

**PUBLIC SAFETY  
IMPACT FEE CALCULATIONS:  
POLICE AND FIRE-RESCUE  
DEPARTMENTS**

**HOOKSETT, NH**

**Final Report  
August 9, 2002**

(Revised from 1<sup>st</sup> Draft Report  
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Prepared for:

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**Town of Hooksett Public Safety Impact Fees**

**A. Authority and Purpose**

New Hampshire R.S.A. Subsection 674: 21, V authorizes municipalities to assess impact fees to new development for the construction or improvement of capital facilities owned or operated by the municipality including public safety facilities. The amount of the fee must be reasonably related to the capital needs created by new development. Impact fees may be used to recoup the cost of facilities developed in anticipation of growth, or to fund future public safety facilities that will accommodate the needs of new development. The purpose of this methodology is to define a proportional share of public safety capital costs that is reasonably attributable to the needs created by new development for police and fire-rescue functions.

**B. Existing Public Safety Facilities and Capital Equipment in Hooksett**

Table 1 summarizes the existing public safety facilities of the Town. The principal facility serving both police and fire is the Public Safety Building located on Legends Drive. This facility includes the administrative offices of the police and fire departments of the town, as well as their principal locations for related public safety equipment and vehicles. The total facility size is 35,200 square feet. An additional fire station of 5,120 square feet is located in Hooksett Village.

**Table 1**

<b>PUBLIC SAFETY - CENTRAL STATION</b>	
	<b>Floor Area (Sq.Ft.)</b>
<b>Police Department Portion</b>	
1st Floor incl. Dispatch	6,406
2nd Floor	5,400
50% of Common Area	1,800
<b>Total Police Department</b>	<b>13,606</b>
<b>Fire-Rescue Department Portion</b>	
1st Floor Admin, Tower	3,570
2nd Floor Dormitory/Lockers/Dining	4,784
50% of Common Area	1,800
Garage/Apparatus/Maintenance Bays	11,440
<b>TOTAL</b>	<b>21,594</b>
<b>Total Central Station - Police/Fire-Rescue</b> (Excluding Carport)	<b>35,200</b>
<b>FIRE-RESCUE VILLAGE STATION</b>	
1-Story	<b>5,120</b>
<b>Total Police Department Building Area</b>	<b>13,606</b>
<b>Total Fire-Rescue Dept. Building Area</b>	<b>26,714</b>

## 1. Public Safety Demands in Hooksett

Public safety services center on the protection of persons and property. Therefore, demand on police and fire-rescue functions is influenced by both residential and non-residential development, and is shaped by the unique aspects of Hooksett's physical geography and highway accessibility:

- The Town has a large and growing commercial-industrial base, as well as rapidly growing residential development demands;
- Hooksett has begun attracting regional retail development that will drawing traffic into Hooksett from a wider radius;
- Two major north-south transportation corridors (Interstate 93 and U. S. Route 3) carry heavy traffic flows to and through town. The principal highway corridor carrying local traffic through Hooksett is U.S. Route 3, which has average daily traffic of approximately 35,000 cars per day (weekday volume);
- The combination of residential demands and economic activity in Hooksett from local employment and manufacturing, related shipping and transport of materials, shopper travel, and traffic volume on I-93, and all place special demands on its public safety services. These demands are only partially reflected by the resident population of the Town.
- The barriers created by the Interstate highway (I-93) and the Merrimack River allow for a limited number of highway crossing points between the easterly and westerly sides of Hooksett. These barriers, as well as local traffic congestion on U.S. Route 3 will require personnel and facilities to be more dispersed within the Town as it grows so that adequate public safety response times can be achieved throughout the community.

For these reasons, the demands on public safety services in Hooksett cannot be readily compared to those in other communities, even where the community has similar number of residents. The unique demands of each community also mean that there are no ready-made formulas or standards from which to compute the precise quantity of facilities or capital equipment needed to serve future development. In developing this approach to impact fee assessment, we have instead relied on the professional judgment of the public safety departments themselves to assess their likely long-term capital needs.

## 2. Police Department Facilities and Staffing

Based on a review of floor plans and square footage estimates prepared at the time of construction, the total floor area devoted to the Police Department is approximately 13,606 square feet. In allocating estimated floor area to Police vs. Fire-Rescue functions, we assumed that each department uses 50% of the common areas within the building respectively. The demand for floor area by the Police Department is driven primarily by personnel and records

keeping, while the space needs of the Fire Department are driven more by the inventory of apparatus and equipment, and by the need to locate facilities strategically so that acceptable response times can be maintained with respect to concentrations of development.

The Police Department at the present time has 24 full time officers with an additional 14 personnel devoted to administrative and dispatch functions bringing total full time employment to 38 persons. The total number of sworn officers is equivalent to 2.05 officers per thousand population based on the 2000 Census.

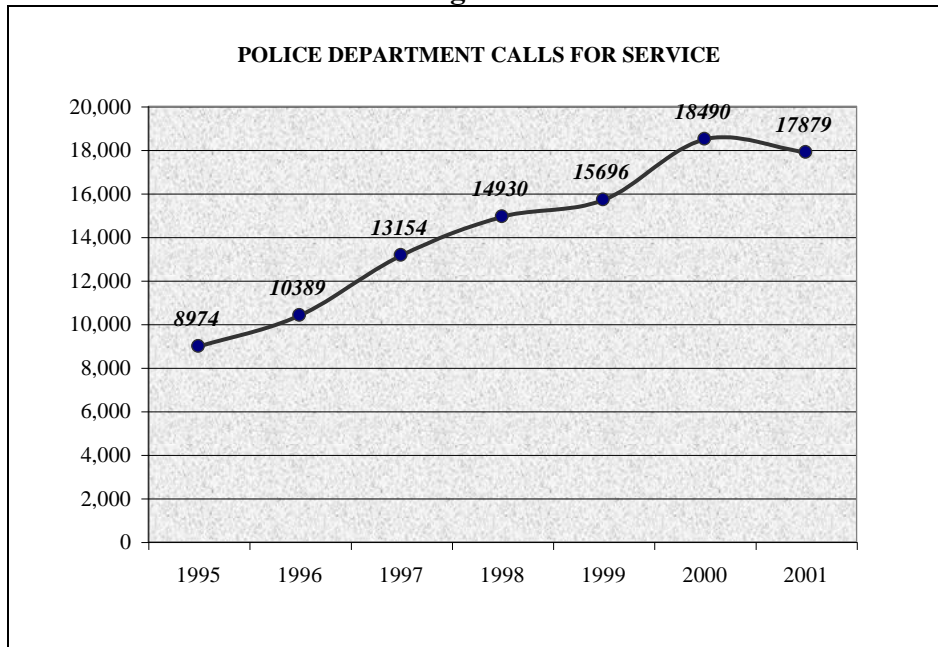
<b>POLICE DEPT.</b>	<b>Personnel</b>	
	<b>Including Dispatch</b>	<b>Per 1000 Population</b>
Full-Time Officers	24	2.05
Admin/Dispatch	14	1.19
<b>Total Full Time</b>	<b>38</b>	<b>3.24</b>

According to U.S. Department of Justice FBI figures, law enforcement agencies in the U.S. employed an average of 2.5 full time officers per 1,000 inhabitants. When full time civilian employees are included the rate is 3.5 per thousand inhabitants. In the northeast total law enforcement employment ratio average is 3.5 per thousand. The northeastern states had the highest rate of sworn officers to population at 2.8 per thousand. Suburban and rural counties in the U.S. each had a rate of 2.6 officers per thousand population.

