N.H. Coastal Zone Management Program
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SUMMARY REPORT

Power Plant Construction: WHAT DOES IT MEAN TO MY TOWN?

The Municipal Impacts of Construction
of the
Seabrook Nuclear Power Plant

BY THE
STRAFFORD ROCKINGHAM REGIONAL COUNCIL
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INTRODUCTION:

The construction of Seabrook Station is the largest construction project undertaken in southeastern New Hampshire since the construction of Pease Air Force Base during the 1950's. It is expected that 3,000 to 3,500 persons will be employed at the site when construction peaks late in 1979. Some of these individuals were not residents of New Hampshire prior to the start of construction. They have moved to New Hampshire to work at Seabrook and, for the purposes of this report, are called "in-migrants".

The new people that move to a community demand the same public services that are offered to the other residents of the community. Hence, that community has to expand its existing public services to accommodate these newcomers. This is what has occurred in the communities in the Strafford-Rockingham area to accommodate the residential growth associated with the construction of Seabrook Station.

This paper is a summary of a report prepared by the Strafford Rockingham Regional Council which focuses on the cost of providing municipal services to the workers and their families who have moved to the region to work at Seabrook Station.

METHOD:

Municipal costs are measured in terms of dollars expended and resources utilized. Increases in municipal expenditures are measured for education, water and sewer treatment, fire and police protection, solid waste management, road maintenance, medical and social services. Items that are not measured by municipal expenditures are also surveyed. These include the availability and price of housing, changes in residential land use, and impacts on local business.

The cost of providing municipal services to in-migrants is based upon statistical information describing the character of these individuals. Data on family income, education, age, race and occupation of in-migrants was obtained from the 1978 Rockingham Strafford Census Project.

Municipal expenditures for ten communities for the calendar year 1978 are surveyed. The surveyed communities are representative of all communities in the Strafford Rockingham Region in terms of the range of municipal services offered by the communities. The communities are Portsmouth, Dover, Hampton, Exeter, Epping, Stratham, Plaistow, Kensington, Northwood and New Durham. Costs of providing municipal services to in-migrant workers are then generalized to each community in the region based on the expenditures generated in the surveyed communities.

Property taxes, sewer and water fees, automobile and residence taxes collected by each municipality from in-migrants are not inventoried as part of the study, Obviously the costs reflected in the study would be to some degree mitigated by these revenues.

Seabrook Power Plant Employment Projections:

Table 1 indicates future employment requirements at the Seabrook construction site. It should be noted that actual employment at the site has been greater than the actual projections that were developed in 1978. It is expected that actual employment at the site will continue to run higher than the projected employment, possibly greater than 3500 by December, 1979.

TABLE 1

Seabrook Power Plant Employment Projection

Date	Workers
June 1978	1,816
December 1978	2,392
June 1979	2,735
December 1979	2,995
June 1980	2,980
December 1980	2,885
June 1981	2,719
December 1981	2,515
June 1982	1,864
December 1982	1,453
June 1983	1,203
December 1983	965
June 1984	675
December 1984	60

Source: Public Service Co. of N.H.

Not all of these workers are residents of the Strafford-Rockingham region. At any one time it is expected that 67% of the workers will be residents of New Hampshire, with 49% residents of the Strafford-Rockingham region. It is estimated that of the workers residing in the Strafford-Rockingham region 28% were not residents of New Hampshire prior to the start of construction. These percentages are based on Seabrook Stations workers census data taken during June, 1978.

Most of the in-migrants and their families (average size 3.03) have settled in communities near the construction site where housing is available. Communities such as Exeter, Hampton, Seabrook and Portsmouth have experienced a large share of the residential growth associated with the construction of Seabrook Station.

Table 2 indicates the number of power plant workers, in-migrant workers and in-migrant family members by community in the Strafford-Rockingham region on June 20, 1978.

TABLE 2

Estimated Number of Seabrook Power Plant Workers by Town of Residence as of June 20, 1978

How to read figures: "Number of Workers at Plant" refers to the number of people estimated to live in each town who are working at Seabrook Station. Of this number, some have moved to the town since 1976. They are listed under "Number of In-Migrant Workers". "Total Number of In-Migrants" assumes an average of 3.03 persons per family.

