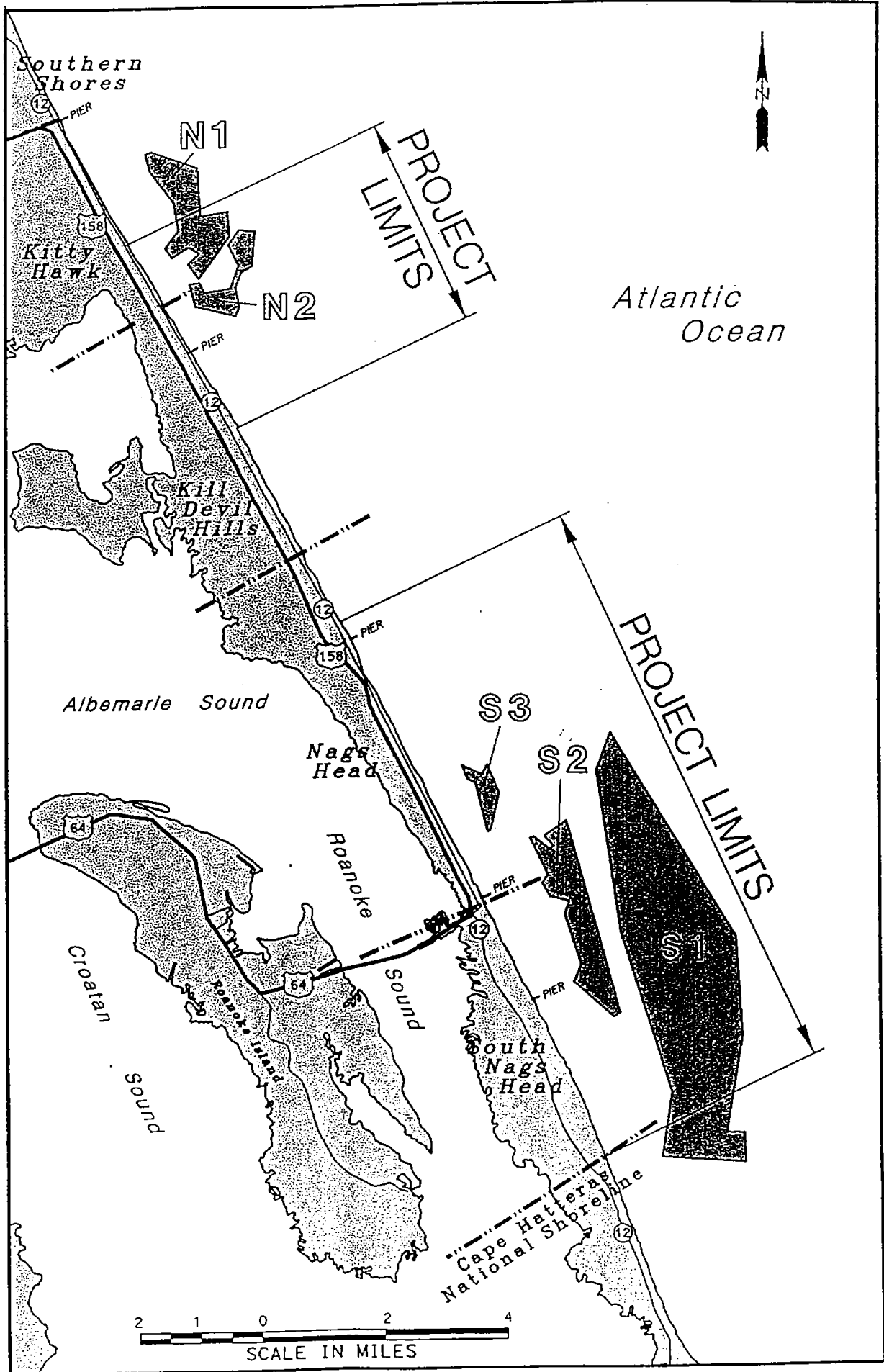