In New Hampshire, as of 1997 Census of Governments, police officers represented at an average of 1.94 officers per thousand population and 2.53 full time equivalent personnel. The comparisons of these ratios are difficult because of the significant differences in the service base of the community, the urban nature and density of the population, crime rates, the geographic area of coverage, etc. Based on a compilation of data prepared by the Police Chief, Hooksett's ratio of officers per thousand population is equivalent to or higher than other New Hampshire communities in the 10,000-15,000 population range. However, population is only one dimension of the actual demand placed on police department services.

Direct comparisons of service needs based on personnel or officers per thousand residents can be misleading because of the very different service demands that exist from one community to another. Therefore, such ratios can serve only as a *rough guideline* for appropriate staffing in any given city or town. As described above in subsection 1, the unique aspects of Hooksett's geography, its business activity, a high "daytime population" from local economic activity, the limited number of river crossings from east to west, and traffic/highway patterns all combine to demand a higher level of staffing than might be indicated by simple comparisons made solely on the basis of population. For police protection, these unique attributes in Hooksett demands tend to affect personnel needs to a greater extent than capital needs. Because rapid access to certain parts of town from a central location is diminished by the roadway patterns, traffic congestion, and geographic barriers, the maintenance of adequate patrol frequencies and response times may require Hooksett to have a higher level of staffing per capita than in other communities to provide an equivalent level of protection.

**Figure 1**



Based on interviews with the Police Chief, the existing police station within the Public Safety Building should be adequate to handle additional personnel in the future. The demands of growth on the department are primarily those of providing adequate personnel for coverage and patrols throughout the town as it grows. These demands fall more heavily on personnel and cruisers than on buildings, and office space facility needs of additional officers probably can be met within the existing building.

The original Public Safety Building was built in anticipation of some future growth. The exact amount of future growth assumed at the time of its development is uncertain, but a review of project records indicates that IACP recommendations may have played some role in determining the amount of space needed for the department. In the past, typical IACP building size recommendations ranged from 260 to 300 or more square feet per full time employee. The lower floor areas per person represent averages that, according to some studies, may be biased toward urban departments with large numbers with large staff. Smaller departments could require a larger square foot area per full time employee.

Assuming a minimum gross floor area of 300 square feet for full time personnel, the Police Department portion of the building could support an additional 7.35 persons if utilized at the maximum ratio (smallest amount of square footage per person). At existing personnel ratios to population, this would indicate an ability to accommodate residential growth of an additional 2,300 people in Hooksett before additional police station space would be needed. Using these measures (average floor area per full time employee in the department), an estimated 84% of the police station capacity is now utilized. As new development proceeds, and the personnel requirements of the department grow, existing space may be consumed at the existing Public Safety Building as the result of new development. Initially, an impact fee may be used to recoup a portion of the remaining capacity of the Police Department portion of the building in the form

of an impact fee. Subsequently the impact fee will allow for the potential for some of additional space to be added to serve increased demands from growth.

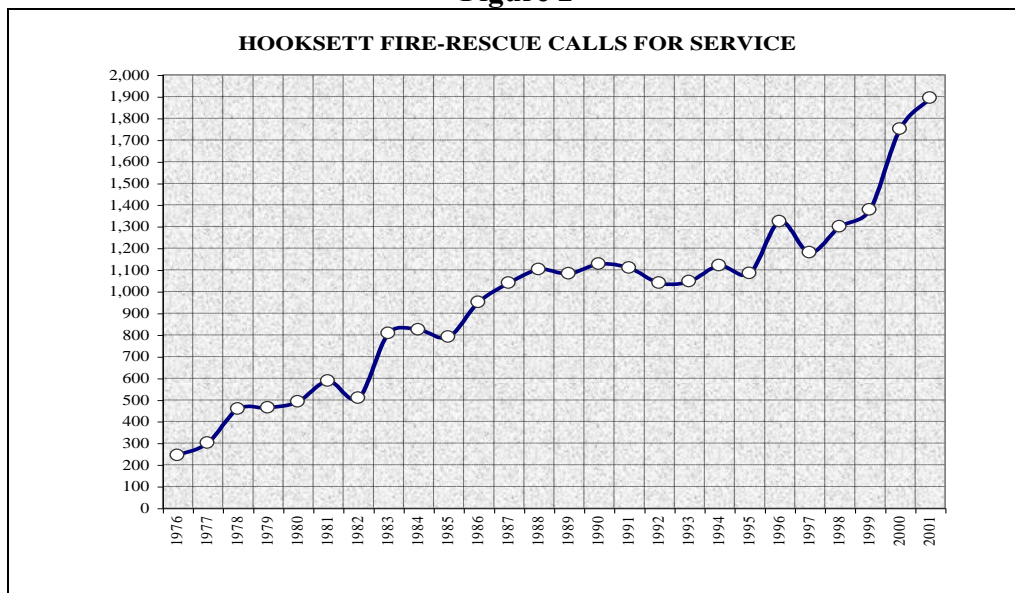
### 3. Fire-Rescue Department Facilities and Staffing

The Fire-Rescue Department utilizes an estimate 21,594 square feet within the Public Safety Building (Central Station). A second fire station (Station #1) is located in Hooksett Village (5,120 square feet), bringing total fire department building floor area to 26,714 square feet. The Fire-Rescue Department employs 29 full time personnel plus 4 call firefighters for a total full time complement of 29 persons. Hooksett full time personnel represent in the department represent 2.47 employees per thousand population as of the 2000 Census.

<b>FIRE-RESCUE</b>	<b>Personnel</b>	<b>Per 1000 Population</b>
Full Time Personnel	29	2.47
Call Firefighters	4	0.34
Total Full Time	29	2.47

As of 1997, full time employment within New Hampshire cities in firefighting function averaged 2.01 full time equivalent personnel per thousand population. Hooksett's requirements are somewhat higher than other communities in the region because of its concentration of commercial industrial development, and the presence of high volume traffic corridors including Route 3 and Interstate 93. The department has primary responsibility for fire-rescue responses to the Hooksett portion of I-93. The substantial growth in calls for fire and rescue services in Hooksett is illustrated in Figure 2 below.

**Figure 2**



An interview with the Fire Chief indicated that the Fire-Rescue portion of the Public Safety Building is essentially being utilized to capacity. If Hooksett decides to assume full time (24-hours/day – 7 days/week) ambulance transport as a Town public safety service, the need to garage an ambulance within the Public Safety Building, the building will reach its original design capacity for apparatus.

Significant growth in demand on fire-rescue services in Hooksett can be anticipated based solely on several large planned developments that could include at least 1,700 residential units. These larger projects indicate a need for additional equipment and fire department facilities at locations that will permit adequate response times to major concentrations of population. In addition, a large concentration of new commercial development is now underway on the westerly side of the Merrimack River near Exit 10 of Interstate 93. In part because of traffic congestion and in part because of distance to existing stations, these additional centers of new development will require additional stations and equipment as proposed within the Fire Department's Capital Improvements Program. The department also has developed a 20-year plan for building development, and apparatus acquisition/replacement.

The Capital Improvement Program of the Fire Department calls for several additional stations to be constructed in the future. Each of these stations is estimated to require approximately 11,000-12,000 square feet in structures providing two bays for major apparatus. Each of the three new stations would be equipped initially with one major piece of apparatus. A second piece of apparatus could be added to each new station in the future, depending on the amount and pace of growth in various portions of the community.