Town	Number of Workers at Plant	Number of In-Migrant Workers	Total Number of In-Migrants
Brentwood	8	2	6
E. Kingston	5	1	3
Epping	8	2	6
Exeter	57	27	82
Fremont	3	1	3
Greenland	6	2	6
Hampton	79	28	85
Hampton Falls	5	1	3
Kensington	3	3	9
New Castle	3	1	3
Newfields	2	1	3
Newington	2	1	3
North Hampton	11	3	9
Portsmouth	117	28	85
Rye	18	5	15
Seabrook	100	28	85
South Hampton	2	1	3
Stratham	9	2	6
Atkinson	9	2	6
Danville	10	3	9
Hampstead	6	2	6
Kingston	15	4	12
Newton	12	3	9
Plaistow	11	3	9

(cont'd)

Town	Number of Workers At Plant	Number of In-Migrant Workers	Total Number of In-Migrants
Salem	48	13	49
Sandown	3	1	3
Windham	9	2	6
Barrington	16	4	12
Dover	90	10	30
Durham	28	8	24
Farmington	17	5	15
Lee	5	1	3
Madbury	3	1	3
Middleton	2	1	3
Milton	9	2	6
New Durham	7	2	6
Northwood	6	2	6
Newmarket	16	4	12
Nottingham	7	2	6
Rochester	80	22	67
Rollinsford	8	2	6
Somersworth	40	11	33
Strafford	4	1	3
TOTAL	883	247	746

(Source: Rockingham-Strafford Census Project; NH Department of Employment Security; Public Service Company of NH; NH Office of State Planning)

The remainder of the report describes and analyzes the impact of the 746 in-migrants.

SOCIO-ECONOMIC CHARACTERISTICS

Size of Family

Comparing average family size of in-migrant workers to that of local Seabrook workers indicates that local workers have larger families than in-migrants. The difference is not significant where the average family size of in-migrant workers is 3.03, while for local workers it is 3.24

Age Impacts

The median age of in-migrant workers and their families is 26 years. This is younger than the median age of the population in the Strafford-Rockingham area. It is estimated that there are an average of 1.03 students associated with each in-migrant worker. Based on this estimate, 255 students have been added to the region's school systems as a result of the residential in-migration associated with the construction of Seabrook Station.

There are very few elderly individuals 65 years and older that are in-migrating to New Hampshire as a result of the construction of Seabrook Station. In fact, only one-half of one percent, or 4 of the 746 in-migrants are 65 years or older. Based on this information, it can be concluded that the construction of Seabrook will have little or no impact on private and public programs for the elderly.

Race

The in-migrants are predominantly white. Only 3.3%, or 25 of the 746 in-migrants associated with the construction are black. No other races were identified in the survey of power plant workers.

Work Skills

Many of the in-migrant workers have either professional, technical or managerial skills. This was expected since the professional-technical requirements of the labor force required to build a nuclear power plant were not to be found in the local labor force prior to the start of construction. This influx is significant in economic terms, with the professional worker demanding a higher wage than construction laborers.

In-migrant workers are not limited to the professional, technical and managerial skill category. Clerks, machine trades, benchwork and structural workers have also moved to the region to work at Seabrook Station. Of all

in-migrants surveyed, 40% considered themselves to be in the professional category, 16.7% in the clerical category, and 43.3% as various kinds of laborers.

Years of Education

As a group, in-migrants associated with the construction of Seabrook Station have completed more years of formal education when compared to all residents of the region. In-migrants also have a higher percentage of individuals with some formal education beyond the high school level as compared to all of the region's residents. This information is significant in that well-educated individuals tend to be well-paid. This statement is further substantiated when family incomes are examined.

Housing

Housing occupied by in-migrant workers is essentially the same as the housing that is occupied by those workers who were residents of the region prior to the start of construction at Seabrook Station, and housing occupied by residents of the region as a whole. That is, 60% of in-migrant families are occupying single family residences, 33% are occupying multi-family units and 7% mobile home units.

Because of the diversity of housing types occupied by in-migrants and their small numbers, it is apparent that the displacement of low income individuals has been minimal. The construction of Seabrook Station has increased the demand for all types of housing in the Strafford-Rockingham area, an area already experiencing a tight housing market. According to the State Planning Office, 3,424 housing units were constructed in the region during the two-year period, 1976-1977. Assuming each in-migrant worker demands one housing unit, the increase in demand for housing in the Strafford-Rockingham region directly attributable to the construction of Seabrook Station is 247 housing units. This amounts to 7.2% of the housing constructed in 1976 and 1977.

