

**Appendix IV: Section 4.0 (4) 90% Upper Prediction Limit (UPL) MLE 100-Year Mean Return Period Event**

**i) St. Kitts**

Return Period	Wind Speed (mph)	
	50% UPL	90% UPL
50 years	102	119
100 years	113	133

**Police Stations**

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
1	St George	1952	20	0.2	0.25	1.108	1.000	1.108	147.30	0.678		0.835		0.678		-	-	-
1A	St George	1971	8	0.1	0.25	1.108	1.000	1.108	147.30	0.629	1,800,000	0.782		0.629		1,133,006	-	-
2	St George	1972	300	0.7	0.25	1.108	1.000	1.108	147.30	0.966	500,000	0.983	100,000	0.966	300,000	483,126	98,267	289,875
3	St Thomas	1968	40	0.11	0.25	1.108	1.000	1.108	147.30	0.784	952,000	0.943	100,000	0.784	100,000	746,786	94,253	78,444
4	St Anne	1942	70	0.2	0.25	1.108	1.000	1.108	147.30	0.859	840,000	0.977	100,000	0.859	800,000	721,763	97,667	687,394
5	St John	1971	200	0.6	0.25	1.108	1.000	1.108	147.30	0.949	500,000	0.980	20,000	0.949	150,000	474,317	19,603	142,295
6	St John	1950	200	0.5	0.25	1.108	1.000	1.108	147.30	0.949	130,000	0.980	20,000	0.949	150,000	123,322	19,603	142,295
7	St Mary	1972	300	0.7	0.25	1.108	1.000	1.108	147.30	0.966	500,000	0.983	100,000	0.966	300,000	483,126	98,267	289,875
S											5,222,000		440,000		1,800,000	4,165,445	427,659	1,630,178

**Fire Stations**

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
9	St George	1968	8	0.10	0.25	1.108	1.000	1.108	147.30	0.629		0.782		0.629		-	-	-
S											-		-		-	-	-	-

**Hospitals & Health Centers**

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
11	St George	1967	170	0.5	0.25	1.108	1.000	1.108	147.30	0.988	660,000	0.990	200,000	0.988		652,406	197,999	-
12	St George	1967	170	0.5	0.25	1.108	1.000	1.108	147.30	0.988	1,000,000	0.990	350,000	0.988		988,494	346,499	-
13	St George	1999	170	0.5	0.25	1.108	1.000	1.108	147.30	0.955	860,000	0.978	300,000	0.955		820,877	293,483	-
14	St George	1999	170	0.5	0.25	1.108	1.000	1.108	147.30	0.955	800,000	0.978	1,000,000	0.955		763,606	978,278	-
15	St George	1999	170	0.5	0.25	1.108	1.000	1.108	147.30	0.955	1,600,000	0.978	100,000	0.955		1,527,213	97,828	-
16	St George	1967	170	0.5	0.25	1.108	1.000	1.108	147.30	0.988	1,000,000	0.990	400,000	0.988		988,494	395,998	-
17	St George	1999	170	0.5	0.25	1.108	1.000	1.108	147.30	0.955	860,000	0.978	200,000	0.955		820,877	195,656	-
18	St George	1967	170	0.5	0.25	1.108	1.000	1.108	147.30	0.988	3,000,000	0.990	1,600,000	0.988		2,965,482	1,583,994	-
21	St Anne		60	0.1	0.25	1.108	1.000	1.108	147.30	0.952	500,000	0.980	100,000	0.952		475,949	97,991	-
24	Christ Church	1986	380	0.8	0.25	1.108	1.000	1.108	147.30	0.998	800,000	0.997	100,000	0.998	5,000	798,494	99,678	4,991
25	St George	1949	40	0.1	0.25	1.108	1.000	1.108	147.30	0.806	600,000	0.946	240,000	0.806		483,831	227,053	-
26	St Mary				0.25	1.108	1.000	1.108	147.30	0.815	300,000	0.950	25,000	0.815		244,387	23,755	-
27	Christ Church	1952	400	0.9	0.25	1.108	1.000	1.108	147.30	0.998	160,000	0.997	25,000	0.998		159,720	24,926	-
29	St John	1954	100	0.2	0.25	1.108	1.000	1.108	147.30	0.974	260,000	0.984	25,000	0.974		253,341	24,600	-
30	St John		50	0.1	0.25	1.108	1.000	1.108	147.30	0.941	370,000	0.979	25,000	0.941		348,018	24,465	-
31	St John		150	0.4	0.25	1.108	1.000	1.108	147.30	0.986	270,000	0.988	25,000	0.986		266,132	24,712	-
32	St Anne	1955	80	0.1	0.25	1.108	1.000	1.108	147.30	0.966	270,000	0.982	25,000	0.966		260,819	24,551	-
33	St Thomas		35	0.1	0.25	1.108	1.000	1.108	147.30	0.913	260,000	0.975	20,000	0.913		237,387	19,502	-
34	St George	1975	8	0	0.25	1.108	1.000	1.108	147.30	0.815	600,000	0.950	500,000	0.815		488,773	475,110	-
S											14,170,000		5,260,000		5,000	13,544,298	5,156,076	4,991

**Port**
**1. Buildings**

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
41	St George	1997	10	0	0.13	1.056	1.000	1.056	140.43	0.567	3,300,000	0.642	50,000	0.567		1,870,968	32,112	-
42	St George	1991	25	0	0.13	1.056	1.000	1.056	140.43	0.823	800,000	0.954	210,000	0.823		658,144	200,393	-
43	St George	1982	13	0	0.13	1.056	1.000	1.056	140.43	0.567	760,000	0.642	200,000	0.567		430,890	128,447	-
43A	St George	1993	13	0	0.13	1.056	1.000	1.056	140.43	0.748		0.894		0.748		-	-	-
44	St George	1986	10	0	0.13	1.056	1.000	1.056	140.43	0.567	2,000,000	0.642	1,500,000	0.567		1,133,920	963,353	-
45	St George	1980	12	0	0.13	1.056	1.000	1.056	140.43	0.748		0.894		0.748		-	-	-
S											6,860,000		1,960,000		-	4,093,922	1,324,304	-