The Central Station is located within the Public Safety Building. Station 1 is the existing facility in Hooksett Village. Demands on the Fire-Rescue Department's Central Station (Public Safety Building) capacity have grown faster than anticipated in the building's design. The department now uses rooms that were intended to be conference rooms as offices. The Town has been studying the potential for absorbing the ambulance function now provided by Tri-Town Ambulance under contract to the area. As of 2002, 50% of the ambulance runs for the Tri-Town service area (includes Allentown and Pembroke) are in Hooksett. If the department assumes responsibility for ambulance transport services, current garage space at the Public Safety Building will be used to its design capacity.

The nature of fire-rescue facilities is to form a network of services to maintain acceptable response times to developed areas. Facilities tend to be interdependent, as equipment and personnel from one station may be assigned to cover another station when that company is out responding to a call. New development in Hooksett will benefit both from the new facilities and from past investments in creating the existing inventory of equipment and apparatus that is needed to maintain adequate coverage throughout the Town.

The addition of equipment and improved response capabilities can translate into benefits to private property owners by reducing fire risk and stabilizing or reducing property insurance premiums. The Public Protection Classifications (PPC) established for commercial and residential properties by the Insurance Services Office derive a rating level for fire companies.

Most insurance companies use the Insurance Service Office (ISO) property protection class (PPC) ratings, in part, to evaluate risk and establish premiums.

The PPC is established according to a Fire Suppression Rating Schedule (FSRS) that assesses local firefighting capability. The ratings are based on the following major components, by weight:

<u>Fire alarms</u> – dispatch and alarm response	10%
<u>Engine companies</u> -number, coverage, water needed for fighting fires, training and equipment maintenance -	50%
<u>Water supply</u> – fire flow tests, supply available for suppression, hydrant distribution	40%

In the most recent ISO community rating for Hooksett (dated March 1996), the department received relatively low credits for ladder service and reserve ladder service due to the absence of aerial ladder apparatus. To rectify this, the Department will take delivery of a Quint by January 2003 that will provide aerial ladder capability. A second ladder (or Quint) would add a backup aerial capability, noted as a need in the 1996 ISO rating. While ISO provides a comparative rating for insurance purposes, it is not a hard-line standard of deficiency. However, based on the rating, and needs expressed in the CIP, it would seem reasonable to consider the need for one aerial ladder or Quint as a component of existing need. This aspect is addressed later within the impact fee calculations in estimating proportionate impact fees for new development

### **C. Allocation of Service Demand**

#### **1. Residential vs. Non-Residential Demands**

The public safety services center on the protection of persons and property of all types. In order to fairly apportion the service demands of new development and its proportionate impact on public safety services, it is necessary to estimate the proportion of the need for capital facilities that is reasonably related to residential versus non-residential development. Secondly it is necessary to consider the amount of future growth in each sector. Consideration should also be given to the amount of human activity in the form of increased resident population and growth in local employment, and the amount of floor area in commercial industrial development that requires protection.

In Hooksett, assessed valuation data indicates that approximately 71% of the total assessed value in the Town (excluding utilities) is in residential property classifications, and about 29% is commercial-industrial property. In terms of total land assessed, approximately 64% is classified as residential for tax assessment purposes and 36% for commercial and industrial uses. These ratios represent one possible basis for assigning reasonable proportions of demands on public safety facilities to residential vs. non-residential development.



Still another means is to consider the relative proportion of activity between population and employment. As of 2000, the Town of Hooksett had a population of 11,721 persons; private wage and salary employment in the Town in 2000 totaled 6,263 employees in private sector employment (total of population plus employment equals 17,984). If employment and population are taken as equivalents and totaled, then 65% of the combined potential demand on services is residential, and 35% is employment-based (commercial-industrial).

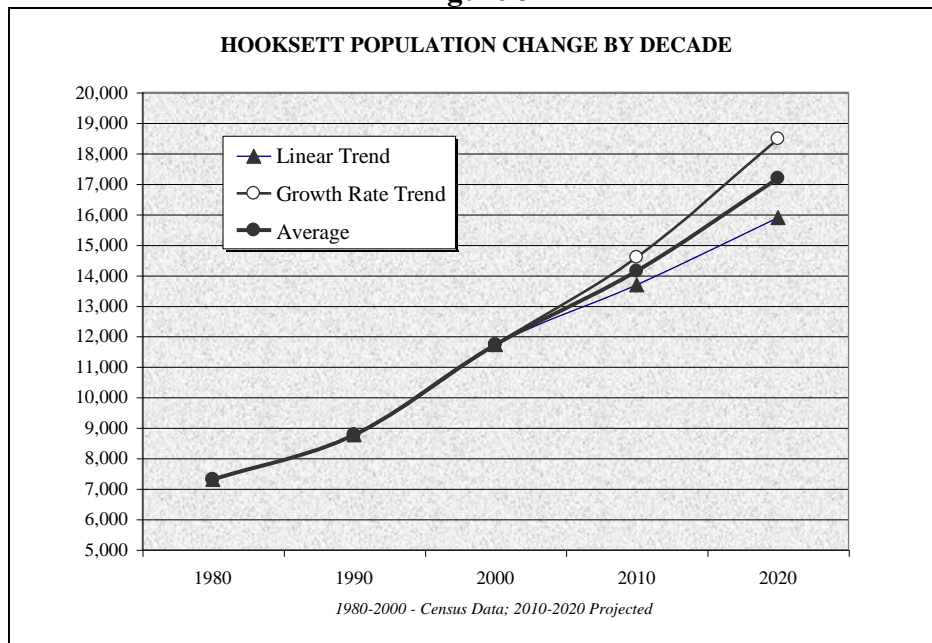
## 2. Long-Term Projection of Growth

### a. Population

The most recent long-term projections of population issued by the Office of State Planning (1997) predate the year 2000 U.S. Census. The actual population of Hooksett as of the 2000 Census was 11,721. The 1997 OSP projections indicated a *year 2015* estimated population for Hooksett at only 11,482 persons. Therefore, the Town had already exceeded its projected 2015 population 15 years earlier. It is obvious that a different long-term growth projection is now needed to reasonably anticipate future population growth in Hooksett.

Several large-scale known sources of residential growth may begin to be developed in the near future. These include additional further phases of Granite Hill, the initiation of a large-scale planned development by Manchester Sand and Gravel, and additional residential and commercial growth at the north campus of Southern New Hampshire University. Positive employment and housing market conditions and prevailing low interest rates suggest that these and other sources of new population growth could materialize within the next twenty years.

**Figure 3**

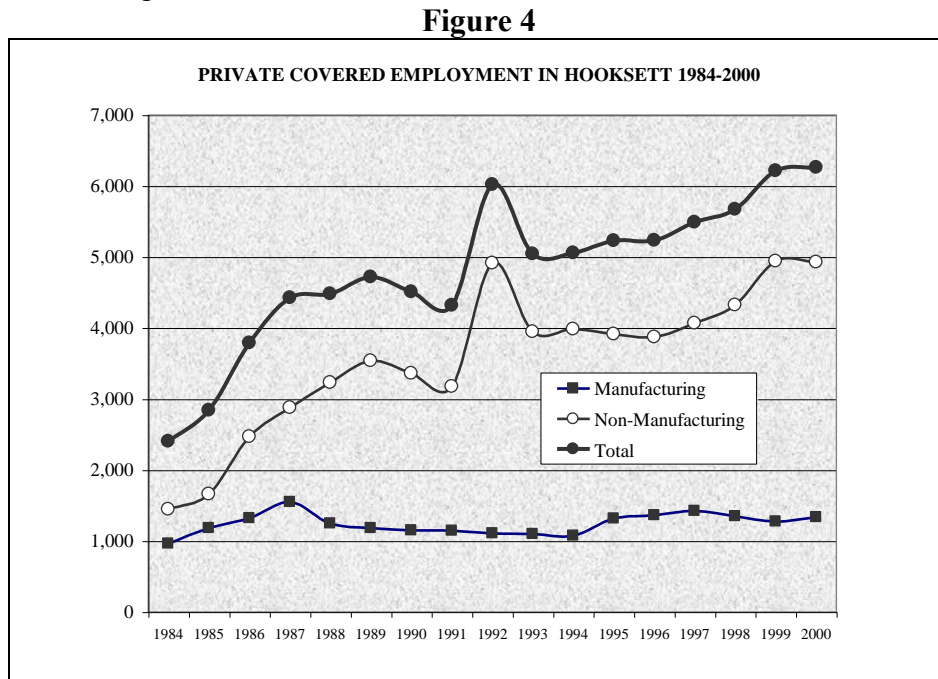


In order to project future population, we utilized both a linear growth trend projection as well as a projection based on the trend in rates of growth (percent change) from prior decades beginning

