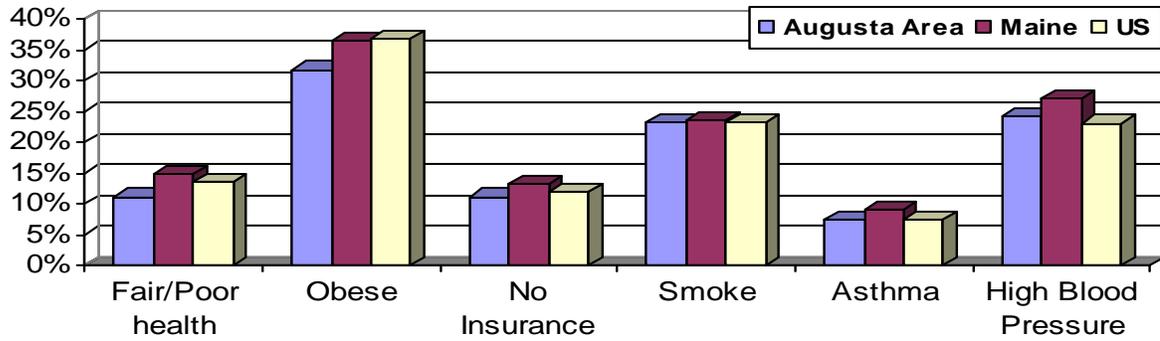
HEALTH CARE

In March, 2002, MaineHealth published a Community Health Profile for Kennebec County. It broke the county into “south” and “north” – where south refers roughly to the Greater Augusta area – and compared it to Maine and the nation.

The data indicates that health in southern Kennebec County is better, in most respects, than the national average. There is a lower proportion of people reporting only fair or poor health: not eating fruits and vegetables, obese, reporting that cost is a barrier to health care, lacking health insurance, and reporting asthma. On the other hand, there is a slightly higher proportion reporting high blood pressure (Exhibit L2).

The City of Augusta is the central Maine health services hub. As such it is home to a myriad of hospitals, nursing homes, rehabilitation facilities, and independent clinics that serve the entire Kennebec Valley region and beyond, including those listed here.

Exhibit L2. Health Indicators



Source:

Hospitals

⇒ Maine General Medical Center is an acute care hospital. The hospital has two campuses: one in Augusta, the other in Waterville. Both campuses provide emergency care, medical/surgical care, maternal and child health, inpatient and outpatient diagnostic services (Exhibit L3).

⇒ Togus VA Medical Center, a 67 in-patient bed facility with general medical, surgical, intermediate and mental health beds. Togus VA Medical Center includes five (5) Community Based Outpatient Clinics (CBOC), two (2) Mental Health Outpatient Clinics, and five (5) Vet Outreach Centers provide health care services to veterans who live throughout the state.

As a local section of Veteran Benefits Administration (VBA), Togus Veterans Service Center provides a wide range of benefits, information, and services to veterans and their families. These comprehensive services include compensation, pension and education application processing, vocational rehabilitation and counseling, and information about home loans, life insurance, education, and death/survivor benefits.

⇒ Riverview Psychiatric Center (formerly Augusta Mental Health Institute), a civil and forensic psychiatric treatment facility, offers a wide range of inpatient and outpatient medical rehabilitation services to individuals with serious, persistent mental illness.

Exhibit L3. Maine General Medical Center Care Services (Augusta and Waterville)

Annual Admissions:	13,600
Outpatient Visits:	145,000
Charity Care:	\$5.5 million
Acute Care Beds	309
Full Time (equivalent) Employees:	2,049
Active Medical Staff:	236
Family Medicine Institute, Augusta Outpatient visits:	31,079

Source: www.maine-general.org/about_mgh/

The only treatment facility fully operated by the State of Maine, it is mandated and equipped to provide care, treatment, and involuntary hospitalization. Key services include pharmacy, therapeutic recreation, dietetic services and chaplaincy.

⇒ The Harold Alfond Center for Cancer Care, just opened in Northwest Augusta (summer of 2007), is a state-of-the-art 55,000 square-foot facility on 110 acres. It consolidates the cancer treatment centers of Maine General's Augusta and Waterville campuses. The project will impact the future development of the city's northwest side as it attracts medically-based satellite businesses and services to the area.

Nursing Homes

⇒ Maine Veterans' Home - Augusta (MVH - A) is a teaching facility, maintaining affiliations with hospitals, schools of medicine, universities, community colleges, and vocational schools. The facility includes 24-hour RN coverage in three separate nursing units: a 40-bed rehabilitation and skilled nursing care unit, a 40-bed long-term care unit, and a 40-bed secured long-term care unit for residents with Alzheimer's Disease and other dementias.

⇒ Maine General Medical Center has two (2) rehabilitation and nursing facilities in Augusta, Glenridge and Gray Birch. Both have large activity and dining rooms and individual day rooms with private and semi-private rooms. Gray Birch offers long-term nursing care, transitional care for patients recovering from surgery or other disabling conditions, and a residential or assisted care unit. Glenridge provides long-term nursing, and includes a special unit for residents suffering from dementia.

Maine General Health also owns Augusta's first retirement community, Granite Hill Estates. The 135-acre community began in 1997 and offers residents a full spectrum of retirement living options including cottages, apartments and assisted living choices that provide daily care. Facilities include a restaurant-style dining room, recreational areas, exercise facilities, a heated pool, transportation services, on-site banking, housekeeping, and physician services on site.

⇒ Augusta Rehabilitation Center offers a full range of medical services, including short-term rehabilitation and long-term skilled care. The staff includes medical specialists, nurses, nutritionists, dietitians, and social workers. The facility provides long-term, post-acute, and rehabilitation services.

PUBLIC HEALTH NEEDS

The City of Augusta, unlike other major cities, does not have a public health division. If it were to have such a division, the office would be responsible for a number of functions now performed directly by the Maine Department of Health and Human Services for Augusta. Such functions could include:

⇒ Epidemiology and Emergency Preparedness:

- Investigates reportable diseases
- Coordinates public health emergency preparedness
- Works with private medical resources to assure prevention and treatment of reportable diseases (food borne illnesses, Lyme disease, whooping cough, hepatitis B, rabies).

⇒ Family Health:

- Student health centers
- Maternal and child health (prenatal screening, new admission home visits, lead poisoning screening of children, CPR and first aid training).