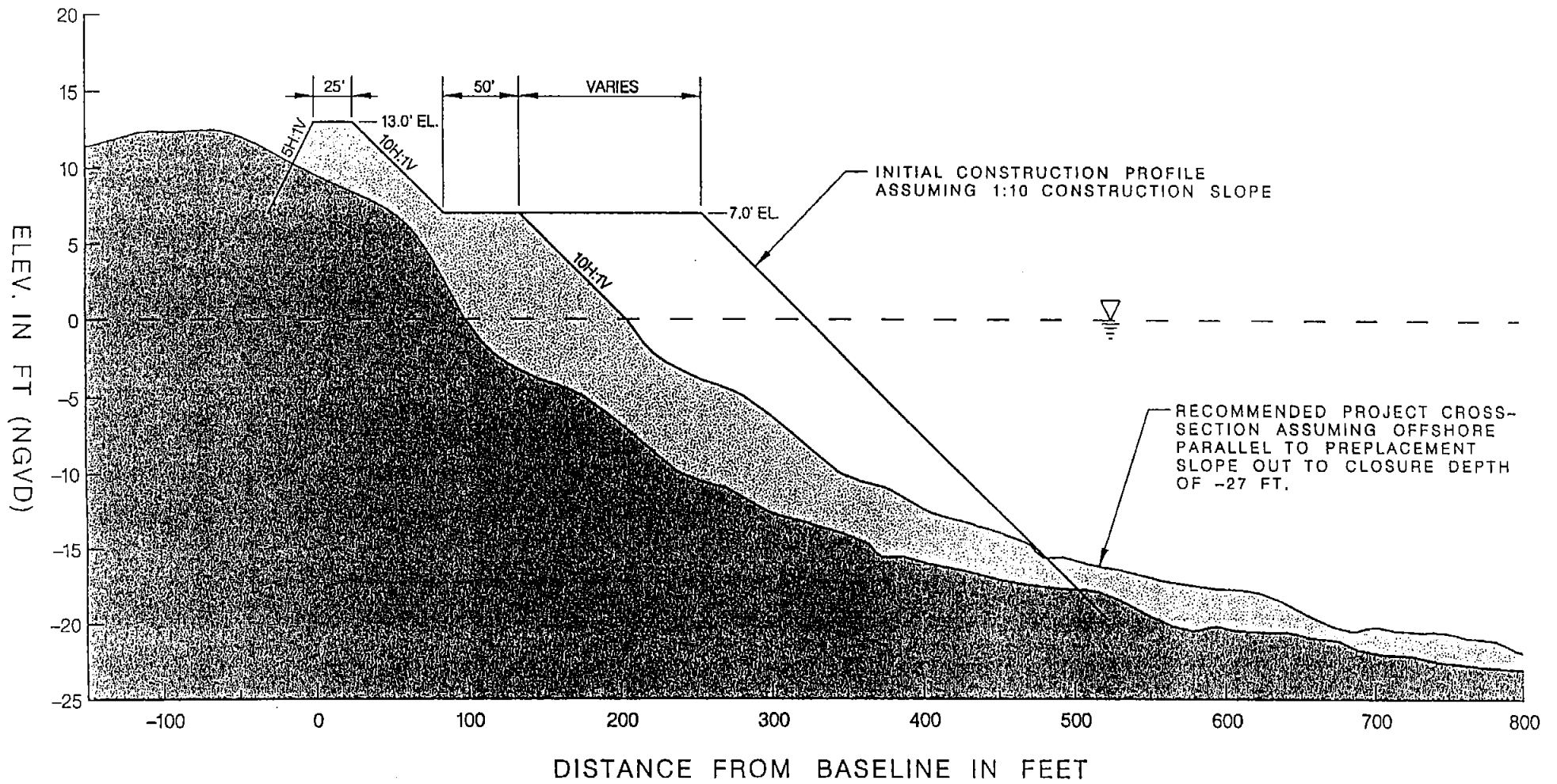