## 2. Wharf

1	2	3	4	5	6	7	8	9	10	11	12
Struc. No.	Yr. Blt.	Elevation (ft.)	Design Wave Ht. (ft.)	Wave Elevation (ft)	Design Moment	Failure Moment	Moment due to Wind	z	P <sub>f</sub>	Rep. Cost	Damage to Wharf
41A	1996	12.5	27.0	53.51	160,541.43	240,812.14	166,884.01	-1.2280	0.1097	30,000,000	3,291,818
45A	1980	10	15.0	29.73	37,708.49	56,562.73	41,056.75	-1.0966	0.1364	35,000,000	4,774,661
S										65,000,000	8,066,480

## 3. Pier

1	2	3	4	5	6	7	8	9	10	11	12
Struc. No.	Yr. Blt.	Elevation (ft.)	Design Wave Ht. (ft.)	Wave Elevation (ft)	Design Moment	Failure Moment	Moment due to Wind	z	P <sub>f</sub>	Rep. Cost	Damage to Pier
41B	1996	9	15.6	30.92	41,185.25	61,777.88	44,676.57	-1.1073	0.1341	22,000,000	2,949,915
S										22,000,000	2,949,915

## 4. Lighting Towers

## 5. Equipment

## 6. Molasses Pipeline

## 7. Railroad Tracks

**Airport**

**1. Buildings**

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
51	St Peter	1998	130	1.0	0.4	1.172	1.000	1.172	155.88	0.953	36,000,000	0.961		0.953		34,312,896	-	-
52	St Peter	1999	130	1.0	0.4	1.172	1.000	1.172	155.88	0.953	2,000,000	0.961	4,000,000	0.953		1,906,272	3,845,808	-
52A	St Peter	1999	130	1.0	0.4	1.172	1.000	1.172	155.88	0.953	1,400,000	0.961	500,000	0.953		1,334,390	480,726	-
53	St Peter	1974	130	1.0	0.4	1.172	1.000	1.172	155.88	0.953	300,000	0.961	1,000,000	0.953		285,941	961,452	-
53A	St Peter	1974	130	1.0	0.4	1.172	1.000	1.172	155.88	0.953	320,000	0.961	30,000	0.953		305,004	28,844	-
54	St Peter	1974	130	1.0	0.4	1.172	1.000	1.172	155.88	0.953		0.961	1,000,000	0.953		-	961,452	-
S											40,020,000		6,530,000		-	38,144,503	6,278,282	-

**2. Lighting Towers**

**3. Runway**

1	2	3	4	5	6	7	8	9
Parish	Length of Runway in feet	Rep. Cost per foot (\$)	Total Rep. Cost (\$)	Erosion Potential	Pavement Resistance	Failure Likelihood	Failure Probability	Pavement Damage
St. Peter	8,000	10,000	80,000,000	H	VH	M	0.01	800,000
S			80,000,000					800,000

**Coast Guard Station**

**1. Buildings**

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
55	St George	1987	20	0	0.13	1.056	1.000	1.056	140.43	0.601	1,100,000	0.567	250,000	0.601		660,817	141,690	-
S											1,100,000		250,000		-	660,817	141,690	-

2. Pier

1	2	3	4	5	6	7	8	9	10	11	12	
Struc. No.	Yr. Blt.	Elevation (ft.)	Design Wave Ht. (ft.)	Wave Elevation (ft.)	Design Moment	Failure Moment	Moment due to Wind	z	P <sub>f</sub>	Rep. Cost	Damage to Pier	
55A	1988	10	13.0	25.77	27,661.75	41,492.62	30,538.24	-1.0560	0.1455	750,000	109,108	
										S	750,000	109,108

Custom & Excise Department

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
56	St George	1977	75	0.1	0.13	1.056	1.000	1.056	140.43	0.809	600,000	0.836	200,000	0.809		485,125	167,263	-
											S	600,000	200,000		-	485,125	167,263	-

Power Stations

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
70	St Peter	1972	75	0.8	0.4	1.172	1.000	1.172	155.88	0.919	6,000,000	0.936	30,000,000	0.919	2,000,000	5,516,748	28,075,680	1,838,916
71	St Peter	1999	75	0.8	0.4	1.172	1.000	1.172	155.88	0.919	4,000,000	0.936	25,000,000	0.919	3,000,000	3,677,832	23,396,400	2,758,374
											S	10,000,000	55,000,000		5,000,000	9,194,580	51,472,080	4,597,290

**Transmission Lines**

1	2	3	4	5	6	7	8a	8b	8c	8d	9	10	11	12	13	14
Parish	Miles of Lines	Elevation ft.	Design Wind Spd (mph)	Factor of Safety	Failure Wind Speed	Standard Deviation	K <sub>z</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	z	Pr	Rep. Cost per Mile (\$)	Total Rep. Cost (\$)	Damage to Poles (\$)
St George	224	300	90	1.1	99	29.7	0.21	1.090	1.000	1.090	145.01	1.5492	0.9393	74,000	16,576,000	15,570,297
St Mary	40	350	90	1.1	99	29.7	0.28	1.120	1.000	1.120	149.01	1.6839	0.9539	74,000	2,960,000	2,823,556
Christ Church	8	300	90	1.1	99	29.7	0.3	1.129	1.000	1.129	150.16	1.7225	0.9575	35,000	280,000	268,102
St John	24	200	90	1.1	99	29.7	0.22	1.095	1.000	1.095	145.58	1.5684	0.9416	35,000	600,000	564,964
St Paul	12	200	90	1.1	99	29.7	0.3	1.129	1.000	1.129	150.16	1.7225	0.9575	35,000	420,000	402,153
St Anne	28	150	90	1.1	99	29.7	0.16	1.069	1.000	1.069	142.15	1.4529	0.9269	74,000	2,072,000	1,920,476
St Thomas	8	150	90	1.1	99	29.7	0.23	1.099	1.000	1.099	146.15	1.5877	0.9438	35,000	280,000	264,269
Trinity	8	150	90	1.1	99	29.7	0.1	1.043	1.000	1.043	138.72	1.3373	0.9094	35,000	280,000	254,644
St Peter	52	250	90	1.1	99	29.7	0.44	1.189	1.000	1.189	158.16	1.9920	0.9768	35,000	1,820,000	1,777,806
S															25,288,000	23,846,268