in 1980. The linear trend projections suggest a year 2020 population of 15,891. The growth rate trend, reflecting an accelerated trend, indicated a 2020 population of 18,812. We've utilized the average of these trends to estimate future population at 17,351 for the year 2020 as a means of projecting the future service population for public safety facilities.

*b. Employment*

Employment projections were made in a similar manner using a linear trend based on annual data for private covered employment located in Hooksett as published by New Hampshire Employment Security for each of the years from 1980 to 2000. Data for the period 1984-2000 are shown below in Figure 4.



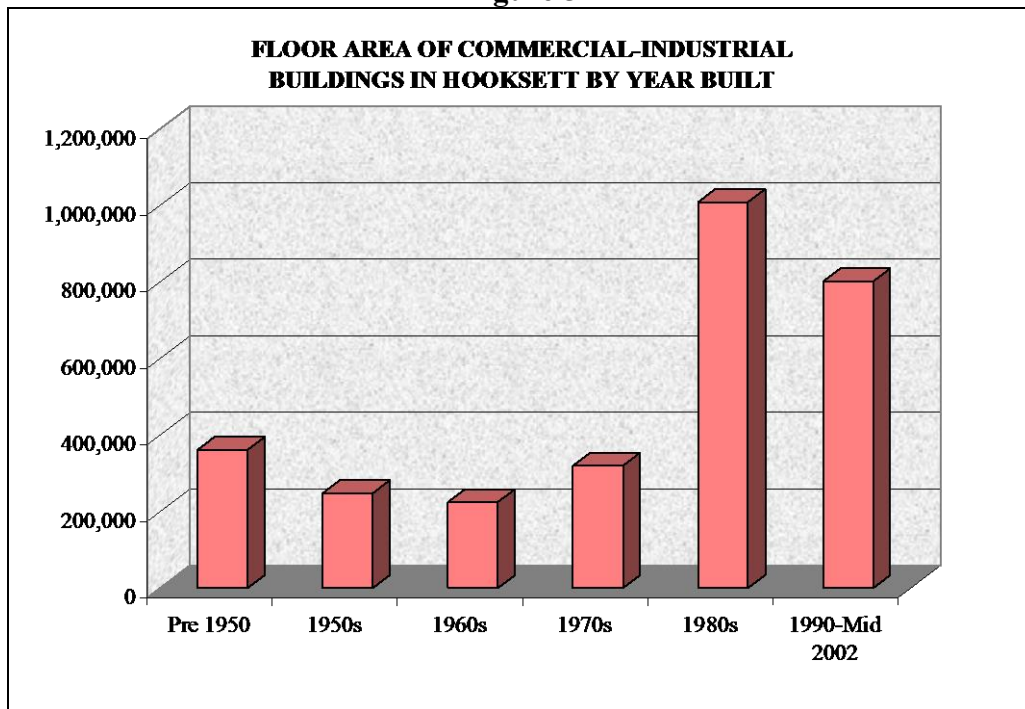
Manufacturing employment has been growing slowly in recent years in Hooksett but has still not reached its 1987 peak. Non-manufacturing employment has shown steady growth. This sector includes growth in jobs in office space and retail trade development. This has been the predominant form of employment growth in the Town of Hooksett.

Manufacturing and non-manufacturing employment were projected separately, and then summed. The potential future employment in Hooksett was estimated at 10,123 using the linear trend function 12,400 using the growth rate trend.

In order to reconcile the employment projections with the amount of developed commercial industrial space in the town, we reviewed the tax base record and cross-tabulated the amount of commercial and industrial floor constructed by year. Figure 5 illustrates the amount of floor area in commercial and industrial buildings in Hooksett by the period in which the structures were built according to tax records. The typical amount of space constructed in the decades of the 50's, 60's and 70's was between 200,000 and 300,000 square feet per decade. However nearly

1,000,000 square feet were added during the 1980's and during the period of 1990 through mid-2002 nearly 800,000 square feet were constructed.

**Figure 5**



The amount of floor space in existence as of 1980, 1990 and 2000 were utilized as benchmarks to estimate the amount of commercial-industrial floor area per employee in Hooksett. These ratios were then held constant for year 2010 and 2020 to estimate the amount of employment that would be supportable given an estimated increase of 850,000 square feet every ten years (average of 85,000 square feet per year). Based on an examination of recent past trends, this expectation seems reasonable, with about 15,000 square feet per assumed for manufacturing and 70,000 square feet per year in non-manufacturing growth.

On the basis of recent additions to the commercial industrial base evidenced by this data, we've projected about 85,000 square feet per year at the existing ratios of floor area to employment, for manufacturing and non-manufacturing space, the ratios indicate a 2020 employment base of 10,068 jobs supported by the anticipated growth in floor area. This is also consistent with the linear trend projection of local employment.

Table 2 illustrates the growth history and projection for Hooksett population, employment, and estimated floor area of commercial and industrial buildings. Demand on services between residential and non-residential sectors has been estimated using the ratio of population to the sum of population plus employment. For the allocation of impact fees, we've utilized per capita impacts for residential development and per square foot impacts for non-residential buildings. As indicated in Table 2, the rapid addition of commercial and industrial development has probably contributed substantially toward increases in traffic, as well as increases in service demands placed on the Police and Fire Departments.

**Table 2**

<b>GROWTH HISTORY AND PROJECTION - HOOKSETT</b>						Compound Annual Rate of Change by Period					
						Historic			Projected		
<b>HOOKSETT</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>	<b>2020</b>	<b>1980-90</b>	<b>1990-00</b>	<b>1980-2000</b>	<b>2000-2010</b>	<b>2010-2020</b>	<b>2000-2020</b>
Population	7,303	8,767	11,721	14,270	17,351	1.8%	2.9%	2.4%	2.0%	2.0%	2.0%
Employment (Private, Covered)											
Manufacturing	661	1,148	1,335	1,633	1,931	5.7%	1.5%	3.6%	2.0%	1.7%	1.9%
Non-Manufacturing	1,116	3,360	4,928	6,532	8,137	11.7%	3.9%	7.7%	2.9%	2.2%	2.5%
Total	1,777	4,508	6,263	8,165	10,068	9.8%	3.3%	6.5%	2.7%	2.1%	2.4%
Population and Employment	9,080	13,275	17,984	22,436	27,419	3.9%	3.1%	3.5%	2.2%	2.0%	2.1%
Res Portion of Total	80.4%	66.0%	65.2%	63.6%	63.3%						
Non-Res Industrial Portion of Total	7.3%	8.6%	7.4%	7.3%	7.0%						
Non-Res Commercial Portion of Total	12.3%	25.3%	27.4%	29.1%	29.7%						
<b>Estimated Floor Area of Buildings - Non-Government Employers</b>											
Industrial (Manufacturing)	446,000	581,000	672,000	822,000	972,000	2.7%	1.5%	2.1%	2.0%	1.7%	1.9%
Commercial (Non-Manufacturing)	924,000	1,650,000	2,150,000	2,850,000	3,550,000	6.0%	2.7%	4.3%	2.9%	2.2%	2.5%
Total	1,370,000	2,231,000	2,822,000	3,672,000	4,522,000	5.0%	2.4%	3.7%	2.7%	2.1%	2.4%
<b>Estimated Average Floor Area Per Employee (Includes Vacant Space)</b>											
				(Hold Ratio @ 2000 level:)							
Industrial (Manufacturing)	675	506	503	503	503						
Commercial (Non-Manufacturing)	828	491	436	436	436						
Total	771	495	451	450	449						