BEACH NOURISHMENT COSTS

DARE COUNTY
BEACH NOURISHMENT COMMITTEE
APRIL 2003



PROJECT LIMITS & BORROW SITES



13.0' DUNE WITH 50' BERM
TYPICAL CONSTRUCTION PROFILE

RENOURISHMENT PROJECT COSTS

INITIAL PROJECT CONSTRUCTION

| | KITTY HAWK | KILL DEVIL HILLS | NAGS HEAD | TOTAL |
|---------------------------|------------|---------------------|-----------|--------|
| PROJECT FEET | 6,550 | 12,335 | 53,461 | 72,346 |
| PROJECT MILES | 1.2 | 2.3 | 10.1 | 13.6 |
| CONST. COST (\$ MILLIONS) | \$7.9 | \$14.8 | \$49.0 | \$71.7 |

PROJECT MAINTENANCE

PERIODIC MAINTENANCE CYCLES ARE REQUIRED AT APPROXIMATELY THREE -YEAR INTERVALS. EACH MAINTENANCE CYCLE COST IS APPROXIMATELY ONE-HALF THE INITIAL COST (\$35.9 MILLION / CYCLE PLUS ENVIRONMENTAL MONITORING COSTS OR AN AVERAGE \$12.6 MILLION / YEAR).

GRAND TOTAL

\$664 MILLION OVER 50 YEARS

RENOURISHMENT PROJECT TOTAL COST

Federal Share: \$46.6 + \$6.3 x 47Yrs = \$342.7 MILLION

State Share: \$18.8 + \$4.7 x 47Yrs = \$239.7 MILLION

Local Share: \$6.3 + \$1.6 x 47Yrs = \$81.6 MILLION

Total: \$71.7 + \$12.6/YR x 47Yrs = \$664 MILLION

BEACH NURISHMENT COST SHARING

| | FEDERAL | STATE | LOCAL |
|------------------------|----------------------|----------------------|----------------------|
| CONSTRUCTION | 65% | 26.25% | 8.75% |
| \$71.7 Mil. | \$46.6Mil. | \$18.8Mil | \$6.3Mil |
| | | | |
| MAINTENANCE | 50% | 37.5% | 12.5% |
| \$12.6Mil./Year | \$6.3Mil./Yr. | \$4.7Mil./Yr. | \$1.6Mil./Yr. |

FUNDING THE LOCAL CONSTRUCTION SHARE

REQUIRED EXPENDITURE

| | |
|-------------------------|----------------|
| Total construction cost | \$71.7 Million |
| Local share | \$ 6.3 Million |

REVENUE

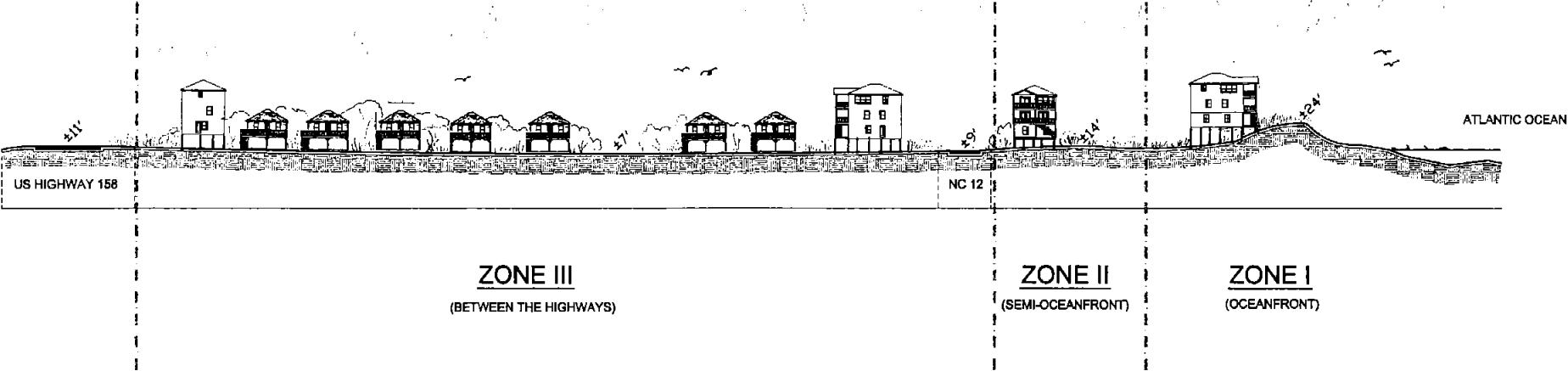
| | |
|-----------------------------|---------------|
| Dare County Visitors Bureau | \$1 Million |
| Three assessments totaling | \$5.3 Million |