**Utility Poles**

1	2	3	4	5	6	7	8a	8b	8c	8d	9	10	11	12	13	14
Parish	No. of Poles	Elevation ft.	Design Wind Spd (mph)	Factor of Safety	Failure Wind Speed	Standard Deviation	K <sub>z</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	z	Pr	Rep. Cost per Pole (\$)	Total Rep. Cost (\$)	Damage to Poles (\$)
St George	8000	300	90	1.1	99	29.7	0.21	1.090	1.000	1.090	145.01	1.5492	0.9393	1200	9,600,000	9,017,546
St Mary	1400	350	90	1.1	99	29.7	0.28	1.120	1.000	1.120	149.01	1.6839	0.9539	1200	1,680,000	1,602,559
Christ Church	300	300	90	1.1	99	29.7	0.3	1.129	1.000	1.129	150.16	1.7225	0.9575	1200	360,000	344,702
St Johns	800	200	90	1.1	99	29.7	0.22	1.095	1.000	1.095	145.58	1.5684	0.9416	1200	960,000	903,943
St Paul	500	200	90	1.1	99	29.7	0.3	1.129	1.000	1.129	150.16	1.7225	0.9575	1200	600,000	574,504
St Anne	1000	150	90	1.1	99	29.7	0.16	1.069	1.000	1.069	142.15	1.4529	0.9269	1200	1,200,000	1,112,245
St Thomas	300	150	90	1.1	99	29.7	0.23	1.099	1.000	1.099	146.15	1.5877	0.9438	1200	360,000	339,775
Trinity	300	150	90	1.1	99	29.7	0.1	1.043	1.000	1.043	138.72	1.3373	0.9094	1200	360,000	327,400
St Peters	1800	250	90	1.1	99	29.7	0.44	1.189	1.000	1.189	158.16	1.9920	0.9768	1200	2,160,000	2,109,924
S															17,280,000	16,332,598

**Courthouses**

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>z</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
90	St George	1997	15	0	0.13	1.056	1.000	1.056	140.43	0.515	7,000,000	0.400		0.515		3,608,458	-	-
S											7,000,000	-	-	3,608,458	-	-		

**Government Buildings**

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
91	St George	1963 / 1995	15	0.1	0.13	1.056	1.000	1.056	140.43	0.515	15,000,000	0.400		0.515		7,732,410	-	-
S											15,000,000		-		-	7,732,410	-	-

**Public Market**

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
92	St George	1978	10	25	0.6	1.258	1.000	1.258	167.31	0.713		0.111		0.713		-	-	-
S											-		-		-	-	-	-

**Radio & TV Studios**

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
93	St George	1958	155	0.5	0.25	1.108	1.000	1.108	147.30	0.930	500,000	0.946		0.930		464,760	-	-
S											500,000		-		-	464,760	-	-

Schools & Colleges

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15	
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipement Damage \$	
101	St Mary	1986	340	0.7	0.3	1.129	1.000	1.129	150.16	0.976	1,600,000	0.976	400,000	0.976		1,561,285	390,505	-	
102	St Mary	1971	340	0.7	0.3	1.129	1.000	1.129	150.16	0.976	1,000,000	0.976	400,000	0.976		975,803	390,505	-	
103	St Mary*	1971	340	0.7	0.3	1.129	1.000	1.129	150.16	0.976	2,300,000	0.976	420,000	0.976		2,244,347	410,030	-	
104	St Mary	1982	340	0.7	0.3	1.129	1.000	1.129	150.16	0.976	2,000,000	0.976	100,000	0.976		1,951,606	97,626	-	
105	St George	1982	135	0.3	0.2	1.086	1.000	1.086	144.44	0.900	2,500,000	0.924	110,000	0.900		2,249,793	101,659	-	
106	St George	1975	20	0.1	0.1	1.043	1.000	1.043	138.72	0.547	200,000	0.447	30,000	0.547		109,382	13,415	-	
106A	St George	1999	35	0.1	0.1	1.043	1.000	1.043	138.72	0.646	1,106,000	0.612	30,000	0.646		714,890	18,366	-	
107	St George	1992	100	0.6	0.3	1.129	1.000	1.129	150.16	0.907	2,000,000	0.930	3,000,000	0.907		1,813,786	2,789,034	-	
108	St John	1968	60	0.2	0.2	1.086	1.000	1.086	144.44	0.795	3,000,000	0.819	80,000	0.795		2,384,883	65,542	-	
109	St Anne	1978	50	0.1	0.1	1.043	1.000	1.043	138.72	0.706	1,000,000	0.708	425,000	0.706		706,467	301,000	-	
109A	St Anne	1999	50	0.1	0.1	1.043	1.000	1.043	138.72	0.706		0.708	400,000	0.706		-	283,294	-	
110	St Anne	1978	50	0.1	0.1	1.043	1.000	1.043	138.72	0.706	2,600,000	0.708	500,000	0.706		1,836,814	354,118	-	
111	St Anne	1982	25	0	0.1	1.043	1.000	1.043	138.72	0.587	1,700,000	0.513	100,000	0.587		998,344	51,285	-	
112	St John	1986	100	0.3	0.2	1.086	1.000	1.086	144.44	0.865	1,600,000	0.893	70,000	0.865		1,384,787	62,536	-	
113	St George	1972	40	0.1	0.1	1.043	1.000	1.043	138.72	0.669	2,500,000	0.650	2,500,000	0.669		1,673,055	1,624,190	-	
114	St Thomas	1997	70	0.2	0.2	1.086	1.000	1.086	144.44	0.817	2,600,000	0.843	250,000	0.817		2,124,920	210,777	-	
114A	St Thomas	1967	90	0.2	0.2	1.086	1.000	1.086	144.44	0.852	3,000,000	0.879	410,000	0.852		2,555,955	360,593	-	
115	St John	1996	50	0.1	0.1	1.043	1.000	1.043	138.72	0.706	1,350,000	0.708	50,000	0.706		953,730	35,412	-	
116	St George	1996	100	0.3	0.2	1.086	1.000	1.086	144.44	0.865	7,000,000	0.893	1,500,000	0.865		6,058,444	1,340,054	-	
117	St George	1986	100	0.6	0.3	1.129	1.000	1.129	150.16	0.907	5,000,000	0.930	330,000	0.907		4,534,465	306,794	-	
118	St George	1972	100	0.6	0.3	1.129	1.000	1.129	150.16	0.907	3,000,000	0.930	1,200,000	0.907		2,720,679	1,115,614	-	
119	St George	1961	60	0.4	0.3	1.129	1.000	1.129	150.16	0.847	3,500,000	0.874	530,000	0.847		2,964,861	463,412	-	
119A	St George	1957	60	0.4	0.3	1.129	1.000	1.129	150.16	0.847	6,000,000	0.874	3,000,000	0.847		5,082,618	2,623,086	-	
120	Trinity	1985	140	0.1	0.1	1.043	1.000	1.043	138.72	0.859	1,600,000	0.887	150,000	0.859		1,375,181	133,098	-	
121	St George	1996	25	0.3	0.2	1.086	1.000	1.086	144.44	0.655	1,200,000	0.626	150,000	0.655	30,000	785,440	93,845	19,636	
122	St Peters	1974	450	2.0	0.6	1.258	1.000	1.258	167.31	0.998	1,500,000	0.995	70,000	0.998		1,497,179	69,652	-	
123	St Peters	1996	450	2.0	0.6	1.258	1.000	1.258	167.31	0.998	700,000	0.995	50,000	0.998		698,683	49,751	-	
124	St George	1987	15	0.1	0.1	1.043	1.000	1.043	138.72	0.494	300,000	0.370	50,000	0.494		148,224	18,492	-	
125	Christ Church	1987	300	1.0	0.4	1.172	1.000	1.172	155.88	0.982	850,000	0.980	50,000	0.982		834,932	49,017	-	
126	St Paul	1959	225	0.8	0.4	1.172	1.000	1.172	155.88	0.974	500,000	0.975	40,000	0.974		487,022	39,006	-	
127	St George	1966	8	0	0.1	1.043	1.000	1.043	138.72	0.494	1,386,000	0.370	80,000	0.494		684,793	29,587	-	
127A	St George	1999	8	0	0.1	1.043	1.000	1.043	138.72	0.494	1,000,000	0.370	80,000	0.494		494,079	29,587	-	
128	St Peters	1982	85	0.9	0.4	1.172	1.000	1.172	155.88	0.924	300,000	0.943	100,000	0.924		277,337	94,260	-	
129	St Paul	1999	170	0.4	0.2	1.086	1.000	1.086	144.44	0.922	1,300,000	0.941	70,000	0.922		1,198,388	65,852	-	
											S	67,192,000		16,725,000		30,000	56,082,170	14,080,990	19,636