⇒ Health Promotion:

- Various programs to encourage and assist citizens to achieve a healthy lifestyle
- Children's oral health
- Substance abuse prevention
- Overdose prevention
- Early detection and referral programs for chronic disease such as heart disease, diabetes, cancer, and lung diseases

⇒ Health Services for the Indigent:

- Free clinics operated in cooperation with private providers

⇒ Infectious Disease:

- Testing, treatment, management, and investigation of infectious diseases
- Comprehensive care for persons with HIV/AIDS
- Low cost immunization clinics
- TB testing

The City of Portland, with 64,000 residents, supports a public health division with a FY 2006 budget of \$4.3 million. Of this amount, \$976,000 comes from municipal funds, \$940,000 from direct federal grants, \$931,000 from federal grants that pass through Maine Center for Disease Control, \$519,000 from state grants, \$505,000 from Medicare and Medicaid, and \$437,000 from other grants.

If Augusta supported a local public health division at the same relative level of effort, it would provide about \$300,000 in municipal funds, and could expect to generate approximately \$1,000,000 in outside support. These funds would both stimulate the Augusta economy and help Augusta citizens live healthier lives.

Currently a number of non-profit organizations, including Maine General Medical Center and the regional Healthy Maine Partnership (Healthy Communities of the Capital Area), carry out important local public health functions.

No one in city government is currently charged with identifying health problems and working with private non profit providers to assure that health, mental health, and dental services are available to meet the needs of the people who reside in Augusta.

While this analysis concentrates on Augusta by itself, no other community in the region is addressing public health either. There is a potential for a regionalized approach to this issue.

KEY ISSUES

- (1) Augusta should have resources and policies that protect and promote good health for all of its citizens – adults, school children, and especially the poor, disabled, or elderly.
 - Augusta should consider a department of public health to assure clean water and air and to provide public health services.

- Augusta should have housing, food, transportation, and health care programs for its most vulnerable residents, while assisting them to become self-reliant.
- (2) The City should stimulate growth of the health care industry, recognizing it is one of the largest industries in Augusta and brings many people from surrounding towns into the city.
 - Incentives could include financial incentives for both practitioners and for health service organizations.
 - The City could work with existing organizations to expand medical and dental care, provide supported housing and social service programs for vulnerable residents, and build affordable housing for lower paid health care workers.
 - The City could consider developing of health service zones, with incentives to convert old, underused buildings, and to provide easy access, parking, and public transit.
 - (3) The city should adopt policies that encourage healthy behaviors, including safe driving, walking, good nutrition, and avoidance of tobacco use.
 - All parks and other city properties should be smoke-free.
 - Citizens should be able to walk safely to work, school, shopping, health services, and civic and cultural events.
 - Augusta schools should have policies and programs to support health and healthy behaviors for students, teachers, and administrators.
 - Students should be encouraged to walk to school, have daily physical activity at school, be encouraged to eat healthy food, and avoid tobacco, drugs, and alcohol.
 - The schools should seek to partner with parents and community agencies in the effort to help students to be healthy.

PUBLIC SAFETY

As Maine’s capital city, Augusta has a wider range of public safety concerns than the average Maine community. There are issues related to homeland security because of the presence of state government, to the influx of workers and shoppers every day that roughly doubles Augusta’s population, and to being a service center and a provider of health and mental health services.

This chapter addresses issues of public safety in the community and provides information on current safety levels, as well as future needs. Exhibit M1 on the following page provides a map of Augusta public safety facilities.

PART I: CRIME AND THE POLICE DEPARTMENT

Crime statistics are collected in two ways. The first is from Uniform Crime Reports (UCR), a summary of monthly activity submitted to the state government. The second is through a system that records each incident in an Incident-Based Report (IBR). The IBR is newer and provides greater detail than the UCR but only a few police departments in Maine are using the system (Augusta is one), and the data is not collected in any one place for comparison purposes. Therefore, the UCR data will be used for this analysis to allow for comparisons (see Exhibit M2).

2005 Uniform Crime Reports	Crime Rate	Clearance Rate
US	39.22	19.8
New England	27.07	18.9
Maine	25.26	28.1
Kennebec County	28.06	33.9
Augusta	66.00	38.4
Waterville	41.95	30.5
Brunswick	22.88	14.8
Lewiston	37.70	24.2
Auburn	35.64	39.0
Source: Crime in Maine, 2005; Maine Department of Public Safety		

Compared to other Maine communities, and even to the United States overall, Augusta has a relatively high crime rate. A crime rate is calculated by comparing all of the “index crimes” committed in a community to its total population (in ten thousands). Index crimes are serious crimes: murder, rape, robbery (theft involving violence), aggravated assault, burglary (breaking and entering), larceny (nonviolent theft), motor vehicle theft, and arson. For Augusta in 2005, there were 1,234 index crimes, divided by a population estimated by the Public Safety Department to be 18,691.