Approximately 65% of the in-migrant workers owned their housing units. To the extent that home ownership reflects commitment, the high percentage of owner-occupied housing may indicate that in-migrant residents have become an integral part of the community.

Income Level

In-migrants household incomes appear to be significantly higher than that of local Seabrook workers as well as all of the region's households. Survey results indicate that in-migrant median household income for 1978 is $21,667 while local workers median income is $16,508. Median household incomes for all families in each of the surveyed communities is presented in Table 3.

TABLE 3

MEDIAN HOUSEHOLD INCOME BY COMMUNITY

Community	Median Household Income
New Durham	$ 9,629
Northwood	10,341
Portsmouth	10,472
Dover	10,925
Epping	11,286
Exeter	11,617
Hampton	14,882
Kensington	15,595
Plaistow	16,361
Stratham	17,049

(Source: Strafford Rockingham Regional Council; Rockingham-Strafford Census Project)

MUNICIPAL IMPACTS

Municipal revenues as well as costs are generated when people move into a community. Property taxes, residence taxes, sewer and water fees, as well as state and federal transfer payments are generated when there are additions to a community's population. In turn, costs are incurred when municipalities provide services to the new population.

The cost of providing municipal services to in-migrant families is the focus of this section. Municipal services surveyed in detail are: education, water and sewage treatment, fire and police protection, road maintenance, solid waste management, medical and social services. Land use and open space impacts are also surveyed even though monetary costs are not generated.

Education

It is estimated that there are 255 additional students enrolled in the region's public and private schools as a result of the construction of Seabrook Station. Education represents the largest expense in each of the communities surveyed in terms of Seabrook-induced growth. Per student cost varies from $1,441 in Hampton to $1,090 in Epping. The cost of educating the in-migrant population in each of the surveyed communities is summarized in the Appendix, Table A.

Water

Municipal water represents a cost to those communities who provide it. Of the surveyed communities, only Portsmouth, Exeter and Dover provide municipal water service. A private

company serves Hampton, hence it is not included as a municipal cost. Epping has a municipal water system, but there have been no new hookups to the system in the past few years.

In those communities that do not provide water, the cost is borne by the individual homeowner. Communities that do not currently provide water will not be induced to develop a system as a result of Seabrook related development because the demand for water induced by the residential development is not of sufficient magnitude.

The cost of providing municipal water to the in-migrant families is summarized in the Appendix, Table B.

Sewage Treatment

Of the communities that are surveyed, municipal sewage treatment is provided only in the communities of Hampton, Portsmouth, Exeter and Dover. Epping has a municipal system, but, as in the case with their water system, there have been no new connections in the past few years. Hence, in-migrants are expected to have no impact on Epping's sewage system.

In communities that do not provide public sewer, the cost of sewage disposal is borne by the individual homeowner. Those communities that do not currently provide public sewage disposal will not be induced to do so as a result of Seabrook related development since the demand induced by residential development is not of a sufficient magnitude.

The cost of providing public sewage to the in-migrant population is summarized by community in the Appendix, Table C.

Fire Protection and Police Protection

Each community surveyed provides fire and police protection of some sort. Smaller communities usually utilize volunteer manpower, while larger communities employ professional workers. Hence, the cost of providing service varies. The cost of providing fire protection to in-migrant families is summarized by community in the Appendix, Table D, while the same for police protection is presented in the Appendix, Table E.

Municipal Road Maintenance

Road maintenance is provided in all of the surveyed communities. The costs of major overhaul or construction is not taken into consideration.

Maintenance costs associated with the project have increased because of two reasons. First, the in-migrant population has generated additional traffic on the towns' current road network, resulting in additional wear and tear. Secondly, communities have experienced additions to their road network as a result of new housing and subdivisions. The community is responsible for maintaining the road once it is built, hence increasing road maintenance costs for the community.

The increase in each surveyed community's road maintenance costs as a result of the residential development induced by Seabrook is summarized in the Appendix, Table F.