## D. Impact Fees by Department

### 1. Police Department

The Police Department impact fee has been based on the expected number of full time personnel for the year 2020 and associated space needs assuming that the current ratio of full-time Police Department employment per thousand population continues into the future. (See Table 3.)

**Table 3 – Police Department Staffing and Facility Space**

<b>PUBLIC SAFETY IMPACT FEE CALCULATIONS - POLICE</b>		
<b>POLICE DEPARTMENT</b>	Personnel	Per 1000 Population (2000)
	Full Time Staffing Per 1000 Pop.	38
Excluding Dispatch	30	2.56
Sworn Officers Only	24	2.05
	Base Year (2000)	Future Year (2020) at Existing Avg. (Rounded)
Full Time Staffing Required	38	56
Excluding Dispatch	30	44
Sworn Officers Only	24	36
Minimum Gross Floor Area Per FT Staff	300	300
Total Floor Area Needed	11,400	16,800
Facilities In Place (2000)	13,606	
Existing Surplus (Deficiency)	2,206	
Additional Supportable Personnel - Existing Facility	7.35	
Additional Space Needed for Growth		3,194
Police Department - Cruisers		
Total Baseline (2000)	12	18
Value of Cruisers @ \$35,000	\$420,000	\$630,000
Vehicle Acquisition Attributable to Growth		\$210,000
	<b>Existing</b>	
Allocation to Service Base - Station Area - Base Year Needs	11,400	
Residential @ 65%	7,410	
Industrial @ 7%	798	
Commercial @ 28%	3,192	
	<b>Future</b>	
Total Future Need (2020) - Station Area		16,800
Residential @ 63%		10,584
Industrial @ 7%		1,176
Commercial @ 30%		5,040
Growth-Related Demand on Facilities - Station Area		5,400
Residential Demand		3,174
Industrial Demand		378
Commercial Demand		1,848

The growth projections developed earlier for population and commercial-industrial floor area have been used as a guide to allocate the dollar amount and floor area quantities of station space consumption to three categories of new development: residential, industrial and commercial according to their proportional shares of baseline (2000) and future year (2020) service demands. The growth related capital costs are then divided among those three sectors.

The capital cost for police station facilities has been computed at a ratio of \$105 per square foot. This is based on an updated derivation of cost using from the original construction cost of the Public Safety Facility, prorating of those costs to the floor areas of the Police and Fire Departments, and updated using RS Means cost multipliers arrive at a 2002 adjusted value. It is noted here that while the original construction cost estimates for the Public Safety Facility were based on RS Means square foot cost figures, actual bid construction costs were significantly lower than those published figures. The baseline costs for new police station space based on 2002 RS Means square foot costs 2002 are as high as \$130 to \$140 per square foot.

**Table 4**  
**Updated Cost Per Sq. Ft. For Existing Police Facility Space**

<b>Cost per Sq. Foot Estimated</b>	
<b>POLICE AREA</b>	
Construction Cost/Sq. Ft Police Area at Safety Complex - 1997	\$93.70
Cost/Sq. Ft. Common Area	\$60.29
Weighted Average Per Sq. Ft.	\$89.28
1997 R.S. Means Police Sta. Base 13,000 s.f. adj to NH	\$117.47
2002 R. S. Means Police Sta. Base 13,000 s.f. adj. To NH	\$138.23
Adjustment factor	1.18
Cost Per Sq. Ft. Equiv. Space 2002	<b>\$105</b>

The capital cost of facilities also includes an allowance for additional vehicles in the form of cruisers attributable to growth, assuming one additional cruiser for every two officers.

Residential demands on capital facilities are then allocated to an estimated population growth of 5,630 persons. The industrial portion of capital costs has been allocated across 300,000 square feet of additional industrial space and the commercial portion allocated across 1,400,000 square feet of additional commercial floor area. Based on these numbers, the residential cost per capita and industrial and commercial costs per square foot are derived.

The residential portion of capital cost is then assigned by housing unit structure type based on the number of persons per occupied unit. At this point in time only 1990 Census data are available at this level of detail. When 2000 data are available showing persons per unit by structure type this information should be updated. The capital cost impact for industrial and commercial space has been computed per thousand square foot of new floor area.

**Table 5 – Allocation of Capital Cost – Police Department Facilities**

Gross Capital Cost Per Sq. Ft. for Police Station Portion of Space	\$105
Total Capital Cost Including Cruisers	\$777,000
Growth-Related Capital Cost Including Cruisers	
Residential	\$456,703
Industrial	\$54,390
Commercial	\$265,907
Total	<u>\$777,000</u>
Residential Service Population Growth	5,630
Industrial Growth (Sq. Ft.)	300,000
Commercial Growth (Sq. Ft.)	1,400,000
Residential Cost Per New Resident	\$81
Industrial Per 1,000 Sq. Feet	\$181
Commercial Per 1,000 Sq. Feet	\$190

<b>POLICE DEPARTMENT</b>	<b>CREDIT SCHEDULE</b>	
<b>Credit Per Dwelling Unit by Structure Type</b>		
	<u>Assessed Val.</u>	<u>Credit</u>
Single Family Detached	\$170,000	\$93
Townhouse	\$100,000	\$55
Duplex/Two Unit	\$100,000	\$55
Multifamily- 3+ Units	\$50,000	\$27
Manufactured Housing	\$60,000	\$33
Industrial Credit Per 1000 Sq. Ft.	\$50/s.f.	\$27
Commercial Credit Per 1000 Sq. Ft.	\$80/s.f.	\$44

**Net Impact Fee Schedule: Police Department**

<b>Residential Per Unit</b>	<b>Persons Per Unit</b>	<b>Net Impact Fee</b>
Single Family Detached	2.99	<b>\$149</b>
Townhouse	2.32	<b>\$133</b>
Duplex/Two Unit	2.67	<b>\$161</b>
Multifamily- 3+ Units	2.20	<b>\$151</b>
Manufactured Housing	1.88	<b>\$119</b>
<b>Non-Residential Per 1000 Sq. Ft.</b>		
Industrial		<b>\$154</b>
Commercial		<b>\$146</b>

The credit allowances that are included in the impact fee calculations in Table 5 were derived from the data in Table 6 below. The credited amount represents part of the remaining debt service to be paid on the police station portion of the existing Public Safety Facility. The purpose of the credit is to provide an offset for additional taxes to be paid by the fee-payer for that portion of facilities that are already utilized by existing development. Based on the

standards used in this analysis, about 84% of the ultimate capacity of the police station space is currently utilized. Therefore the credit calculation reflects 84% of the net present value of remaining bond payments on the police station portion of the facility. That net present value of future bond payments is then distributed across the entire Hooksett tax base as of 2001 to compute a tax rate equivalent per thousand valuation. That rate is then applied to the estimated average assessed value for newer housing units, and to a thousand square feet of industrial or commercial space respectively.