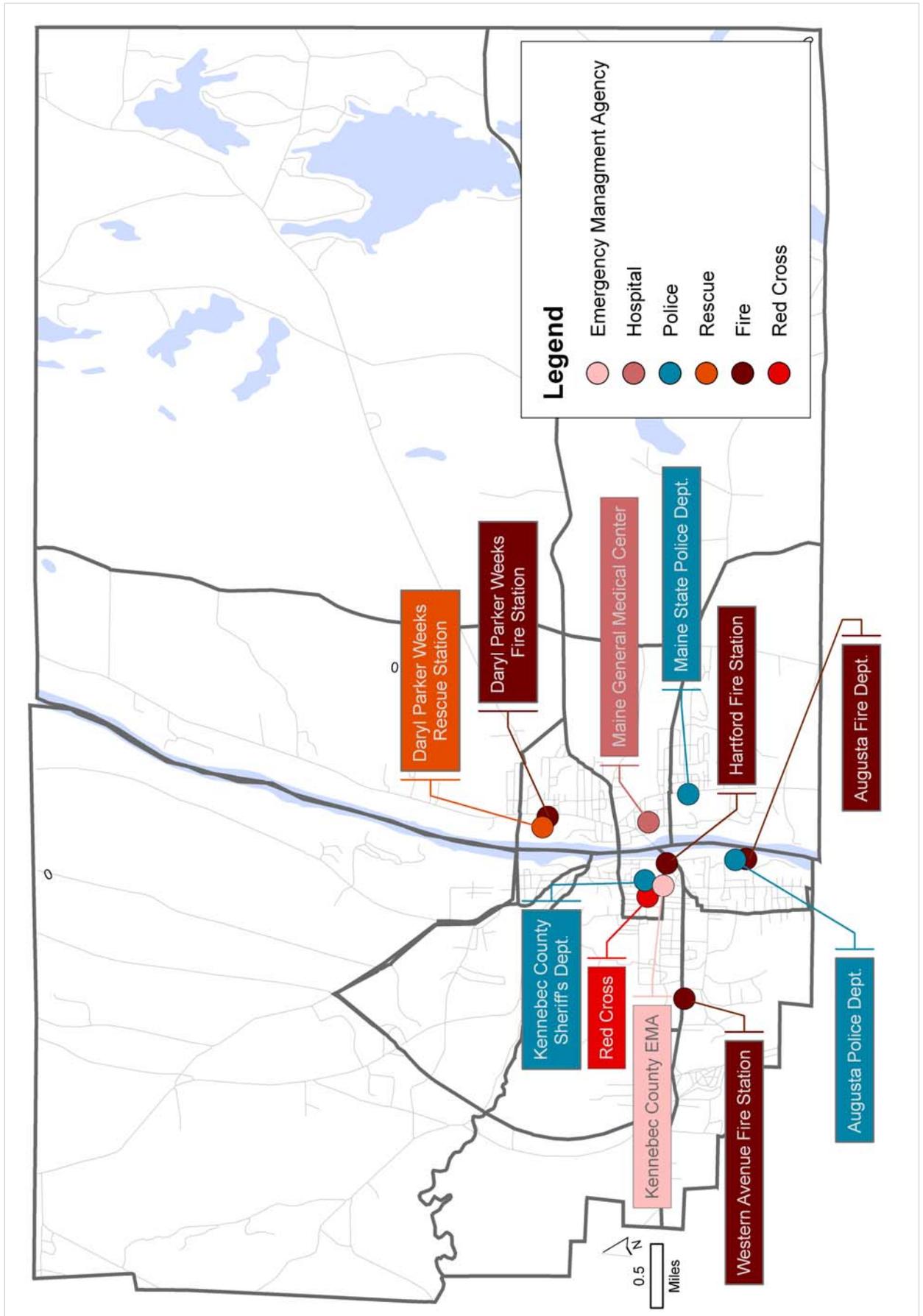
What is deceptive about this crime rate is that the U.S. Census estimates that Augusta’s population nearly doubles to more than 35,000 people during the day – a much higher increase than is true for the comparison communities below. When this is taken into account, the crime rates for Augusta, Waterville, Lewiston, and Auburn would all be in the 30 to 40 range, comparable with each other.

When it comes to individual crimes, Augusta has extremely high rates for property crimes such as burglary and larceny – no matter how the numbers are calculated (see Exhibit M3).

Augusta also has relatively high rates for more violent crimes. Nearly half of the reported rapes in Kennebec County were in Augusta (16 of 37), and nearly half of robberies (7 of 16), even though Augusta is only one-sixth of the county’s population.

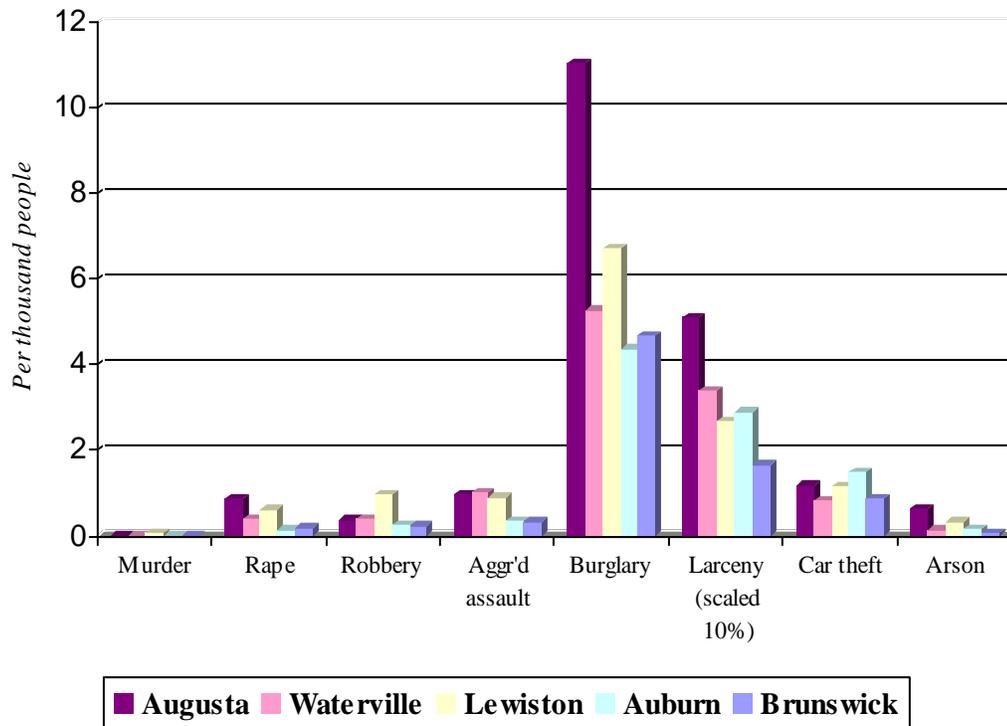
Augusta also recorded the second-highest number of hate crimes of any community in Maine in 2005. Of the 56 hate crimes reported in Maine that year, seven were in Augusta (South Portland reported the highest number, with 10). Of Augusta’s hate crimes, three were anti-Jewish, and four were anti-gay. Three involved assaults, three involved intimidation, and one involved vandalism.

Exhibit M1: Augusta Public Safety Facilities



Source: Maine OGIS and City of Augusta

Exhibit M3: 2005 Crime Rates by Crimes



Source: City of Augusta Police Department

Finally, by virtue of its location and its role as a mental health and social service center, Augusta has a number of sex offenders living in the community, many of whom need to be monitored. A check of the National Sex Offender Public Registry in February, 2007, indicated that 121 sex offenders were living in Augusta at that time. Many of the offenders reside close to schools and parks that children frequent. One of the Police Department’s duties is to inform the public when a sex offender moves into an area, and to monitor the person’s activities to the extent that is feasible.

Police Department

The City of Augusta’s police department is located at 33 Union Street. This station is also home of the City Emergency Operation Center (EOC), which acts as the information center in the case of a city-wide disaster. The location has emergency power, central communication equipment, and necessary documents such as maps, charts, and files.