Solid Waste Management

Currently, each community in the region has its own solid waste management program. The residential development induced by Seabrook Station has increased the cost of disposal in each of the region's communities. These costs will increase in the future as the cost of disposal increases. The increase in the cost of municipal solid waste management programs induced by residential development associated with the construction of Seabrook Station is summarized in the Appendix, Table G.

Medical - Visiting Nurses

Visiting nurse associations in the region are subsidized by local tax dollars. The subsidy varies anywhere from $1.00 to $1.25 per person per community. The increase in local subsidies as a result of in-migrant population is summarized in the Appendix, Table H.

Social Services

The demographic analysis indicates that the in-migrant Seabrook Station population are not and will not likely be primary receivers of social services financed by local tax dollars. As a result, no direct cost to communities is expected.

Land Uses: Residential, Commercial and Industrial

In-migrant workers have been occupying a variety of housing types, the majority being single family units. Since the start of construction at Seabrook Station, most residential construction in the region has been single family dwellings. Based on these two observations, the land use analysis assumes that the primary impact of the construction of Seabrook has been single family units.

Because the number of housing units occupied by each in-migrant in each community is small, the land utilized is not large. The increase in land use induced by the residential development associated with Seabrook Station is summarized in Appendix, Table I.

There are no accurate measures of increases in commercial or industrial land uses related to Seabrook Station construction. The population growth attributable to the construction of Seabrook Station does not represent a population increase of a large enough magnitude to project increased commercial and industrial land use. Clearly, existing commercial establishments will have more customers because there are more people to be served; however, to project increased commercial development on a town-by-town basis would be misleading given the absence of data that indicates new commercial construction based solely on Seabrook Station construction.

In terms of industrial land use, no evidence exists that Seabrook Station has had any impact. In fact, an argument could be made that the local labor pool has been so depleted by Seabrook construction that it has discouraged some new industry to locate within the region.

Open Space

As indicated in the population study, the in-migrant population have distributed themselves fairly evenly. This has resulted in no undue pressure on any one recreational facility or open space area. However, since construction has increased the region's population, it has placed added demands on existing open and recreational areas.

MUNICIPAL IMPACTS BY EACH COMMUNITY

The cost of providing municipal services to in-migrant families was calculated for each community in the Strafford Rockingham region for the year 1978. The costs of providing service are highest where there are the greatest concentration of in-migrant population. These communities are Portsmouth at $55,368, Hampton and Seabrook each at $53,368, and Exeter at $46,062. The cost for the entire Strafford Rockingham region amounts to $408,112. Individual community costs are summarized in Table 4.

TABLE 4

ESTIMATED IMPACT ON MUNICIPAL COSTS BY IN-MIGRANT FAMILIES BY COMMUNITY, 1978

(Benchmark communities are noted by *)

Community	Municipal Service Unit Cost Per Family	In-Migrant Families	Total Cost of Municipal Services
Brentwood	$1,485	2	$2,970
E. Kingston	1,485	1	1,485
Epping*	1,205	2	2,410
Exeter*	1,706	27	46,062
Fremont	1,485	1	1,485
Greenland	1,485	2	2,970
Hampton*	1,906	28	53,368
Hampton Falls	1,367	3	1,367
Kensington*	1,367	3	4,100
New Castle	1,977	1	1,977
Newfields	1,205	1	1,205
Newington	1,205	1	1,205
North Hampton	1,485	3	4,455
Portsmouth*	1,977	28	55,368
South Hampton	1,367	1	1,367
Stratham*	1,423	2	2,846
Atkinson	1,326	3	3,966
Danville	1,485	1	1,485
Hampstead	1,485	2	2,970
Kingston	1,485	4	5,940
Newton	1,485	3	4,455
Plaistow*	1,527	3	4,581
Salem	1,476	13	19,188
Sandown	1,326	1	1,326
Windham	1,326	2	2,652
Barrington	1,326	4	5,304
Dover*	1,476	10	14,769
Durham	1,706	8	13,648
Farmington	1,326	5	6,630
Lee	1,326	1	1,326
Rye	1,706	5	8,530
Seabrook	1,906	28	53,368

Community	Municipal Service Unit Cost Per Family	In-Migrant Families	Total Cost of Municipal Services
Madbury	$1,326	1	$ 1,326
Middleton	1,483	1	1,483
Milton	1,483	3	4,449
New Durham*	1,483	2	2,966
Northwood*	1,326	2	2,652
Newmarket	1,205	4	4,820
Nottingham	1,326	2	2,652
Rochester	1,476	22	32,472
Rollinsford	1,476	2	2,952
Somersworth	1,476	11	16,236
Strafford	1,326	1	1,326
TOTAL		247	$408,112