**Pavements**

1	2	3	4	5	6	7	8	9
Parish	Area Paved sq. ft.	Rep. Cost per sq. ft. (\$)	Total Rep. Cost (\$)	Erosion Potential	Pavement Resistance	Failure Likelihood	Failure Probability	Pavement Damage
St George	265,000	8	2,000,000	H	M	VH	0.5	1,000,000
St George			3,800,000	H	M	VH	0.5	1,900,000
St Peter	350,000	70	24,500,000	H	M	VH	0.5	12,250,000
		S	30,300,000					15,150,000

**Paved Roads**

1	2	3	4	5	6	7	8	9
Parish	Miles of Road	Rep. Cost Per Mile	Total Rep. Cost	Erosion Potential	Pavement Resistance	Failure Likelihood	Failure Probability	Pavement Damage
St Anne	24	573,000	13,752,000	H	M	VH	0.5	6,876,000
St Thomas	7	573,000	4,011,000	H	M	VH	0.5	2,005,500
Trinity	7	573,000	4,011,000	H	M	VH	0.5	2,005,500
St Peter	44	573,000	25,212,000	H	M	VH	0.5	12,606,000
St George	190	573,000	108,870,000	H	M	VH	0.5	54,435,000
St Mary	34	573,000	19,482,000	H	M	VH	0.5	9,741,000
Christ Church	7	573,000	4,011,000	H	M	VH	0.5	2,005,500
St John	20	573,000	11,460,000	H	M	VH	0.5	5,730,000
St Paul	10	573,000	5,730,000	H	M	VH	0.5	2,865,000
		S	196,539,000					98,269,500

**Unpaved Roads**

1	2	3	4	5	6	7	8	9
Parish	Miles of Road	Rep. Cost Per Mile	Total Rep. Cost	Erosion Potential	Pavement Resistance	Failure Likelihood	Failure Probability	Pavement Damage
St George	34	36,000	1,224,000	H	L	VH	0.5	612,000
St Mary	6	36,000	216,000	H	L	VH	0.5	108,000
Christ Church	1	36,000	36,000	H	L	VH	0.5	18,000
St John	4	36,000	144,000	H	L	VH	0.5	72,000
St Paul	2	36,000	72,000	H	L	VH	0.5	36,000
St Anne	4	36,000	144,000	H	L	VH	0.5	72,000
St Thomas	1	36,000	36,000	H	L	VH	0.5	18,000
Trinity	1	36,000	36,000	H	L	VH	0.5	18,000
St Peter	8	36,000	288,000	H	L	VH	0.5	144,000
S			2,196,000					1,098,000

**Wastemanagement Collection Vehicles**

1	2	3	4	5	6	7	8	9	10	11
Parish	No.of Vehicles	Cost per Vehicle (\$)	Max X-area of Veh. (sq. ft.)	Weight of Vehicle (lb.)	$\bar{z}$	<b>s</b>	<b>b</b>	<b>P<sub>f</sub></b>	Total Rep. Cost	Damage to Vehicles
St George	4	200,000	172	14000	6211.18	1557.76	3.99	0.0000	800,000	27
St Mary	1	200,000	172	14000	6211.18	1557.76	3.99	0.0000	200,000	7
St Anne	1	200,000	172	14000	6211.18	1557.76	3.99	0.0000	200,000	7
S									1,200,000	40