The Department is comprised of four (4) organizational segments: Administration, Patrol Division, Criminal Investigative Division, and Records and Communications Division. The departments are made up of a Chief, a Deputy Chief, four Lieutenants, six Sergeants, and thirty Patrol Officers. The patrol officers are broken down into: Patrol Division (24), Criminal investigation Division (CID) (5), and Records (1). Additional staff includes eight dispatchers, three Reserve Police Officers, three Parking Enforcement Officers, two Secretaries, a Clerk, ten full-time and three part-time School Crossing Guards, and three Mental Health Workers.

⇒ The Patrol Division is responsible for protecting the public. The division is comprised of uniformed personnel who provide around-the-clock patrol of the city, conduct criminal investigations, and prepare reports. The division includes:

- a *Traffic Safety Officer* who is responsible for the planning and development of traffic activities within the city and who serves as a liaison with the State Department of Transportation for the coordination of traffic rules and regulations;
- Parking *District Officers* responsible for managing parking, issuing tickets, providing parking permits, collecting and recording parking fines, and applying the "Denver Boot;" and
- an *Animal Control Officer* whose duties include being a liaison between the area veterinarians and the Humane Society Shelter, handling dog licensing, and enforcing ordinances and regulations related to animals and reptiles.

⇒ The Criminal Investigation Division (CID) is responsible for the investigation and apprehension of persons involved in major criminal activity. It assists the Patrol Division in conducting follow-up investigations as well as the recovery of stolen property. CID works in cooperation with area businesses, municipalities, courts, and other law enforcement agencies for the efficient clearance of crime in the community. All undercover and VIP protection assignments are normally coordinated by this division.

- CID includes a *Juvenile/Crime Prevention Officer* who provides for the proper handling of juvenile offenders. This officer also provides youth educational programs as well as traditional crime prevention programs such as Neighborhood Watch, Citizen Police Academy, Shoplifting and Robbery seminars, and crimes against the Elderly.

⇒ The Communication and Records Division is a support activity for all other divisions.

- The *communications* aspect of the division is responsible for the recording, processing, and dispatching of all requests for assistance from throughout the city and Hallowell (on a contract basis) in the form of Police, Fire, and Emergency Medical Services.

- The *records* aspect of the division is responsible for the maintenance of the computer system, department records, and property system, as well as the operational readiness of all officer and support equipment.
- A uniformed officer is assigned to this division as the *Court/Property Officer*, who also processes bad check complaints.

Issues with the Police Department

(1) The Public Safety Subcommittee was impressed with the dedication and professionalism of the men and women in the Augusta Police Department. However, they found fatigue and turnover to be problems in the Department. There are two reasons for this:

- The low starting pay for a police officer (\$13.40/hour) is not enough to attract experienced officers. This means that new hires tend to be less experienced, taking more time and resources to train. Once the officers are trained, many move to different police departments that pay the same or more, and have less call volume. This cycle of turnover and training is a burden for long-term officers.
- Many positions are unfilled in the Department, such as the Community Policing Officer (responsible for dealing with sex offenders), the Juvenile Crime Prevention Officer, and the Elder Crimes Prevention Officer. These positions are critical for protection and for communication with the public.

**PART II: FIRE AND EMERGENCY
MEDICAL PROTECTION**

Background

Over the last twenty-five years, municipal fire departments have been responding to fewer fires, but have been providing more services in the areas of emergency medicine, hazardous materials management, and search and rescue. A major reason for the reduction in fire incidence is the effectiveness of fire codes in reducing the vulnerability of new buildings. However, vehicles and equipment are becoming more specialized and expensive each year to meet the new service demands.

Fire Department

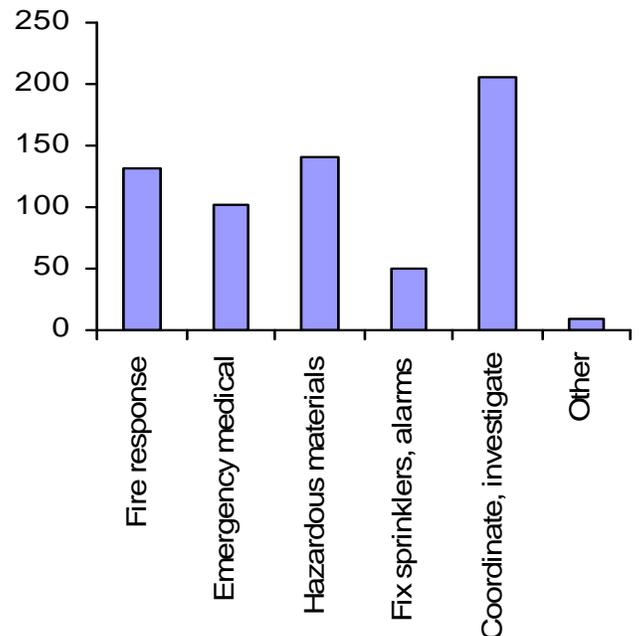
The Augusta Fire Department is comprised of forty three uniformed full-time firefighters and paramedics, and one administrative staff, who are located in three stations. It is a full-service department that provides not only the obvious function of fire suppression, but also emergency medical services (EMS) with inter-facility transfer; public information; fire safety inspections; public education; fire training; disaster management; water, extrication and rope rescue service; fire alarm; communications; and facility, apparatus and equipment maintenance. The Fire Department responds to approximately 7,000 calls each year, of which more than 4,000 are EMS related (see Exhibit M4).

The budget of the fire department has been increasing steadily over the last three years. However, these increases are not due to new activities, but rather increased costs to maintain the department. Ambulance services generate fees from other municipalities and from insurers, which in most years is enough to cover expenses.

⇒ The Fire Department is part of the Central Maine Emergency Response Team (CMERT) and provides Hazardous Material response to the counties of Kennebec and Somerset. The Decon Strike Team 5 as they are called is partially funded through Federal and State support.

⇒ Rescue Services such as ice & water rescue are handled by the fire department. Confined space rescue is handled by a joint agreement between the fire department and the Augusta Sanitary District. The city's fire department handles all vehicle extrications, high-angle rescue, construction accidents. The entire 43-member department is certified in Airport Crash Rescue as part of an FAA requirement with the State Airport.

Exhibit M4. 2003 Incidents, Augusta Fire Department



Source: FDID Incident Type Summary, NFIRS 5.0 National Reporting System.