(Source: Strafford-Rockingham Regional Council)

Municipal costs are also estimated for the period of peak employment, 1980. At the time these costs were calculated, it was expected that 2995 workers would be employed at the construction site. It is expected that in-migrant population will continue to grow, and peak at this time. It is expected that municipal costs of providing services will amount to $672,587 for the entire region. Communities where costs will be the largest are Portsmouth at $90,942, Hampton and Seabrook each at $87,676, and Exeter at $76,770. Individual community costs are presented in Table 5.

Also significant to note is the unit cost of delivering municipal services to each family in the surveyed communities. The municipal costs that are developed do not include those incurred as a result of capital expenditures such as new classrooms or extended sewer lines. Unit costs differed by community because of the amount of services delivered.

The per-family costs of services by community are as follows: Hampton - $1,906; Kensington - $1,367; Portsmouth - $1,977; Exeter - $1,706; Epping - $1,205; Plaistow - $1,527; Stratham - $1,423; Dover - $1,476; Northwood - $1,326; and New Durham - $1,483.

This information can be used by local planners in evaluating the costs to a community of residential development.

TABLE 5

ESTIMATED IMPACT ON MUNICIPAL COST BY IN-MIGRANT FAMILIES BY COMMUNITY, PEAK EMPLOYMENT AT SEABROOK STATION (1980)

(Benchmark communities are noted by *)

Community	Municipal Service Unit Cost Per Family	In-Migrant Families	Total Cost Municipal Services (a)
Brentwood	$1,485	3	$4,455
E. Kingston	1,485	2	2,970
Epping*	1,205	3	3,615
Exeter*	1,706	45	76,770
Fremont	1,485	2	2,970
Greenland	1,485	3	4,455
Hampton*	1,906	46	87,676
Hampton Falls	1,367	2	2,734
Kensington*	1,367	5	6,835
New Castle	1,977	2	3,954
Newfields	1,205	2	2,410
Newington	1.205	2	2,410
North Hampton	1,485	5	7,425
Portsmouth*	1,977	46	90,942
Rye	1,706	8	13,648
Seabrook	1,906	46	87,676
South Hampton	1,367	2	2,734
Stratham*	1,423	3	4,269
Atkinson	1,326	5	6,630
Danville	1,485	2	2,970
Hampstead	1,485	3	4,455
Kingston	1,485	7	10,395
Newton	1,485	5	7,425
Plaistow*	1,527	5	7,635
Salem	1,476	21	30,996
Sandown	1,326	2	2,652
Windham	1,326	3	3,978
Barrington	1,326	7	9,282
Dover*	1,476	17	25,092
Durham	1,706	13	22,178
Farmington	1,326	8	10,608
Lee	1,326	2	2,652

Community	Municipal Service Unit Cost Per Family	In-Migrant Families	Total Cost Municipal Services
Madbury	$1,326	2	$ 2,652
Middleton	1,483	2	2,966
Milton	1,483	3	4,449
New Durham*	1,483	3	4,449
Northwood*	1,326	3	3,978
Newmarket	1,205	7	8,435
Nottingham	1,326	3	3,978
Rochester	1,476	36	53,136
Rollinsford	1,476	3	4,428
Somersworth	1,476	18	26,568
Strafford	1,326	2	2,652
TOTAL		409	$672,587

(a) Figures are in 1978 dollars)

(Source: Strafford-Rockingham Regional Council)

Regional Business: Employment Multiplier

A survey of economic literature indicates that an employment multiplier of 1.7 is appropriate for the Strafford-Rockingham region as a result of the construction of Seabrook Station. In other words, for each ten jobs at Seabrook Station, another seven jobs are created in the local economy.

The total employment impact can be measured by multiplying total in-migrant employment at Seabrook Station (247) times the multiplier. This results in 420 additional jobs in the region created by the construction of Seabrook Station.

This estimate of total employment impact is extremely conservative. As mentioned previously, 883 jobs have been directly created for the area's residents as a result of the construction of Seabrook Station. Some of these residents occupied other jobs in the region prior to the start of construction, for others their job at Seabrook represents their first job within the region. Therefore, the direct employment impact actually falls somewhere between 247 and 883.