ASSESSMENT

Three Benefit Zones

- **Zone I** **Ocean front parcels that immediately abut the beach nourishment project from the north end of the main fill to the southern end of the taper in each project area.**
- **Zone II** **Parcels east of Virginia Dare Trail which are not oceanfront, parcels south of Whalebone junction east of NCSR 1243 (Old Oregon Inlet Rd.) which are not oceanfront, from the north end of the main fill to the southern end of the taper in each project area.**
- **Zone III** **Parcels lying between Virginia Dare Trail and Croatan Highway, parcels south of Whalebone junction lying west of NCSR 1243 (Old Oregon Inlet Rd.), from the north end of the main fill to the southern end of the taper in each project area, and oceanfront parcels between the south end of the northern project taper and the beginning of the main fill at the north end of the southern project.**

ASSESSMENT ZONES PROFILE



ASSESSMENT METODOLOGY

ZONE RATIOS ARE INTENTIONALLY SET

ZONE I
10

ZONE II
2.5

ZONE III
1

- **Zone I** Average assessment \$3130/parcel. 77.6% of the total assessment (\$4,111,800). 1313 parcels. 72,346 linear feet. ~\$118 Mil. assessed land value. At current estimate, assessment at approximately \$60/ft. Special rules for parcels that can not be improved and for flag lot parcels.
- **Zone II** Average assessment \$770/parcel. 6.9% of the total assessment (\$365,700). 476 parcels. ~\$26 Mil. assessed land value. Assessment will be on basis of land value; \$1.41/\$100 assessed land value at current estimate and assessments.
- **Zone III** Average assessment \$302/parcel. 15.5% of the total assessment (\$821,500). 2716 parcels. ~\$195 Mil. assessed land value. At current estimate, Assessment will be on basis of land value; \$0.42/\$100 assessed land value at current estimate and assessments.

SPECIAL SITUATIONS

Oceanfront lots that can not be improved.

Assessed at 25 times the established per ft. rate regardless of total frontage.

Example: Assuming an assessment rate of \$60/foot., a 65 ft. lot that cannot be developed will be assessed a total of \$1500 instead of \$3900 that would be assessed if the lot could be developed.

Flag lots.

Assessed at 25 times the established per ft. rate regardless of total frontage.

Example: Assuming an assessment rate of \$60/foot., a flag lot with 10 ft. of oceanfront will be assessed a total of \$1500 instead of \$600 that would be assessed if only the 10 ft. of oceanfront were assessed.

SPECIAL SITUATIONS

Exempt Parcels.

State and federally owned parcels are exempt. All other parcels, including county and municipal owned parcels, are assessed.

Example: Assuming an assessment rate of \$60/foot, Kill Devil Hills will pay an assessment of \$30,000 covering the 10 municipal beach accesses totaling 500 ft, in the project area.

Condominium Associations.

Common areas assessments are prorated to the individual condominium unit owner on the basis of the ratio of the ad valorem tax value of the owners unit at the time of the assessment to the sum of the ad valorem tax values at the time of the assessment for all units in the condominium.

Example: Assuming an assessment rate of \$60/foot, a 150 ft. lot common area shared by 50 condominium units will be assessed a total of \$9000. The \$9000 assessment will be prorated among the 50 units on the basis of of the ratio of each unit to the total value of all 50 units.