**Table 6 – Credits for Future Debt Service**

<b>DERIVATION OF IMPACT FEE CREDITS - PUBLIC SAFETY - POLICE</b>				
<b>POLICE DEPT PORTION OF EXISTING BUILDING</b>				
Police Dept Share of Costs @ 48%				
<b>84%</b> Of capacity utilized in base year - credit same percent				
<b>Future Payments - Credited</b>				
		Police Dept	Prorated on %	
	Principal & Interest	Share of Cost @	Capacity	
		48%	Already	
2003	\$169,855	\$81,530	\$68,312	
2004	\$163,760	\$78,605	\$65,860	
2005	\$157,665	\$75,679	\$63,409	
2006	\$151,570	\$72,754	\$60,958	
2007	\$145,475	\$69,828	\$58,506	
2008	\$139,380	\$66,902	\$56,055	
2009	\$133,285	\$63,977	\$53,604	
2010	\$127,190	\$61,051	\$51,153	NPV Future
2011	\$121,095	\$58,126	\$48,701	Pymts @ 6%
<b>Total</b>	<b>\$1,309,275</b>	<b>\$628,452</b>	<b>\$526,558</b>	<b>\$404,390</b>
Net Local Valuation 2001				\$740,054,246
Credit Per \$1000 Assessed Value				<b>\$0.55</b>
<b>Structure Type</b>		<b>Assessed Value</b>	<b>Credit</b>	
Single Family Detached		\$170,000	\$93	
Townhouse		\$100,000	\$55	
Duplex/Two Unit		\$100,000	\$55	
Multifamily- 3+ Units		\$50,000	\$27	
Manufactured Housing		\$60,000	\$33	
		<b>Assessed Value</b>	<b>Credit Amount</b>	
<b>Non Residential</b>		<b>Per Sq. Foot</b>	<b>Per 1000 Sq. Feet</b>	
Industrial Assessed Val/Sq. Ft.		\$50		
Commercial Assessed Val/Sq. Ft.		\$80		
Industrial Value -1000 Sq. Ft.		\$50,000	<b>\$27</b>	
Commercial Value-1000 Sq. Ft.		\$80,000	<b>\$44</b>	



## 2. Fire-Rescue Department Facilities and Staffing

The capital cost impact of new development on fire department public facilities has been estimated using two methods. The first is to estimate the total capital investment (existing and anticipated facilities and apparatus) that will be necessary to service Hooksett's year 2020 population and employment base. That capital value is then allocated according to the various demand sectors as of 2020.

The 20-year capital improvement program of the Fire-Rescue department and other sources were utilized to develop estimates of the current value of capital investment needed to service that demand. The second method uses the assumption most of the new facilities and apparatus planned in Hooksett, including several fire stations and associated equipment, are principally needed to serve the needs of future development. The recommended impact fee is then based on the average of these two approaches.

Table 7 below provides an estimate of the value per square foot of the Fire-Rescue portion of the existing Public Safety Building (Central Station), based on adjustments to its original construction costs in 1997.

**Table 7**

<b>Cost per Sq. Foot Estimated</b>	
<b>EXISTING PUBLIC SAFETY BUILDING - FIRE STATION PORTION</b>	
Construction Cost/Sq. Ft Fire Dept. at Safety Complex -1997	\$60.29
1997 Means Fire Sta. Base 14,000 (largest) s.f. adj to NH	\$74.16
2002 Means Fire Sta. Base 14,000 (largest) s.f. adj. To NH	\$92.34
Adjustment Factor to 2002	1.25
Cost Per Sq. Ft. Equiv. Space 2002	<b>\$75</b>

Table 8 below illustrates the estimated replacement cost of current facilities and equipment of the Fire Department apparatus and equipment housed at the Public Safety Center as well as the Station Number One in the Village are shown here. Vehicles that are to be retired during the planning period, represented by the Fire Department's twenty-year capital program, are not included in the facility cost allocation. For the Fire Department portion of the Safety Center, only the Fire Department portion of total building value is shown.

**Table 8 – Capital Value of Existing Facilities**

<b>PUBLIC SAFETY IMPACT FEE CALCULATIONS FOR FIRE-RESCUE</b>					
<b>EXISTING FACILITIES, APPARATUS AND PROPOSED IMPROVEMENTS</b>					
<b>FIRE DEPARTMENT</b>	Existing Buildings & Apparatus- Original Cost	Year Constructed or Acquired	Cost Adj. Source	Cost Adj. Factor	Estimated Replacement Cost (2002-03)
<b>Fire Dept. Portion of Safety Ctr</b>	\$1,301,902	1997	RS Means - Two Story Fire Station	1.24	\$1,619,550
Apparatus at Station					
Engine # 2	\$285,000	1998		6%/year	\$339,440
Engine #4 - Repl w/Ladder/Quint #2	\$114,891	1981			to be retired
Ladder/Quint #2 - Replaces Engine #4	---	Prop. 2003	CIP		\$700,000
Engine #5	\$98,761	1989		6%/year	\$223,289
Forestry #1	---	1953	CIP		\$59,200
Forestry #2	\$48,000	2002	CIP		\$48,000
Forestry #4	---	1953			retire
Special Haz-Mat District Vehicle	Purchased by multi-town district - not included in capital value basis for fee				
Car #1	\$29,000	1999	CIP + Equip. Allowance		\$40,000
Car #2	n/a	1995	CIP + Equip. Allowance		\$40,000
Car #3	n/a	1989	CIP + Equip. Allowance		\$40,000
Emergency Mgmt Mobile Generator	\$39,000	1999	Dept. Estimate		\$45,000
Fire Dept. Radio System	\$160,000	2000-2002	CIP		\$200,000
Large Diameter Hose - 5"	\$56,000	1999-2001	CIP		\$68,000
E-2 Rescue Tools		1992/1998	CIP		\$62,000
Cardiac Monitoring/Defibrillator	\$23,898	2000	CIP		\$58,000
Breathing Apparatus/Air Compressor		2002	CIP		\$68,000
SCBA Paks (30) Breathing Apparatus		1990	CIP		\$170,800
Computer System	\$68,500	2001		6% / Year	\$72,610
Rescue #1 Heavy Vehicle	---	2004 Proposed	CIP		\$575,000
Training Ground and Building		2002 Proposed	CIP		\$275,000
<b>TOTAL CENTRAL FACILITY-FIRE PORTION</b>					<b>\$4,703,889</b>
<b>Station # 1 (Village)</b>	Not Available	1994	Assessed val.		\$492,000
Apparatus at Station					
Aerial Ladder/Quint	\$587,000	2002	To be delivered Jan 2003		\$587,000
Engine #1	\$150,000	1985	CIP	6%/yr	\$450,000
Tanker #3	\$117,767	1981	CIP	6%/yr	\$400,356
Hose #1 - Retire w/Ladder/Quint #1 in place	\$130,000	1992	CIP		retired
Forestry #3 - eliminate	---	1963	CIP		retired
Utility/Cascade #1 - eliminate	---	1976	CIP		retired
Boat #1	---	1988	CIP		\$19,000
E-1 Rescue Tools	---	1992/1998	CIP		\$62,000
Sprinkler/Fire System	---	Proposed 2002	CIP		\$45,000
Vehicle exhaust ventilation system	---	Proposed 2002	CIP		\$41,500
<b>TOTAL STATION 1</b>					<b>\$2,096,856</b>
<b>TOTAL EXISTING FACILITIES</b>					<b>\$6,800,745</b>