If we used 883 workers as the direct employment impact, the total employment impact would be:

883 X 1.7 = 1,501 additional jobs in region created by Seabrook Station.

The question of how many of these new jobs were filled by in-migrants and how many were filled by local residents is beyond the scope of the study. Therefore, the municipal impacts of the secondary employment effects created by the construction of Seabrook Station can not be addressed. It is important to recognize that the estimates of municipal impacts indicated elsewhere in the report can be considered conservative since they do not include the effects of secondary employment and any resulting in-migrant workers moving to the region to fill secondary jobs.

Tourism and Commercial Fishing

The coastal tourist industry is centered in the Hampton Beach and Seabrook area on New Hampshire's coastline. The Southeastern New Hampshire Regional Planning Commission has estimated that 25,900 tourists visit the Hampton and Seabrook Beach area per day during the summer. The actual construction site is located on the opposite side of the Hampton-Seabrook marsh from the beaches. The only evidence that tourists may have of the construction site are: (1) large cranes extending into the skyline which can be viewed from Hampton-Seabrook beaches; (2) bright lights at the construction site which can be viewed for miles; and (3) the docking facilities constructed by Public Service Company in Seabrook Harbor.

It is apparent that these facilities have had no impact on the tourist trade in the beach area. There have been no noticeable decreases in the tourist trade as a result of the visual changes in landscape at the beach area. Howie Leonard, director of the Hampton Beach Chamber of Commerce, reports that visitors have inquired to him about the presence of these facilities. But, to his knowledge, no one has left or not come to the beach area because of the presence of construction equipment. The Chamber of Commerce receives an occasional letter concerning Seabrook Station, but, in general, tourists' attitudes have not changed because of the construction.

Traffic congestion at the entrance to the plant, located at NH Route 107 (NH 107) and US Route 1 (US 1) may have had some impact on the tourist trade. This route is used by some tourists coming from the south on Interstate Route 95 (I-95) in order to avoid the toll at the NH Route 51 (NH 51) exit off I-95. To mitigate this problem, the Chamber of Commerce recommends to travelers in its promotions of the Hampton Beach area to use the NH 51 exit off I-95. NH 51 provides a direct access to the beach. Leonard feels that the traffic problem at the entrance to the plant has had little impact on the Hampton and Seabrook tourist industry.

Another apparent impact of the construction of Seabrook Station has been the increase in winter rentals in the beach areas along New Hampshire's coastline by construction workers at the site. The beneficiaries of this activity are the seasonal homeowners along

New Hampshire's coastline, the rental agents and some of the seasonal businesses on the Seacoast. The increase in winter rentals may have increased the price of rentals, but it does not appear to have induced additional construction of seasonal homes. The apparent effect of construction workers on seasonal businesses have been minimal. Mr. Leonard reports that a few more seasonal businesses have stayed open year round than prior to construction. While none of these additional openings can be directly attributed to the construction of the power plant, the presence of additional people in the coastal area during the offseason has certainly helped business.

The commercial fishing industry has been affected in an indirect manner by the construction of Seabrook Station. Morrison and Knudsen company have been using space along the Piscataqua River in Newington and Portsmouth for the storage of materials. They have been shipping some of this material by barge from Portsmouth to Seabrook. When this activity first started, some lobster traps were damaged in the shipping area between the sites. Morrison and Knudsen officials met with local fishermen, and arrangements were made to avoid this problem. Since then, there have been no reports of Morrison-Knudsen barges damaging lobster traps.

The Hampton Harbor Master, Fred Clews, Jr., has reported that there have been no problems between construction activity across from Hampton-Seabrook Harbor and commercial fishing originating in the harbor. There has been no competition between the two activities for berthing space within the harbor.

The construction of the pier by Public Service Company on the Seabrook side of the harbor has the potential to be used as a commercial fishing pier, once its use as a receiving area for power plant materials is completed. Local and state officials have been looking into this possibility.

Conclusion

It has been shown in this report that the construction Seabrook Station has contributed to a portion of the residential growth in this region.

At the same time, municipalities are finding it increasingly difficult to cope with the problems associated with population growth. It follows that the construction of the power plant has contributed to these problems, but is in no way the only contributor to the region's growth. In fact, these problems would still exist even if Seabrook Station were not constructed.