ASSESSMENT TIMING

Assessments will be levied by Dare County in the year following the award of each federal beach nourishment construction contract by the Army Corp of Engineers and will cover the local share of all construction related costs. Assessments levied shall be due upon levy and may be paid in a lump sum or in three equal annual installments. Installment payments shall subject to interest at the rate of 6% per annum, with the first such installment being due within 90 days of levy and the subsequent installments being due on the same date in the two following years.

Current planning is to award three contracts in November of 2004, 2005 and 2006 sequentially. The entirety of all three benefit zones will be assessed following each contract.

ASSESSMENT TIMING EXAMPLE

Nov 1, 2004

\$39.1 Mil. Contracts awarded for construction and construction related activity for the northern project area and and 1/3 of the southern project area in the middle of the southern project area.

Jan 1,2005

Assessment of \$3,088,250 (8.75% of \$39.1 Mil. - 1/3 Visitor Bureau Contribution). Zone I parcels will be assessed at an approximate rate of \$33/ft. Zone II parcels assessed average of \$450 per parcel. Zone III parcels assessed average of \$176 per parcel.

Nov 1, 2005

\$16.3 Mil. Contracts awarded for construction and construction related activity of the southern 1/3 of the southern project area.

Jan 1,2006

Assessment of \$1,093,250 (8.75% of \$16.3 Mil. - 1/3 Visitor Bureau Contribution). Zone I parcels will be assessed at an approximate rate of \$12/ft. Zone II parcels assessed average of \$160 per parcel. Zone III parcels assessed average of \$63 per parcel.

ASSESSMENT TIMING EXAMPLE

- Nov 1, 2006** **\$16.3 Mil. Contracts awarded for construction and construction related activity of the northern 1/3 of the southern project area.**
- Jan 1, 2007** **Assessment of \$1,093,250 (8.75% of \$16.3 Mil. - 1/3 Visitor Bureau Contribution). Zone I parcels will be assessed at an approximate rate of \$12/ft. Zone II parcels will be assessed an average of \$160 per parcel. Zone III parcels will be assessed an average of \$63 per parcel.**

ASSESSMENT RATE SENSITIVITY

Assessment Rates are sensitive to construction cost estimate accuracy and federal/state/local share ratios.

Example. Actual local share turns out to be \$8,140,000, which is nearly \$2 Mil. more than current estimate of \$6,300,000. After subtracting Visitor Bureau contribution, total assessment required is \$7,140,000.

Zone I : \$5,539,200; \$80/ft. Average assessment \$4220/parcel.

Zone II: \$492,660; Average assessment \$1035/parcel; \$1.90/\$100 at current land assessments.

Zone III:\$1,106,700; Average assessment \$407/parcel; \$0.568/\$100 at current land assessments.

FUNDING THE LOCAL MAINTENANCE SHARE

REQUIRED EXPENDITURE

| | |
|--------------------------------|----------------------------|
| Annual Maintenance Cost | \$12.6 Million/Year |
| Local Share (12.5%) | \$ 1.6 Million/Year |

REVENUE

| | |
|-------------------------|--------------------------|
| 1% Occupancy Tax | >\$2 Mil./Year |
|-------------------------|--------------------------|

MAINTENANCE COST SENSITIVITY

Maintenance expenditure is sensitive to maintenance cost estimate accuracy, federal/state/local share ratios, and actual maintenance cycle frequency.

Example. Actual required maintenance cycle turns out to be 4 years instead of three, but in the tenth year a unusually severe spring nor'easter results in an immediate maintenance requirement for the entire project.

Average annual maintenance costs are initially reduced from an estimated \$12.6 Mil./yr.(\$1.6Mil local share) to \$9.5 Mil/yr.(local share \$1.2Mil/yr.), but in the tenth year the nor'easter results in an immediate maintenance requirement of \$37.8Mil (Local share \$4.75Mil).

The 1% occupancy tax receipts in excess of \$2Mil./yr. are sufficient to cover most of this type of contingency, particularly with the reserve of more than \$10Mil. that will exist as the first maintenance cycle comes due.