**Wastemanagement Bins**

1	2	3	4	5	6	7	8	9	10	11
Parish	No.of Bins	Cost per Bin (\$)	Max X-area of Bin (sq. ft.)	Weight of Bin (lb.)	$\bar{z}$	<b>s</b>	<b>b</b>	<b>P<sub>f</sub></b>	Total Rep. Cost	Damage to Bins
St George	4	700	27	1,000	-222.66	244.53	-0.91	0.8187	2,800	2,292
Trinity	1	700	27	1,000	-222.66	244.53	-0.91	0.8187	700	573
S									3,500	2,866

**SUMMARY**

	Structure Value	Contents Value	Equipment Value	Structural Damage	Content Damage	Equipment Damage	% PML
<b>Police Stations</b>	5,222,000	440,000	1,800,000	4,165,445	427,659	1,630,178	83.40
<b>Fire Stations</b>	-	-	-	-	-	-	
<b>Hospitals &amp; Health Centers</b>	14,170,000	5,260,000	5,000	13,544,298	5,156,076	4,991	96.25
<b>Ports</b>							
Buildings	6,860,000	1,960,000	-	4,093,922	1,324,304	-	61.43
Wharf	65,000,000			8,066,480			12.41
Pier	22,000,000			2,949,915			13.41
<b>Airport</b>							
Buildings	40,020,000	6,530,000	-	38,144,503	6,278,282	-	95.43
Runway	80,000,000			800,000			1.00
<b>Coast Guard Station</b>							
Building	1,100,000	250,000	-	660,817	141,690	-	59.44
Pier	750,000			109,108			14.55
<b>Custom &amp; Excise Department</b>	600,000	200,000	-	485,125	167,263	-	81.55
<b>Power Stations</b>	10,000,000	55,000,000	5,000,000	9,194,580	51,472,080	4,597,290	93.23
<b>Transmission Lines</b>	25,288,000			23,846,268			94.30
<b>Utility Poles</b>	17,280,000			16,332,598			94.52
<b>Courthouse</b>	7,000,000	-	-	3,608,458	-	-	51.55
<b>Government Buildings</b>	15,000,000	-	-	7,732,410	-	-	51.55
<b>Public Market</b>	-	-	-	-	-	-	
<b>Radio &amp; TV Studios</b>	500,000	-	-	464,760	-	-	92.95
<b>Schools &amp; Colleges</b>	67,192,000	16,725,000	30,000	56,082,170	14,080,990	19,636	83.60
<b>Pavements</b>	30,300,000			15,150,000			50.00
<b>Paved Roads</b>	196,539,000			98,269,500			50.00
<b>Unpaved Roads</b>	2,196,000			1,098,000			50.00
<b>Wastemanagement</b>							
Vehicles	1,200,000			40			0.00
Bins	3,500			2,866			81.87
<b>Total</b>	<b>608,220,500</b>	<b>86,365,000</b>	<b>6,835,000</b>	<b>304,801,263</b>	<b>79,048,344</b>	<b>6,252,095</b>	<b>55.62</b>

ii) Nevis

Return Period	Wind Speed (mph)	
	50% UPL	90% UPL
50 years	102	119
100 years	113	133

**Police Stations**

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
201	St Paul	1998	15	0.1	0.1	1.043	1.000	1.043	138.72	0.529	4,500,000	0.669	150,000	0.529	300,000	2,381,252	100,383	158,750
201B	St Paul	1998	15	0.1	0.1	1.043	1.000	1.043	138.72	0.730		0.873	600,000	0.730		-	523,778	-
202	St Thomas	1950's	200	0.6	0.3	1.129	1.000	1.129	150.16	0.995	250,000	0.994	25,000	0.995	100,000	248,630	24,838	99,452
203	St George	1940	725	1.8	0.6	1.258	1.000	1.258	167.31	1.000	285,000	1.000	25,000	1.000	100,000	284,992	25,000	99,997
203A	St James	1983	40	0.3	0.2	1.086	1.000	1.086	144.44	0.757	350,000	0.920	50,000	0.757	200,000	264,991	45,979	151,423
S											5,385,000		850,000		700,000	3,179,865	719,978	509,623

**Hospital & Health Centers**

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
205	St Paul	1952	150	0.6	0.3	1.129	1.000	1.129	150.16	0.958	276,000	0.978	105,000	0.958		264,304	102,732	-
205 A	St Paul	1963	150	0.6	0.3	1.129	1.000	1.129	150.16	0.990	448,000	0.991	182,000	0.990		443,375	180,299	-
205 B	St Paul	1952	150	0.6	0.3	1.129	1.000	1.129	150.16	0.958	1,400,000	0.978	245,000	0.958		1,340,674	239,709	-
205 C	St Paul	1985	150	0.6	0.3	1.129	1.000	1.129	150.16	0.990	531,000	0.991	75,000	0.990		525,518	74,299	-
205 D	St Paul	1995	150	0.6	0.3	1.129	1.000	1.129	150.16	0.990	147,000	0.991	87,000	0.990		145,482	86,187	-
211	St Paul	1958	20	0.2	0.15	1.065	1.000	1.065	141.58	0.802		0.943		0.802		-	-	-
S											2,802,000		694,000		0	2,719,353	683,226	0

**Port**

1. Buildings

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
209	St John	1999	8	0	0.13	1.056	1.000	1.056	140.43	0.550	400,000	0.473		0.550		219,995	-	-
210	St John	1999	8	0	0.13	1.056	1.000	1.056	140.43	0.550	745,000	0.473		0.550		409,741	-	-
S											1,145,000		0		0	629,736	0	0

2. Wharf

1	2	3	4	5	6	7	8	9	10	11	12
Struc. No.	Yr. Blt.	Elevation (ft.)	Design Wave Ht. (ft.)	Wave Elevation (ft)	Design Moment	Failure Moment	Moment due to Wind	z	Pt	Rep. Cost	Damage to Wharf
208	1999	6	13	25.77	27,661.75	41,492.62	30,538.24	-1.0560	0.1455	13,500,000	1,963,938
S										13,500,000	1,963,938

3. Pier

1	2	3	4	5	6	7	8	9	10	11	12
Struc. No.	Yr. Blt.	Elevation (ft.)	Design Wave Ht. (ft.)	Wave Elevation (ft)	Design Moment	Failure Moment	Moment due to Wind	z	Pt	Rep. Cost	Damage to Pier
206	1994	6	13	25.77	27,661.75	41,492.62	30,538.24	-1.0560	0.1455	400,000	58,191
207	1997+	6	13	25.77	27,661.75	41,492.62	30,538.24	-1.0560	0.1455	5,500,000	800,123
S										5,900,000	858,314