⇒ Emergency Medical Services (EMS) are provided by contract to the surrounding communities of Manchester, Hallowell, and Chelsea. In addition to providing emergency medical care, the paramedics also provide community education programs (CPR, first aid, etc) and runs a Risk Watch program.

- Risk Watch is a school-based injury prevention program developed by the National Fire Protection Association (NFPA). The program provides children and families with skills and knowledge to create safer homes and communities. The curriculum is divided into five teaching modules (Pre-K/Kindergarten, Grades 1-2, Grades 3-4, Grades 5-6, and Grades 7-8), each of which addresses the following topics: motor vehicle safety, fire prevention, CPR/first aid, poison prevention, fall prevention, firearms safety, bike/pedestrian safety, and water safety.

⇒ The Civil Emergency Preparedness Division (CEPD) is part of the fire and department. Its goal is to provide the highest level of preparedness and coordination of state, local, and federal resources to safely mitigate natural or weapons of mass destruction events. The division is currently updating its disaster management plan, to be released in 2008. The plan includes the location of emergency shelters, studies on response time and access routes, consolidation of dispatch and regional communication, coordination with healthcare officials on "Bird-Flu" issues, as well as securing funding and training for response teams.

Issues with the Fire Department

(1) Hartford Station and most of the substations are older structures and are showing deterioration; some are not being actively used as they were designed to hold equipment no longer in use. Meanwhile, there is a lack of space for proper training. With new technology and the desire for increased training, there is need for a comprehensive facilities assessment.

(2) A mandatory sprinkler ordinance for all new building construction should be implemented. Numerous studies have proven that the most effective way to prevent fire-related deaths is the installation of fire sprinklers. On a national average, the cost of a residential sprinkler system equals only 1% to 1.5% of the total building cost. The City should consider tax incentives to defer any cost increase in construction. This will eventually pay for itself as future costs for fire suppression decrease.

- Property damage caused by fires would be dramatically reduced which, over the long term, will lower Augusta's fire protection rating (currently the city has a fire protection rating of 4, where 1 is the best and 10 the worst).
- The City's annual fire protection expenses would decrease as the demand for fire suppression forces is lowered with automatic sprinkler systems.

(3) Currently neither the Fire Department nor the Code Enforcement Office has the staffing to see that state laws with regard to fire safety are enforced. As the Fire Department is the group that sees violations when on calls, it might make sense to create a position in the Department with the sole purpose of community outreach, education, and fire code enforcement. This would ease the workload at the Code Enforcement Office as well.

Part III: Other Public Safety Activities

Kennebec County Emergency Management Agency

The Kennebec County Emergency Management Agency (KEMA) is part of a series of county-wide agencies focused on community mitigation (risk reduction) preparedness, response and recovery from emergencies and disasters such as floods, hurricanes, earthquakes or hazardous materials spills. It works under the umbrella of the Maine Emergency Management Agency and the Department of Defense, Veterans, and Emergency Management.

Homeland Security

State and local emergency management agencies are responsible for coordinating homeland security efforts throughout Maine. This includes the development of local and regional task forces focused on disaster response. A 2005 Homeland Security Grant was provided to the City of Augusta in the amount of \$459,062 for the purchase of communications and security equipment. The following groups working in conjunction with the KEMA provide community-based response and training for Homeland Security issues.

Community Emergency Response Team (CERT)

The team is comprised of civilian volunteers who have been trained to respond to community needs in the event of a major emergency. The team is trained in various aspects of emergency assistance and response, from first aid to incident command training. The goal is to assist the local emergency departments in the case of a city-wide disaster. Augusta is part of the Kennebec County CERT, which has been activated in several drills, as well as actual events.

Local Emergency Planning Committee

The Local Emergency Planning Committee (LEPC) is made up of 14 members from local government, law, emergency, medical, transportation, media, and community groups as well as concerned citizens. LEPC's main goal is to help oversee the movement and use of hazardous materials in Kennebec County, and assist businesses and governmental agencies in the establishment of policies and procedures for handling these materials. In addition, the committee works to provide disaster response plans and to attain the local infrastructure and training necessary to deal with a hazardous material disaster.

FISCAL CAPACITY

When the numbers are adjusted for inflation, the City of Augusta's fiscal record in the last ten years is impressive. Non-school expenditures have declined slightly, property tax rates are down, and property tax collections have been reduced. On the other hand, bonded indebtedness has risen.

Going forward, the City faces the need to make major investments in its sewer and water infrastructure, in the waterfront, in the Library, and in transportation. To afford these improvements, continued economic growth will be needed.

ASSESSED VALUATION, COMMITMENT, AND TAX RATE

The recession in the early 1990s had a severe effect on Augusta. After inflation is taken out of the numbers, the assessed valuation of the city actually went down in real terms from 1995 to 2001 (see Exhibit N1). In the last ten years, the assessed value has steadily increased. Overall, residential and commercial uses have increased the most in value, while industrial uses have declined.

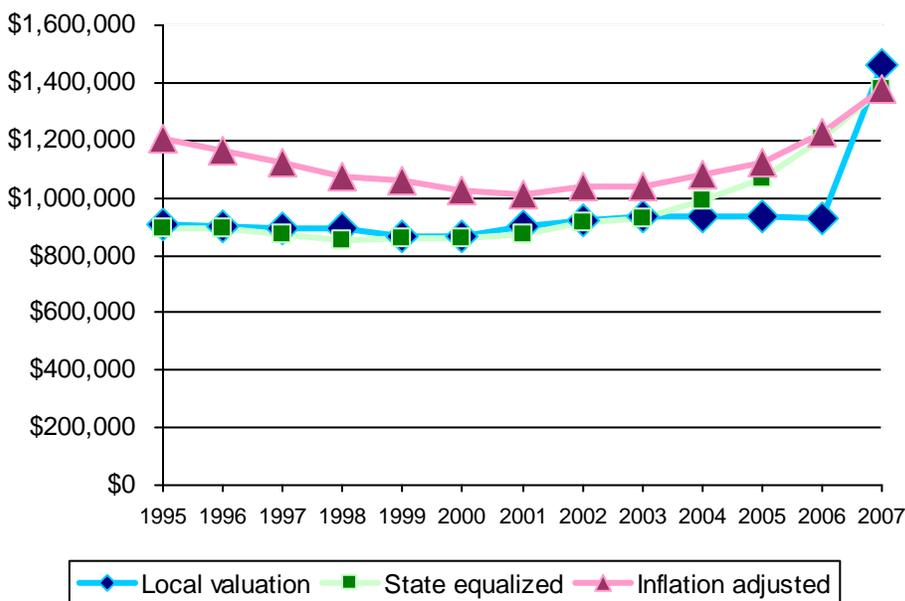
There was a revaluation in 2007 which illustrated this trend. After the revaluation, the share of property value attributed to industrial uses declined from 3.7% of total taxable value to 2.8%. Meanwhile, residential properties increased from 47% to 51%, and commercial properties from 39% to 40%.¹

According to state records, in 2005 over a quarter (28%) of Augusta's property tax valuation was exempt from tax payments.² This was over twice the state proportion of 12%. Most of the difference is accounted for by state government property (see Exhibit N2 - on the following page).