The value of this study lies not only in the fact that it evaluates present and future Seabrook Station related residential development, but also that the data generated in this report can be used in evaluating the municipal impacts, monetary as well as non-monetary, of all residential development within the region.

APPENDIX

Table A

IMPACT OF IN-MIGRANT WORKERS AT SEABROOK STATION ON EDUCATIONAL COST, CROSS-SECTION OF COMMUNITIES IN THE STRAFFORD-ROCKINGHAM REGION (1978)

(1.03 X Families)

COMMUNITY	IN-MIGRANT FAMILIES	IN-MIGRANT STUDENTS	COST/ STUDENT	TOTAL COSTS
Hampton	28	29	$1,441.41	$41,801
Kensington	3	3	1,242.00	3,726
Portsmouth	28	29	1,391.83	40,363
Exeter	27	28	1,255.00	35,140
Epping	2	2	1,090.38	2,181
Plaistow	3	3	1,318.75	3,956
Stratham	2	2	1,096.11	2,192
Dover	10	10	1,095.73	10,957
Northwood	2	2	1,149.00	2,298
New Durham	2	2	1,251.00	2,502

(Source: Strafford-Rockingham Regional Council)

Table B

IMPACT OF IN-MIGRANT WORKERS AT SEABROOK STATION ON MUNICIPAL WATER SERVICE, CROSS-SECTION OF COMMUNITIES IN THE STRAFFORD-ROCKINGHAM REGION (1978)

COMMUNITY	IN-MIGRANTS	PER CAPITA RESIDENTIAL WATER DEMAND/DAY (Gals.)	COST/ 1,000 GALS.	TOTAL COST
Hampton	85	N/A*	N/A	0
Kensington	9	N/A	N/A	0
Portsmouth	85	108	$ .950	$3,183
Exeter	82	90	.796	2,144
Epping	6	N/A	N/A	0
Plaistow	9	N/A	N/A	0
Stratham	6	N/A	N/A	0
Dover	30	99	.680	737
Northwood	6	N/A	N/A	0
New Durham	6	N/A	N/A	0

*N/A: Service not available in community

(Source: Strafford-Rockingham Regional Council)

Table C

IMPACT OF IN-MIGRANT WORKERS AT SEABROOK STATION ON MUNICIPAL SEWAGE SERVICE, CROSS-SECTION OF COMMUNITIES IN THE STRAFFORD-ROCKINGHAM REGION

(1978)

COMMUNITY	IN-MIGRANTS	GALS. EFFLUENT/ DAY*	COST/1,000 GALS/ YEAR	TOTAL COST
Hampton	85	8,500	$ .740	$2,296
Kensington	9	N/A	N/A	0
Portsmouth	85	8,500	.910	2,823
Exeter	82	8,200	.280	838
Epping	6	N/A	N/A	0
Plaistow	9	N/A	N/A	0
Stratham	6	N/A	N/A	0
Dover	30	3,000	.630	737
Northwood	6	N/A	N/A	0
New Durham	6	N/A	N/A	0

N/A: Service not available in community

* : 100 gallons per day multiplied times in-migrants

(Source: Strafford-Rockingham Regional Council)

Table D

IMPACT OF IN-MIGRANT WORKERS AT SEABROOK STATION ON MUNICIPAL FIRE PROTECTION, CROSS-SECTION OF COMMUNITIES IN THE STRAFFORD-ROCKINGHAM REGION

(1978)

COMMUNITY	IN-MIGRANTS	PER CAPITA COST, FIRE PROTECTION	TOTAL COST
Hampton	85	$31.53 (a)	$2,680
Kensington	9	6.44	58
Portsmouth	85	31.58	2,684
Exeter	82	19.48	1,597
Epping	6	3.78	23
Plaistow	9	6.36	57
Stratham	6	6.19	37
Dover	30	26.64	799
Northwood	6	5.49	33
New Durham	6	9.53	57

(a): Takes into account summer population

(Source: Strafford-Rockingham Regional Council)

Table E

IMPACT OF IN-MIGRANT WORKERS AT SEABROOK STATION ON MUNICIPAL POLICE PROTECTION

CROSS-SECTION OF COMMUNITIES IN THE STRAFFORD-ROCKINGHAM REGION

(1978)