Schools & Colleges

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipement Damage \$
216	St James	1940	150	0.7	0.32	1.138	1.000	1.138	151.30	0.945	600,000	0.956	22,000	0.945		566,912	21,041	-
217	St George	1978	750	1.9	0.6	1.258	1.000	1.258	167.31	0.999	2,100,000	0.998	80,000	0.999		2,097,923	79,855	-
218 A	St George	1950	750	1.9	0.6	1.258	1.000	1.258	167.31	0.999	700,000	0.998	250,000	0.999		699,308	249,548	-
218 B	St George	1950	750	1.9	0.6	1.258	1.000	1.258	167.31	0.999	800,000	0.998	250,000	0.999		799,209	249,548	-
218 C	St George	1978	750	1.9	0.6	1.258	1.000	1.258	167.31	0.999	800,000	0.998	250,000	0.999		799,209	249,548	-
219	St James	1979	200	0.5	0.3	1.129	1.000	1.129	150.16	0.957		0.964	30,000	0.957		-	28,913	-
220	St Paul	1950	50	0.2	0.2	1.086	1.000	1.086	144.44	0.767	1,000,000	0.788	1,300,000	0.767		767,458	1,024,696	-
220 A	St Paul	1990	50	0.2	0.2	1.086	1.000	1.086	144.44	0.767	1,300,000	0.788	860,000	0.767		997,695	677,876	-
221	St Paul	1990	50	0.2	0.2	1.086	1.000	1.086	144.44	0.767	2,300,000	0.788	80,000	0.767		1,765,153	63,058	-
223	St Thomas	1983	100	0.2	0.2	1.086	1.000	1.086	144.44	0.865	200,000	0.893	80,000	0.865		173,098	71,470	-
224	St John	1983	350	1.5	0.5	1.215	1.000	1.215	161.60	0.993	1,377,000	0.988	60,000	0.993		1,367,132	59,285	-
225	St John	+1990	725	1.9	0.6	1.258	1.000	1.258	167.31	0.999	200,000	0.998	25,000	0.999		199,793	24,951	-
S											11,377,000	3,287,000	0	10,232,892	2,799,790	0		

**Airport**

**1. Buildings**

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
226	St James	1968	40	0.2	0.2	1.086	1.000	1.086	144.44	0.783	5,000,000	0.800	3,000,000	0.783		3,913,020	2,401,488	-
227	St James	1998	40	0.2	0.2	1.086	1.000	1.086	144.44	0.783	800,000	0.800	1,500,000	0.783		626,083	1,200,744	-
228	St James	1988	40	0.2	0.2	1.086	1.000	1.086	144.44	0.783	1,350,000	0.800	600,000	0.783		1,056,515	480,298	-
S											7,150,000	5,100,000	0	5,595,619	4,082,530	0		

**2. Runway**

1	2	3	4	5	6	7	8	9
Parish	Length of Runway in feet	Rep. Cost per foot (\$)	Total Rep. Cost (\$)	Erosion Potential	Pavement Resistance	Failure Likelihood	Failure Probability	Pavement Damage
St James	4,000							-
S			0					-

**Courthouse/Library**

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
229	St Paul	*1877	10	0	0.13	1.056	1.000	1.056	140.43	0.515		0.400		0.515		-	-	-
S											0	0	0	0	0	0		

**Public Market**

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
230	St Paul	1940	8	0	0.13	1.056	1.000	1.056	140.43	0.515		0.400		0.515		-	-	-
S											0	0	0	0	0	0		

**Government Buildings**

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipment Damage \$
231	St Paul	1982	15	0.1	0.13	1.056	1.000	1.056	140.43	0.515	500,000	0.400		0.515		257,747	-	-
S											500,000	0	0	257,747	0	0		

**Power House**

1	2	3	4	5	5a	5b	5c	5d	6	7	8	9	10	11	12	13	14	15
Struct No.	Parish	Year Built	Elevation ft.	Distance from coast	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	Struct. Damage Ratio	Building Value	Content Damage Ratio	Contents Value	Equipment Damage Ratio	Ext.Equip Value	Structural Damage \$	Content Damage \$	Equipement Damage \$
232	St John	1984	250	1.3	0.4	1.172	1.000	1.172	155.88	0.977		0.977	8,000,000	0.977		-	7,817,256	-
S											0	8,000,000	0	0	7,817,256	0		

**Transmission Lines**

1	2	3	4	5	6	7	8a	8b	8c	8e	9	10	11	12	13	14
Parish	Miles of Lines	Elevation ft.	Design Wind Spd (mph)	Factor of Safety	Failure Wind Speed	Standard Deviation	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	z	P <sub>r</sub>	Rep. Cost per mile (\$)	Total Rep. Cost (\$)	Damage to Poles (\$)
St Paul	40	100	90	1.1	99	29.7	0.2	1.086	1.000	1.086	129.23	1.0180	0.8457	70,000	2,800,000	2,367,837
St George	60	500	90	1.1	99	29.7	0.6	1.258	1.000	1.258	149.70	1.7071	0.9561	35,000	2,100,000	2,007,814
St James	40	150	90	1.1	99	29.7	0.24	1.103	1.000	1.103	131.28	1.0869	0.8615	35,000	1,000,000	861,458
St John	30	350	90	1.1	99	29.7	0.35	1.151	1.000	1.151	136.91	1.2764	0.8991	35,000	750,000	674,322
St Thomas	30	100	90	1.1	99	29.7	0.25	1.108	1.000	1.108	131.79	1.1041	0.8652	35,000	750,000	648,923
S															7,400,000	6,560,354