Augusta has only insignificant amounts of assessed land in cropland (\$65,800), woodland (\$15,700), and open space (\$35,700) preservation.

Through this period of mostly slow growth in the property tax base, the City has managed to keep its tax commitment flat (see Exhibit N3 - on the following page). Total property tax collections increased from \$22 million to \$26 million between 1997 and 2006.

Exhibit N1. Local and State Assessed Valuations

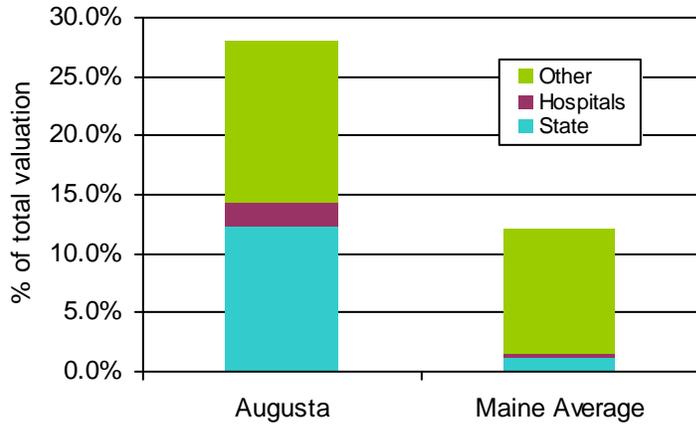


Source: City of Augusta Finance Director

¹ Augusta 2006 Annual Report, page 27.

² 2005 Municipal Valuation Return Statistical Summary, tables 5, 6, 7, 8, 10.

Exhibit N2: Augusta's Tax-exempt property, 2005

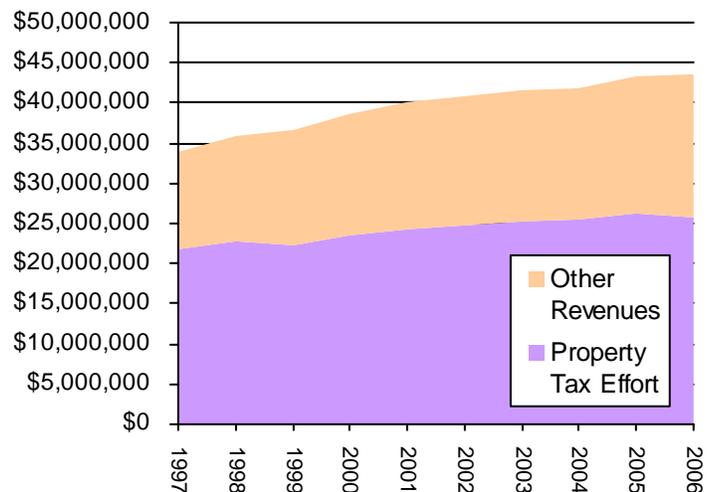


Source: Maine Revenue Services

Exhibit N3: Augusta Assessed Valuation, Tax Rate and Commitment

Fiscal Yr End June 30	Local assessed taxable valuation	Equalized state valuation	Annual change in value (state)	Annual real % adjusted for Inflation	Tax rate	Property Tax Commitment	Annual Increase
2006	\$928,173	\$1,202,000	12.9%	9.4%	26.00	\$25,861,766	-1.2%
2005	\$933,311	\$1,064,250	7.5%	3.9%	26.00	\$26,166,249	2.6%
2004	\$935,457	\$990,400	6.7%	4.0%	25.33	\$25,514,600	1.0%
2003	\$935,771	\$928,000	1.7%	-0.5%	24.85	\$25,251,253	2.5%
2002	\$919,884	\$912,200	4.9%	3.2%	24.60	\$24,638,041	1.7%
2001	\$897,567	\$869,500	0.9%	-1.8%	24.52	\$24,233,540	3.6%
2000	\$864,731	\$861,850	0.0%	-3.2%	24.04	\$23,392,171	4.5%
1999	\$869,153	\$861,700	1.0%	-1.2%	23.34	\$22,388,370	-1.2%
1998	\$891,278	\$853,350	-2.5%	-3.9%	22.66	\$22,664,914	3.8%
1997	\$893,407	\$874,800	-1.8%	-4.0%	22.24	\$21,845,648	-1.2%
1996	\$900,625	\$890,750	-0.4%	-3.2%	22.24	\$25,861,766	--

Exhibit N4: Augusta Local Tax Commitment



When inflation is taken out, this is actually a decline in real property tax collections of 6%. In the meantime, revenues from other sources – principally state and federal aid -- increased from \$12 million to \$18 million. This outside revenue has helped to reduce the pressure on the property tax (see Exhibit N4).

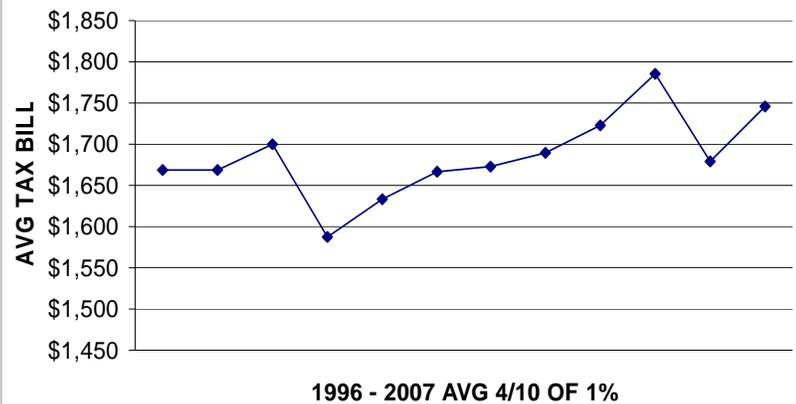
During this period the property tax rate has risen in nominal terms from 21.7 in 1995 to 26.0 in 2006, then fell again to 16.5 as a result of the revaluation. An easier way to see the property tax impacts of the budget is to calculate the average tax paid by household. The City of Augusta has made this calculation. From 1996 to 2007 the average home property tax bill has gone from just under \$1,700 to just over \$1,700 – a remarkable record during a period of rising fuel and maintenance costs (see Exhibit N5).³

Because of this fiscal conservatism, Augusta’s property tax rates, once much higher than surrounding communities in Kennebec County, have come closer together (see Exhibit N6).