COMMUNITY	IN-MIGRANTS	PER CAPITA COST, POLICE PROTECTION	TOTAL COST
Hampton	85	$32.89 (a)	$2,796
Kensington	9	5.63	51
Portsmouth	85	35.22	2,993
Exeter	82	29.31	2,403
Epping	6	15.10	91
Plaistow	9	18.96	171
Stratham	6	16.72	100
Dover	30	25.56	767
Northwood	6	7.62	46
New Durham	6	31.82	191

(a): Takes into account summer population

(Source: Strafford-Rockingham Regional Council)

Table F

IMPACT OF IN-MIGRANT WORKERS AT SEABROOK STATION ON MUNICIPAL ROAD MAINTENANCE, CROSS-SECTION OF COMMUNITIES IN THE STRAFFORD-ROCKINGHAM REGION

(1978)

COMMUNITY	IN-MIGRANT FAMILIES	ROAD FRONTAGE NEW RESIDENTS	ADDITIONS TO TOWN ROAD NETWORK (Ft.)	COST/FOOT/ROAD MAINTENANCE (Dollars)	TOTAL COST
Hampton	28	125	3,500	.927	$3,245
Kensington	3	313	939	.267	251
Portsmouth	28	100	2,800	.891	2,494
Exeter	27	130	3,510	.975	3,423
Epping	2	200	400	.253	101
Plaistow	3	150	450	.824	373
Stratham	2	209	418	1.19	497
Dover	10	200	2,000	.362	724
Northwood	2	295	590	.430	255
New Durham	2	295	590	.309	182

(Source: Strafford-Rockingham Regional Council)

Table G

IMPACT OF IN-MIGRANT WORKERS AT SEABROOK STATION ON MUNICIPAL SOLID WASTE MANAGEMENT, CROSS-SECTION OF COMMUNITIES IN THE STRAFFORD-ROCKINGHAM REGION

(1978)

COMMUNITY	IN-MIGRANT FAMILIES	WASTE GENERATED/ FAMILY/WEEK (lbs.)	TOTAL TONS ALL IN-MIGRANTS PER YEAR	COST/ TON/ YEAR	TOTAL COST
Hampton	28	60.30	43.90	$10.30	$452
Kensington	3	43.23	3.37	1.12	4
Portsmouth	28	60.30	43.90	16.34	717
Exeter	27	60.30	42.33	10.13	428
Epping	2	43.23	2.25	3.28	7
Plaistow	3	60.30	3.37	4.96	23
Stratham	2	43.23	2.25	6.13	13
Dover	10	60.30	15.68	9.67	153
Northwood	2	43.23	2.25	5.61	13
New Durham	2	43.23	2.25	11.99	27

(Source: Strafford-Rockingham Regional Council)

Table H

IMPACT OF IN-MIGRANT WORKERS AT SEABROOK STATION ON MUNICIPAL MEDICAL EXPENSES (VISITING NURSES), CROSS-SECTION OF COMMUNITIES IN THE STRAFFORD-ROCKINGHAM REGION

(1978)

COMMUNITY	IN-MIGRANTS	PER CAPITA ASSESSMENT VISITING NURSES	TOTAL COST
Hampton	85	$1.00	$ 85
Kensington	9	1.15	10
Portsmouth	85	1.25	106
Exeter	82	1.15	94
Epping	6	1.15	7
Plaistow	9	None	0
Stratham	6	1.15	7
Dover	30	1.00	30
Northwood	6	1.00	6
New Durham	6	1.00	6

(Source: Strafford-Rockingham Regional Council)

Table I

IMPACT OF IN-MIGRANT WORKERS AT SEABROOK,
INCREASE IN RESIDENTIAL LAND USE (1978)

COMMUNITY	IN-MIGRANT FAMILIES	ACRES PER RESIDENTIAL FAMILY UNIT	TOTAL ACRES
Hampton	28	.34	9.52
Kensington	3	1.50	4.50
Portsmouth	28	.46	12.88
Exeter	27	.39	10.53
Epping	2	.90	1.80
Plaistow	3	.69	2.07
Stratham	2	1.00	2.00
Dover	10	.79	7.90
Northwood	2	2.00	4.00
New Durham	2	2.00	4.00

(Source: Strafford Rockingham Regional Council)

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