**Utility Poles**

1	2	3	4	5	6	7	8a	8b	8c	8e	9	10	11	12	13	14
Parish	No. of Poles	Elevation ft.	Design Wind Spd (mph)	Factor of Safety	Failure Wind Speed	Standard Deviation	K <sub>2</sub>	$\sqrt{K_{zt}}$	$\sqrt{K_z}$	$\sqrt{K_T}$	Site Speed mph	z	P <sub>r</sub>	Rep. Cost per Pole (\$)	Total Rep. Cost (\$)	Damage to Poles (\$)
St Paul	1000	100	90	1.1	99	29.7	0.2	1.086	1.000	1.086	129.23	1.0180	0.8457	1200	1,200,000	1,014,787
St George	1500	500	90	1.1	99	29.7	0.6	1.258	1.000	1.258	149.70	1.7071	0.9561	1200	1,800,000	1,720,983
St James	1000	150	90	1.1	99	29.7	0.24	1.103	1.000	1.103	131.28	1.0869	0.8615	1200	1,200,000	1,033,750
St John	750	350	90	1.1	99	29.7	0.35	1.151	1.000	1.151	136.91	1.2764	0.8991	1200	900,000	809,186
St Thomas	750	100	90	1.1	99	29.7	0.25	1.108	1.000	1.108	131.79	1.1041	0.8652	1200	900,000	778,707
S															6,000,000	5,357,414

**Pavements**

1	2	3	4	5	6	7	8	9
Parish	Area Paved sq. ft.	Rep. Cost per sq. ft. (\$)	Total Rep. Cost (\$)	Erosion Potential	Pavement Resistance	Failure Likelihood	Failure Probability	Pavement Damage
St James								-
	S		0					0

**Paved Roads**

1	2	3	4	5	6	7	8	9
Parish	Miles of Road	Rep. Cost Per Mile	Total Rep. Cost	Erosion Potential	Pavement Resistance	Failure Likelihood	Failure Probability	Pavement Damage
St Paul	22	459,000	10,098,000	H	M	VH	0.5	5,049,000
St George	33	459,000	15,147,000	H	M	VH	0.5	7,573,500
St James	22	459,000	10,098,000	H	M	VH	0.5	5,049,000
St John	17	459,000	7,803,000	H	M	VH	0.5	3,901,500
St Thomas	17	459,000	7,803,000	H	M	VH	0.5	3,901,500
	S		50,949,000					25,474,500

**Unpaved Roads**

1	2	3	4	5	6	7	8	9
Parish	Miles of Road	Rep. Cost Per Mile	Total Rep. Cost	Erosion Potential	Pavement Resistance	Failure Likelihood	Failure Probability	Pavement Damage
St George	27	36,000	972,000	H	L	VH	0.5	486,000
St John	14	36,000	504,000	H	L	VH	0.5	252,000
St Paul	18	36,000	648,000	H	L	VH	0.5	324,000
St Thomas	14	36,000	504,000	H	L	VH	0.5	252,000
St James	18	36,000	648,000	H	L	VH	0.5	324,000
	S		3,276,000					1,638,000

**Wastemanagement Collection Vehicles**

1	2	3	4	5	6	7	8	9	10	11
Parish	No.of Vehicles	Cost per Vehicle (\$)	Max X-area of Veh. (sq. ft.)	Weight of Vehicle (lb.)	$\bar{z}$	<b>s</b>	<b>b</b>	<b>Pr</b>	Total Rep. Cost	Damage to Vehicles
St Thomas	1	240,000	172	14,000	6211.18	1557.76	3.99	0.0000	240,000	8
St John	2	75,000	150	11,000	4207.42	1358.52	3.10	0.0010	150,000	147
St George	1	150,000	150	11,000	4207.42	1358.52	3.10	0.0010	150,000	147
St Paul	2	240,000	172	14,000	6211.18	1557.76	3.99	0.0000	480,000	16
								S	1,020,000	317



**Wastemanagement Bins**

1	2	3	4	5	6	7	8	9	10	11
Parish	No.of Bins	Cost per Bin (\$)	Max X-area of Bin (sq. ft.)	Weight of Bin (lb.)	$\bar{z}$	s	b	Pr	Total Rep. Cost	Damage to Vehicles
St George	8	1,500	12	500	-43.41	108.68	-0.40	0.6552	12,000	7,862
St John	2	1,760	16	560	-164.54	144.91	-1.14	0.8719	3,520	3,069
S									15,520	10,931

**SUMMARY**

	Structure Value	Contents Value	Equipment Value	Structural Damage	Content Damage	Equipment Damage	% PML
<b>Police Stations</b>	5,385,000	850,000	700,000	3,179,865	719,978	509,623	63.58
<b>Hospitals &amp; Health Centers</b>	2,802,000	694,000	-	2,719,353	683,226	-	97.33
<b>Ports</b>							
Buildings	1,145,000	-	-	629,736	-	-	55.00
Wharf	13,500,000			1,963,938			14.55
Pier	5,900,000			858,314			14.55
<b>Schools &amp; Colleges</b>	11,377,000	3,287,000	-	10,232,892	2,799,790	-	88.88
<b>Airport</b>							
Buildings	7,150,000	5,100,000	-	5,595,619	4,082,530	-	79.01
Runway	-	-	-	-	-	-	
<b>Courthouse / Library</b>	-	-	-	-	-	-	
<b>Public Market</b>	-	-	-	-	-	-	
<b>Government Buildings</b>	500,000	-	-	257,747	-	-	51.55
<b>Power House</b>	-	8,000,000	-	-	7,817,256	-	97.72
<b>Transmission Lines</b>	7,400,000			6,560,354			88.65
<b>Utility Poles</b>	6,000,000			5,357,414			89.29
<b>Pavements</b>	-			-			
<b>Paved Roads</b>	50,949,000			25,474,500			50.00
<b>Unpaved Roads</b>	3,276,000			1,638,000			50.00
<b>Wastemanagement</b>							
Vehicles	1,020,000			317			0.03
Bins	15,520			10,931			70.43
<b>Total</b>	116,419,520	17,931,000	700,000	64,478,980	16,102,779	509,623	60.05