When inflation is factored out, municipal and education expenditures in Augusta have both remained essentially flat over this period (see Exhibit N8 — on the following page).

The City also has four “enterprise funds” that support local services. Enterprise funds are supported by user fees, as opposed to general fund taxes. Such funds support the Augusta Civic Center, Hatch Hill Landfill, the Airport, and the ambulance service. In all, these funds brought \$7.2 million in revenue in the fiscal year ending on June 30, 2006, and expended \$6.8 million (see Exhibit N7).

Exhibit N5: Average Tax Bill



Source:

Exhibit N6: Full Value Tax Rates

	2003	1999
Augusta	22.2	24.43
Hallowell	22.6	18.42
Gardiner	20.3	21.15
Winthrop	16.7	19.98
Readfield	16.6	18.32
Chelsea	15.3	13.9
Manchester	13.6	15.84
Vassalboro	13	14.01
Sidney	9.7	12.69

Source: Maine Revenue Service

Exhibit N7: Enterprise Funds, Fiscal Year Ending June 30, 2006

	Revenues	Operating	Income (loss)
Augusta Civic Center	\$2,929,085	\$2,623,461	\$305,624
Hatch Hill Landfill	\$2,682,875	\$2,612,013	\$70,862
Airport	\$432,235	\$426,730	\$5,525
Ambulance	\$1,164,557	\$1,222,558	(\$58,001)
Total	\$7,208,772	\$6,884,762	\$324,010

Source:

³City of Augusta 2008 budget, Finance Department

Exhibit N8: City Expenditures

Fiscal Yr end June 30	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997
Total	\$43,447,353	\$41,519,576	\$40,704,112	\$40,680,377	\$40,470,861	\$39,550,116	\$36,834,092	\$36,408,347	\$35,350,560	\$34,755,332
Educa- tion	\$23,893,952	\$23,037,625	\$22,422,435	\$22,710,095	\$22,232,493	\$21,189,136	\$20,292,065	\$20,048,538	\$19,023,866	\$18,841,881
Total less education	\$19,553,401	\$18,481,951	\$18,281,677	\$17,970,282	\$18,238,368	\$18,360,980	\$16,542,027	\$16,359,809	\$16,326,694	\$15,913,451
Council, admin, finance,	\$2,053,985	\$1,985,134	\$2,127,876	\$2,083,653	\$2,127,719	\$2,211,967	\$2,036,731	\$1,915,793	\$1,721,294	\$4,266,685
City serv + public wks	\$4,101,693	\$3,953,540	\$2,981,857	\$2,966,127	\$3,001,316	\$3,069,726	\$2,810,895	\$2,872,967	\$3,525,582	\$2,797,878
Comm services	\$2,020,853	\$2,003,704	\$2,335,567	\$2,219,539	\$2,058,400	\$1,758,860	\$1,696,616	\$1,657,595	\$1,752,270	\$1,468,807
Public safety	\$5,232,339	\$4,903,819	\$4,876,575	\$4,845,665	\$4,771,026	\$4,333,753	\$4,668,417	\$4,469,332	\$4,383,198	\$4,619,294
County	\$1,271,219	\$1,234,872	\$1,175,364	\$1,092,007	\$1,032,866	\$967,133	\$923,910	\$907,261	\$905,443	\$905,186
Insur, utilities, other	\$3,567,480	\$3,335,390	\$3,732,354	\$3,710,812	\$3,734,970	\$3,730,906	\$2,609,764	\$2,974,797	\$2,483,215	\$2,969,394
Capital	\$0	\$0	\$0	\$0	\$301,359	\$1,235,604	\$500,573	\$288,064	\$331,787	\$258,044
Debt	\$1,305,832	\$1,065,492	\$1,052,084	\$1,052,479	\$1,210,712	\$1,053,031	\$1,295,121	\$1,274,000	\$1,223,905	\$1,223,131

Source: Augusta Finance Director

When it is considered that homes are less expensive in Augusta than in many surrounding towns, that Augusta residents receive more services than residents in rural towns, and that Augusta residents have shorter commutes to work – then the property tax difference becomes even less important.

The outlook is for continued stability in the coming years. New commercial property is being added along the Turnpike and next to the former Cony High School. Housing values have stabilized in this decade, and demand is projected to grow in coming years from retirees, new state employees, and young people.

There are also fiscal challenges that the city will face, including:

- ⇒ Paying for a Lithgow Library expansion;
- ⇒ Paying for unfunded health care benefits for retired employees which will appear under new municipal accounting requirements next year;
- ⇒ Paying for sewer and water extensions to North Augusta and Riggs Brook;
- ⇒ Helping to pay for replacement schools (or rehabilitation) because of the age and condition of Hodgkins Middle School and Hussey Elementary School; and,
- ⇒ Continuing to support affordable housing development.

These challenges are described in more detail in other sections of this inventory.

TAX INCREMENT FINANCING

Tax increment financing (TIF) is a tool that enables the City to reduce the tax burden to new developments that promote City goals of job development or affordable housing, while at the same time sheltering the City from potential losses in state education funding and revenue sharing as a result of the development.

Augusta has been aggressive in its use of this instrument. Since 1994, the City has used TIF to shift property tax benefits of the Marketplace at Augusta to the downtown area, by using the accumulated funds to support the downtown parking garage, for example. The City has also used this tool to promote expansions at McCarthy Printing and the NRF Company. Most recently the City provided TIF benefits for an affordable housing development on Water Street that will both help renew the downtown and provide needed apartments.

It has also provided a generous TIF to support the redevelopment of the Arsenal into commercial and residential uses; this too is a key to redevelopment of the riverfront and downtown.

The total commitment of tax increment financing (TIF) funds in the current fiscal year (2007) is \$1,076,150. See Exhibit N12 on page 138.