The total capital value of existing facilities and equipment now available within the Fire-Rescue Department is estimated above at just over \$6.8 million. (See Table 8 above.) To help meet the demands of future growth several new stations are proposed. “Station 2” is proposed at Exit 10 and Route 3A where a large concentration of new commercial development is taking place. “Station 3” is proposed at a Manchester Sand and Gravel site on Route 3 (near the center of a future planned development of residential and commercial/industrial space). “Station 4” is

proposed in the Whitehall Road vicinity near where there additional residential growth and a new school are anticipated. Each of these stations would be located near centers of emerging growth and new development. The total new facility and capital equipment investment is estimated at about \$5.6 million. In total, the estimated capital investment value (existing and planned resources) for the Fire-Rescue Department needed to serve 20-year projected demand is estimated at a current value of just over \$12.4 million.

**Table 9 – New Facilities Proposed and Total Capital Investment To Meet 2020 Needs**

<b>PROPOSED NEW FACILITIES AND APPARATUS</b>	<b>Capital Cost</b>
<b>Station # 2 (2 Bays -Proposed - Exit 10/3A)</b>	\$1,400,000
Initial Apparatus at Station	
Aerial Ladder/Quint	\$725,000
Total Station #2	\$2,125,000
<b>Station # 3 (2 Bays -Proposed -Manchester Sand &amp; Gravel Site)</b>	\$1,100,000
Initial Apparatus at Station	
Ladder/Quint	\$650,000
Total Station #3	\$1,750,000
<b>Station # 4 (2 Bays - Proposed - Whitehall Rd Area)</b>	\$1,300,000
Initial Apparatus at Station	
Engine	\$450,000
Total Station #4	\$1,750,000
<b>Total New Facilities &amp; Capital Equipment Proposed</b>	<b>\$5,625,000</b>
<b>Existing Facilities &amp; Capital Equipment as of 2002-03</b>	<b>\$6,800,745</b>
<b>TOTAL CAPITAL INVESTMENT TO SERVE 2020 NEEDS</b>	<b>\$12,425,745</b>

The need for additional fire stations and apparatus reflects the Fire-Rescue Department’s anticipation of growth centers in Hooksett, and the need to protect existing and projected property development in these areas within a response time frame of 4-6 minutes. According to the Fire Chief, given the location of expected centers of new development the existing highway infrastructure and traffic volume will not permit the Department to achieve desired response times by relying solely on existing capital facilities and equipment. The Fire-Rescue Department’s performance objectives for response times are guided by the National Fire Protection Association standards under NFPA 1710. These recommended standards for response time were developed by NFPA on the basis of research indicating the optimal response time necessary to preclude high proportions of property destruction and loss of life. NFPA studies indicate that the rate of “fire propagation”, as a function of time and temperature rise, accelerates rapidly where initial response times exceed the desired 4-6 minute time frame. Data within NFPA 1710 illustrate that response times beyond this range greatly increase the likelihood that the majority or totality of a property will be destroyed by fire. Table 9 provides an estimate of the capital cost of new facilities and initial apparatus to be housed within them, based on the Fire-Rescue Department capital improvement program.

In estimating the cost that may be reasonably allocated to growth, the cost of purchasing one Quint (multi-function apparatus which provides an aerial ladder capability) has been excluded. This is one of the deficiencies identified in the ISO ratings for Hooksett, which indicated that there should be at least one aerial ladder type apparatus and a second as a reserve for that function. One Quint has been approved for purchase, and delivery is expected by January 2003 and is credited to the existing inventory of capital equipment. The cost of a second, or reserve ladder (or Quint) has been attributed as a cost that is attributable primarily to existing needs.

Credit allowances have been calculated on the basis of 100% of the remaining debt service on the fire station portion of the Public Safety Building plus the cost of one Quint (\$700,000). The credit allocation is shown in Table 10. Because virtually all of the fire-rescue portion of the Public Safety Building is currently utilized, 100% of the remaining debt service has been included within the credit allowance.

**Table 10**

<b>DERIVATION OF IMPACT FEE CREDITS - PUBLIC SAFETY - FIRE</b>			
<b>FIRE - RESCUE DEPARTMENT PORTION</b>			
Calendar Yr	Total Payment	Fire Dept Share @ 52%	
<b>100% of Capacity already utilized - Credit Total Future Payments</b>			
<b>Future Payments - Credited</b>			
	Principal & Interest	Fire Dept Share @ 52%	
2003	\$169,855	\$88,325	
2004	\$163,760	\$85,155	
2005	\$157,665	\$81,986	
2006	\$151,570	\$78,816	
2007	\$145,475	\$75,647	
2008	\$139,380	\$72,478	
2009	\$133,285	\$69,308	
2010	\$127,190	\$66,139	
2011	\$121,095	\$62,969	NPV Future Pymts @ 6%
<b>Total</b>	<b>\$1,309,275</b>	<b>\$680,823</b>	<b>\$522,863</b>
Other Credits for Deficiency - Cost of 1 Ladder (Quint)			\$700,000
Total Credited Amount			\$1,222,863
Net Local Valuation 2001			\$740,054,246
Credit Per \$1000 Assessed Value			<b>\$1.65</b>
Structure Type	Assessed Value	Credit	
Single Family Detached	\$170,000	\$281	
Townhouse	\$100,000	\$165	
Duplex/Two Unit	\$100,000	\$165	
Multifamily- 3+ Units	\$50,000	\$83	
Manufactured Housing	\$60,000	\$99	
		Assessed Value	Credit Per 1000 Sq. Ft.
Non-Residential			
Industrial Assessed Value Per S.F.		\$50	
Commercial Assessed Value Per S.F.		\$80	
Assessed Value - Industrial - 1000 Sq. Ft.		\$50,000	<b>\$83</b>
Assessed Value - Commercial - 1000 Sq. Ft.		\$80,000	<b>\$132</b>

Two methods have been used to estimate the per unit capital cost for fire-rescue services that may be reasonably attributed to new development. The first method divides the total capital investment required to serve year 2020 needs (existing and planned capital investment) by the

projected year 2020 service base. The second method divides only the planned capital investment (less the cost of an additional Quint) by the projected *growth* in the service base from 2000-2020. After credit allowances are computed, the net impact fee resulting from each method is expressed per dwelling unit for residential uses, and as a function of floor area amount for non-residential development. The average amount derived from these two methods is the recommended impact fee. (See Table 11 below.)