St. Kitts

	Structure Value	Contents Value	Equipment Value	Structural Damage	Content Damage	Equipment Damage
<b>Police Stations</b>	5222000	440000	1800000	4165445.398	427659.3	1630178
<b>Fire Stations</b>	0	0	0	0	0	0
<b>Hospitals &amp; Health Centers</b>	14170000	5260000	5000	13544298.33	5156076.44	4990.585
<b>Ports</b>						
Buildings	6860000	1960000	0	4093921.6	1324303.96	0
Wharf	65000000	0	0	8066479.633	0	0
Pier	22000000	0	0	2949915.289	0	0
<b>Airport</b>						
Buildings	40020000	6530000	0	38144502.72	6278281.56	0
Runway	80000000	0	0	800000	0	0
<b>Coast Guard Station</b>						
Building	1100000	250000	0	660817.3	141690	0
Pier	750000	0	0	109107.6847	0	0
<b>Custom &amp; Excise Department</b>	600000	200000	0	485125.2	167262.6	0
<b>Power Stations</b>	10000000	55000000	5000000	9194580	51472080	4597290
<b>Transmission Lines</b>	25288000	0	0	23846268.03	0	0
<b>Utility Poles</b>	17280000	0	0	16332598.43	0	0
<b>Courthouse</b>	7000000	0	0	3608458	0	0
<b>Government Buildings</b>	15000000	0	0	7732410	0	0
<b>Public Market</b>	0	0	0	0	0	0
<b>Radio &amp; TV Studios</b>	500000	0	0	464759.5	0	0
<b>Schools &amp; Colleges</b>	67192000	16725000	30000	56082170.44	14080990.38	19635.99
<b>Pavements</b>	30300000	0	0	15150000	0	0
<b>Paved Roads</b>	196539000	0	0	98269500	0	0
<b>Unpaved Roads</b>	2196000	0	0	1098000	0	0
<b>Wastemanagement</b>						
Vehicles	1200000	0	0	40.12618304	0	0
Bins	3500	0	0	2865.584771	0	0
<b>Total</b>	<b>608220500</b>	<b>86365000</b>	<b>6835000</b>	<b>304801263.3</b>	<b>79048344.24</b>	<b>6252094.575</b>

Nevis

	Structure Value	Contents Value	Equipment Value	Structural Damage	Content Damage	Equipment Damage
<b>Police Stations</b>	5385000	850000	700000	3179864.505	719977.625	509622.7
<b>Hospitals &amp; Health Centers</b>	2802000	694000	0	2719353	683226.37	0
<b>Ports</b>						
Buildings	1145000	0	0	629736.26	0	0
Wharf	13500000	0	0	1963938.325	0	0
Pier	5900000	0	0	858313.7865	0	0
<b>Schools &amp; Colleges</b>	11377000	3287000	0	10232891.62	2799789.633	0
<b>Airport</b>						
Buildings	7150000	5100000	0	5595618.6	4082529.6	0
Runway	0	0	0	0	0	0
<b>Courthouse / Library</b>	0	0	0	0	0	0
<b>Public Market</b>	0	0	0	0	0	0
<b>Government Buildings</b>	500000	0	0	257747	0	0
<b>Power House</b>	0	8000000	0	0	7817256	0
<b>Transmission Lines</b>	7400000	0	0	6560354.052	0	0
<b>Utility Poles</b>	6000000	0	0	5357414.13	0	0
<b>Pavements</b>	0	0	0	0	0	0
<b>Paved Roads</b>	50949000	0	0	25474500	0	0
<b>Unpaved Roads</b>	3276000	0	0	1638000	0	0
<b>Wastemanagement</b>						
Vehicles	1020000	0	0	317.2563782	0	0
Bins	15520	0	0	10931.49788	0	0
<b>Total</b>	116419520	17931000	700000	64478980.03	16102779.23	509622.7

**SUMMARY (St. Kitts + Nevis)**

<b>Infrastructure Element</b>	<b>Structure Replacement Cost (EC\$)</b>	<b>Contents Replacement Cost (EC\$)</b>	<b>Equipment Replacement Cost (EC\$)</b>	<b>Structural Damage (EC\$)</b>	<b>Content Damage (EC\$)</b>	<b>Equipment Damage (EC\$)</b>	<b>% PML</b>
<b>Police Stations</b>	10,607,000	1,290,000	2,500,000	7,345,310	1,147,637	2,139,801	73.85
<b>Fire Stations</b>	-	-	-	-	-	-	
<b>Hospitals &amp; Health Centers</b>	16,972,000	5,954,000	5,000	16,263,651	5,839,303	4,991	96.41
<b>Ports</b>							
Buildings	8,005,000	1,960,000	-	4,723,658	1,324,304	-	60.69
Wharf	78,500,000			10,030,418			12.78
Pier	27,900,000			3,808,229			13.65
<b>Airport</b>							
Buildings	47,170,000	11,630,000	-	43,740,121	10,360,811	-	92.01
Runway	80,000,000			800,000			1.00
<b>Coast Guard Station</b>							
Building	1,100,000	250,000	-	660,817	141,690	-	59.44
Pier	750,000			109,108			14.55
<b>Custom &amp; Excise Department</b>	600,000	200,000	-	485,125	167,263	-	81.55
<b>Power Stations &amp; Power House</b>	10,000,000	63,000,000	5,000,000	9,194,580	59,289,336	4,597,290	93.69
<b>Transmission Lines</b>	32,688,000			30,406,622			93.02
<b>Utility Poles</b>	23,280,000			21,690,013			93.17
<b>Courthouse / Library</b>	7,000,000	-	-	3,608,458	-	-	51.55
<b>Government Buildings</b>	15,500,000	-	-	7,990,157	-	-	51.55
<b>Public Market</b>	-	-	-	-	-	-	
<b>Radio &amp; TV Studios</b>	500,000	-	-	464,760	-	-	92.95
<b>Schools &amp; Colleges</b>	78,569,000	20,012,000	30,000	66,315,062	16,880,780	19,636	84.39
<b>Pavements</b>	30,300,000			15,150,000			50.00
<b>Paved Roads</b>	247,488,000			123,744,000			50.00
<b>Unpaved Roads</b>	5,472,000			2,736,000			50.00
<b>Wastemanagement</b>							
Vehicles	2,220,000			357			0.02
Bins	19,020			13,797			72.54
<b>Total</b>	<b>724,640,020</b>	<b>104,296,000</b>	<b>7,535,000</b>	<b>369,280,243</b>	<b>95,151,123</b>	<b>6,761,717</b>	<b>56.33</b>