LONG TERM DEBT

The City funds capital investments through a combination of sources:

- ⇒ state and federal grants
- ⇒ local bonds approved by referenda (larger issues)
- ⇒ local bonds approved by the Council only (smaller issues)
- ⇒ cash from the Undesignated Fund Balance

Some of the bonds are repaid by the City General Fund, some are repaid largely by the state (i.e., Cony High), and some are repaid through enterprise funds.

The City Council approves an annual capital improvements plan outlining commitments through the coming five years. It is put together by City staff, incorporated into the Manager's proposed budget, and then refined through the Council process.

The City also has a five-year equipment replacement schedule which is updated every year as part of the same budget process (see Exhibit N9).

Exhibit N9: CIP and Equipment Replacement Budgets

	2008	2009	2010	2011	2012
CAPITAL IMPROVEMENT					
Cash (General Fund)	\$431,000	\$1,955,000	\$2,054,000	\$1,776,000	\$1,463,360
Council bond	\$500,000				
Referendum bond	\$410,000				
Enterprise fund bond	\$6,711,300	\$2,609,000	\$2,550,500	\$2,321,000	\$2,160,360
TOTAL	\$8,052,300	\$4,564,000	\$4,604,500	\$4,097,000	\$3,623,720
EQUIPMENT REPLACEMENT					
Cash (General Fund)	\$348,000	\$397,000	\$376,000	\$310,000	\$456,000

Source: City Manager's Budget Message, 2007

Augusta currently has \$45 million in General Fund debt. Of this, \$6 million is for municipal purposes, \$29 million is for schools (mainly the new Cony High), and \$13 million is for a refinancing of pension obligations. The Cony bond (\$24,475,506) is supported by the state. The pension bond is a refinancing of a Maine State Retirement System obligation which will save Augusta taxpayers \$2.4 million over its term.

Payments on the debt extend through to 2025. The Cony Debt payments are currently scheduled in the \$4 million range until 2018, after which time the pension obligation ceases, and payment levels drop to the \$2 million range (see Exhibit N10).

Exhibit N10. Debt Repayment Schedule for General Fund Debt

Year	Principal and Interest
2007	\$3,818,548
2008	\$5,088,426
2009	\$4,981,528
2010	\$4,523,758
2011	\$4,329,471
2012	\$4,258,414

Source: City Manager's Budget Message, 2007

Major projects requiring potential General Fund bonding support in the future include:

- ⇒ Lithgow Library expansion
- ⇒ Hodgkins and Hussey School replacements
- ⇒ Potential riverfront improvements

Augusta does not have development impact fees that could help to finance capital improvements.

CAPITAL INVESTMENT PLAN (CINP)

The State Planning Office rules require that municipalities include a Capital Investment Plan in a comprehensive plan. SPO's rule specifically states:

"The capital investment plan must establish the framework for programming and financing

Those new or expanding public service facilities that are needed to accommodate projected growth and development and that constitute major capital improvements for which the municipality has fiscal responsibility."³

Augusta's population decreased during the 1990s and is not expected to reach 1990 levels until sometime after 2020. There are no new public service facilities that necessary to accommodate projected growth and development and therefore the city has not included a traditional capital investment plan in the comprehensive plan.

There are many existing public facilities discussed in this plan, such as Lithgow Library or the Hartford Fire Station, that the city will evaluate and may chose to improve or expand in order to better serve existing population and development. The annual Capital Improvement Plan process is used for those purposes.

The City of Augusta will work closely with other governmental entities that control and maintain some capital facilities within the city to ensure a coordination of efforts regarding capacity and quality improvements for those entities' capital facilities. Water and sewer infrastructure are owned and maintained by the Augusta Water and Sanitary Districts. State offices are often owned and managed by the State of Maine. The County courthouse, jail, and other County offices are owned and managed by Kennebec County. The responsibility for capacity expansion on many major roads in Augusta falls to developers necessitating the development and the State of Maine.

Continued communication with all of these groups is critical to ensuring that city maintenance projects and improvements to the quality of city services are complimented by the work being done by others.

³Chapter 202, Comprehensive Plan Review Criteria Rule, State Planning Office, May 22, 1996, Section 7.B.

CONCLUSION

By the fiscal tests suggested in the handbook *Comprehensive Planning: A Manual for Maine's Communities* (1992), Augusta has capacity for additional borrowing (see Exhibit N11). Its debt to valuation ratio is favorable, it has a healthy fund balance (though that balance will decline in the coming year) and it has double-digit growth in assessed value. The one area of concern is the ratio of per capita debt to per capita income. Augusta has a lower-than-average per capita income compared to the state, and as a service center, faces higher-than-average service demands. Still, half of all property tax collections are from non-residential uses, so the burden of new debt on the individual households is less than it would be in a community that is primarily residential.

The City has led efforts in the region to seek efficiencies through service consolidation. In the past year, the Augusta Water District has gone through a process that is leading to consolidation with the Sewer District. Augusta participates in the regional 911 emergency response effort. As opportunities arise in the future, Augusta will continue to explore regional cost-sharing on operational and capital items.

Exhibit N11. Fiscal Tests for City Budget

	Augusta actual	Suggested level
Municipal debt to valuation (2006)	3.8%	less than 5%
Fund balance to operating budget (2006)	15.0%	more than 8.3%
Per capita debt to per capital income (2007)	11.2%	less than 5%
Assessed value (2006)	double digit growth	should be growing

Source: Planning Decisions

Exhibit N12. TIF Projects in Augusta

Name of TIF District	Date Established	Total Acreage	Original Assessed Value (OAV)	Projected Net Savings with TIF	TIF end date
Marketplace at Augusta Phase I	Feb-90	156.5	\$ 3,040,200.00	\$ 3,523,320.00	2010
Phase II	2000	NA	NA	\$ 4,292,340.00	2020
Old City Hall	Aug-00	0.94	NA	\$ 422,540.00	2020
J.S. McCarthy	Mar-01	1.02	\$ 2,949,700.00	\$ 352,806.00	2020
NRF Distributors	Nov-02	29	\$ 262,600.00	\$ 290,989.00	2012
Downtown TIF	Jul-02	53.65	\$ 30,377,100.00	\$ 1,550,177.00	2022
Cloutier - 90 Water Street	Nov-05	0.23	\$ 336,800.00	\$ 105,546.00	2020
Arsenal	Sep-06	22	NA	\$ 2,196,054.00	2031

Source: City of Augusta