**Table 11 – Capital Cost Allocation and Impact Fee – Fire/Rescue**

	<b>Capital Investment Serving Year 2020 Demands</b>	<b>New Capital Investment Planned 2003 to 2020</b>
<b>FIRE-RESCUE FACILITIES COST</b>		
Total Capital Facilities Investment	<b>\$12,425,745</b>	<b>\$5,625,000</b>
Less Cost to Rectify Deficiency (Add 1 Ladder / Quint)	<b>n.a.</b>	<b>(\$700,000)</b>
Amount Allocated to Service Base	<b>\$12,425,745</b>	<b>\$4,925,000</b>
	Projected Share in	Projected Share
Allocation of Value to Demand Base	2020	of Growth
Residential Portion	63.3%	59.7%
Industrial Portion	7.0%	6.3%
Commercial Portion	29.7%	34.0%
Residential Share of Facility Cost	\$7,865,497	\$2,940,225
Industrial Share of Facility Cost	\$869,802	\$310,275
Commercial Share of Facility Cost	\$3,690,446	\$1,674,500
		Change From
Demand Base Supported by Capital Investment	Year 2020	2000-2020
Residential-Population	17,351	5,630
Non-Residential-Industrial Sq. Ft.	972,000	300,000
Non-Residential-Commercial Sq. Ft.	3,550,000	1,400,000
	Model A	Model B
Proportionate Capital Cost Assignment		
Residential Per Capita	\$453	\$522
Industrial Per 1000 Sq. Ft.	\$895	\$1,034
Commercial Per 1000 Sq. Ft.	\$1,040	\$1,196
<b>CREDIT SCHEDULE</b>		
	Assessed Val.	Credit Amount
Single Family Detached	\$170,000	\$281
Townhouse	\$100,000	\$165
Duplex/Two Unit	\$100,000	\$165
Multifamily- 3+ Units	\$50,000	\$83
Manufactured Housing	\$60,000	\$99
Industrial Per 1000 Sq. Ft.	\$50/s.f.	\$83 per 1000 Sq. Ft.
Commercial Per 1000 Sq. Ft.	\$80/s.f.	\$132 per 1000 Sq. Ft.

<b>Net Impact Fee Schedule: Fire-Rescue Facilities</b>				
<b>Residential Per Unit</b>	Persons Per Unit	<b>Method A</b>	<b>Method B</b>	<b>Average</b>
Single Family Detached	2.99	\$1,074	\$1,280	\$1,177
Townhouse	2.32	\$887	\$1,047	\$967
Duplex/Two Unit	2.67	\$1,045	\$1,229	\$1,137
Multifamily- 3+ Units	2.20	\$914	\$1,066	\$990
Manufactured Housing	1.88	\$753	\$883	\$818
<b>Non-Residential Per 1000 Sq. Ft.</b>				
Industrial		\$812	\$952	\$882
Commercial		\$907	\$1,064	\$986

After the application of credits for future debt service on existing facilities, the two methods indicate a supportable fire-rescue impact fee range of \$1,074-\$1,280 (average \$1,177) per unit for a single family detached home. For industrial space, the methods indicate a proportionate impact fee of \$812-\$952 (average \$882) per thousand square feet, and \$907 to \$1,064 (average \$986) per thousand square feet for commercial space. (See Table 11 above for model assumptions).

### E. Recommended Public Safety Impact Fee

NH RSA 674:21, V allows for the assessment of impact fees for public safety facilities. The recommended public safety impact fees for Hooksett, based on the assumptions in the foregoing methodology, are shown below in Table 12 below. The industrial and commercial fees have been converted to values per square foot of floor area. The fee for fire-rescue represents an average of the two methods described in the preceding section.

**Table 12**

<b>RECOMMENDED PUBLIC SAFETY IMPACT FEES - HOOKSETT NH</b>			
	<b>Police Dept.</b>	<b>Fire-Rescue</b>	<b>Total Public Safety</b>
<b>RESIDENTIAL PER UNIT</b>			
Single Family Detached	\$149	\$1,177	\$1,326
Townhouse	\$133	\$967	\$1,100
Duplex/Two Unit	\$161	\$1,137	\$1,298
Multifamily- 3+ Units	\$151	\$990	\$1,141
Manufactured Housing	\$119	\$818	\$937
<b>NON-RESIDENTIAL PER SQ. FT.</b>			
Industrial Per Square Foot	\$0.15	\$0.88	\$1.03
Commercial Per Square Foot	\$0.15	\$0.99	\$1.14

The residential impact fees should be assessed per dwelling unit using the schedule for the structure types shown, in which the fees are proportional to the number of persons per residential unit. For non-residential development the fees per square feet of building area would be applicable. The fees assessed for the police department should be segregated in a separate capital account that is distinct from the capital account for the fire-rescue department. Expenditures of impact fees should be limited to paying for the growth-related capital facility needs of each department from their respective capital accounts.

It should be noted that there is no single precise method by which the exact demands of residential and commercial and industrial development can be calculated on public safety facilities. However it is important to establish a rational and proportional method of allocation of capital costs based on reasonable expectations of growth. That is the purpose of the impact fee methodology set forth above.

Where developer contributions have already been made in advance of impact fees, it may be appropriate to waive all or part of the public safety impact fees otherwise due by an amount that reflects the value of the contribution. The Hooksett impact fee ordinance contains provisions that allow the Planning Board to consider waiver requests for all or part of an impact fee assessment and accept in lieu of a cash payment, a contribution of real property or facility improvements of equivalent value and utility to the public. The related contribution must be for capital costs of the same kind as that for which the impact fee has been assessed. The Planning Board would need to consider such waiver requests on a case-by-case basis within the terms provided in the ordinance, which also requires review and consent of the waiver by the Town Council.

## **F. Utilization of Impact Fees**

Under RSA 674: 21, V, impact fees may be used to fund the capital needs generated by new development in one of two ways: (1) it can accumulate impact fees to pay for anticipated capital needs in the future that are related to the demands of new development; or (2) it can use impact fees to recoup the cost of prior capital investments that it made in anticipation of such growth. The actual amount of impact fees received by the Town will be a function of the rate of growth. In most cases, there will be some need to advance public funds for the creation of new capital facilities, as impact fee accumulations may not be adequate to construct an entire facility when it is needed.

In the case of public safety capital improvements, there are a number of capital expenditures that could be supported, in whole or in part, by impact fee assessments. These include, but are not necessarily limited to:

- Acquisition of land for public safety facilities
- Design of new or expanded public safety buildings
- Construction and equipping of such buildings
- Acquisition of new capital equipment, vehicles or apparatus (except replacements)
- Payment of debt service on the above expenditures

Because there is remaining capacity in the police department portion of the Public Safety Building, police department impact fee collections could be used to offset remaining debt service on that facility. The fees could also be utilized to purchase new cruisers (not simply replacement vehicles) that are required by the department as more officers are added to the force.

For Fire-Rescue services, the likely use of impact fees will be to offset the construction and equipping of several new fire stations and related apparatus. The impact fees collected should be applied to the development costs of the new stations, and to new capital equipment that is added to the inventory beyond the apparatus need that has been attributed to existing or base year needs (i.e., a second ladder truck or Quint).

## **G. Updates to Impact Fee Assessment**

The cost of facilities and apparatus to be constructed or purchased in the future has been estimated at current value for the purposes of the impact fee assessment. In future updates of the impact fee, actual costs should be used to update these estimates wherever possible. For example, when actual construction costs are obtained for proposed fire department buildings and apparatus purchase, these actual costs can be substituted for the estimates in re-computing the fee. Periodically, the Town may wish to update the estimated replacement costs of various capital facilities utilized to develop this initial impact fee assessment.

The credit allowances incorporated into the impact fee formula may be updated as debt service on the existing Public Safety Building and the acquisition costs for the initial two Quints are paid. With the exception of the Quint now on order (to be delivered January 2003) and a second ladder or Quint recommended by the Department, all other new facilities their related capital equipment are attributable to serving new development. Since these new planned facilities and equipment are assumed to serve the needs of new development, debt service credit allowances need not be calculated.

As additional facilities are planned or added, and as this methodology is updated in future years, further consideration should be given to the ultimate service population and commercial/industrial base that can benefit from existing and proposed capital improvements. Changes in costs, capital needs estimates, and the service base can be updated in the model and the impact fee recalculated.