

EXHIBIT B

20-YEAR CAPITAL NEEDS PROJECTION



20 YEAR - CAPITAL PROGRAM PROJECTION (2020 - 2040)

August 30, 2019

Year	Bear Mountain	Newburgh - Beacon South	Newburgh - Beacon North	Mid-Hudson	Walkway over the Hudson	Kingston - Rhinecliff	Rip Van Winkle	Systemwide	Total	Annual
2020			Deck Replacement Design / CI	Substructure Repairs	Biennial Inspection		Nova-Chip	Biennial Inspections	\$1,740,000	
	Substructure Repairs	Pedestrian Walkway	Deck Replacement	Star Bldg. Loading Dock	River Pier Base Repair	Electrical Upgrade	Electrical Upgrade	Sys. Equip. Purchase	\$4,600,000	
	Overlay & Deck Repairs	River Pier Base		Curb/Railing Replacement		Deck & Rdway Overlay		In- House Capital Prog	\$11,860,000	
						River Pier Base Repair		IT Department	\$14,398,000	
2021			Deck Replacement/CI	Viaduct Painting				Administration	\$320,000	
				Bridge & Approach Paving				Operations	\$7,725,000	
								Capital Maintenance	\$500,000	
								AET / Plaza Removal	\$7,000,000	\$48,143,000
2022	Approach Rehab.		Deck Replacement/CI	Maintenance Painting		De-lead Appr. Spans	Maint. Paint Tower & Deck Truss	Biennial Inspections	\$39,990,000	
								Sys. Equip. Purchase	\$6,400,000	
								In- House Capital Prog	\$11,310,000	
								IT Department	\$357,000	
2023	Maintenance Painting Towers above deck		Deck Replacement			Pedestrian Walkway		Administration	\$40,000	
								Operations	\$995,000	
								Capital Maintenance	\$500,000	
								AET / Plaza Removal	\$5,000,000	\$64,592,000
2024				Replace Suspenders		Pedestrian Walkway		Biennial Inspections	\$30,890,000	
				Rock Scaling	Steel Repairs			Sys. Equip. Purchase	\$3,600,000	
								In- House Capital Prog	\$1,310,000	
								IT Department	\$538,000	
							Administration	\$50,000		
							Operations	\$500,000		
							Capital Maintenance	\$250,000		
										\$37,138,000



20 YEAR - CAPITAL PROGRAM PROJECTION (2020 - 2040)

August 30, 2019

Year	Bear Mountain		Newburgh - Beacon South		Newburgh - Beacon North		Mid-Hudson		Walkway over the Hudson		Kingston - Rhinecliff		Rip Van Winkle		Systemwide		Total	Annual
2030													E. & W. Approach		Capital Maintenance	\$275,000	\$275,000	
													Roadway	\$1,000,000	Biennial Inspections	\$890,000	\$18,890,000	
	Substructure Repairs	\$300,000	Maintenance Painting	\$17,000,000	Substructure Repairs	\$500,000	Substructure Repairs	\$600,000	Substructure Repairs	\$300,000	Substructure Repairs	\$500,000	Substructure Repairs	\$300,000	Sys. Equip. Purchase	\$500,000	\$3,500,000	
			Substructure Repairs	\$500,000											In- House Capital Prog	\$1,310,000	\$1,310,000	
															IT Department	\$500,000	\$500,000	
															Administration	\$55,000	\$55,000	
															Operations	\$110,000	\$110,000	
														Capital Maintenance	\$250,000	\$250,000	\$24,890,000	
2031	Electrical Upgrade	\$2,000,000	Maintenance Painting	\$16,000,000											Biennial Inspections	\$890,000	\$18,890,000	
															Sys. Equip. Purchase	\$500,000	\$500,000	
															In- House Capital Prog	\$1,310,000	\$1,310,000	
															IT Department	\$500,000	\$500,000	
															Administration	\$75,000	\$75,000	
															Operations	\$125,000	\$125,000	
															Capital Maintenance	\$250,000	\$250,000	\$21,650,000
2032							Bridge & Approach Paving	\$4,000,000					(A) Deck (40 yrs)		Biennial Inspections	\$890,000	\$890,000	
												Replacement	\$40,000,000	Sys. Equip. Purchase	\$500,000	\$44,500,000		
												Seismic Retro-fit	\$5,000,000	In- House Capital Prog	\$1,310,000	\$6,310,000		
														IT Department	\$500,000	\$500,000		
														Administration	\$75,000	\$75,000		
														Operations	\$125,000	\$125,000		
														Capital Maintenance	\$250,000	\$250,000	\$52,850,000	
2033							(A) Deck Replacement - 45yrs	\$40,000,000							Biennial Inspections	\$890,000	\$40,890,000	
							(A) Seismic Retro-fit	\$3,000,000							Sys. Equip. Purchase	\$500,000	\$3,500,000	
															In- House Capital Prog	\$1,310,000	\$1,310,000	
															IT Department	\$500,000	\$500,000	
															Administration	\$75,000	\$75,000	
															Operations	\$125,000	\$125,000	
															Capital Maintenance	\$250,000	\$250,000	\$46,650,000
2034							Maint. Paint Floor System and Trusses	\$10,000,000							Biennial Inspections	\$890,000	\$890,000	
															Sys. Equip. Purchase	\$500,000	\$500,000	
					Maintenance Paint	\$5,000,000									In- House Capital Prog	\$1,310,000	\$11,310,000	
															IT Department	\$500,000	\$5,500,000	
															Administration	\$75,000	\$75,000	
															Operations	\$125,000	\$125,000	
															Capital Maintenance	\$250,000	\$250,000	\$18,650,000
2035	Substructure Repairs	\$300,000	Substructure Repairs	\$500,000	Substructure Repairs	\$500,000	Substructure Repairs	\$600,000	Substructure Repairs	\$300,000	Substructure Repairs	\$500,000	Substructure Repairs	\$300,000	Biennial Inspections	\$890,000	\$3,890,000	
												(A) Deck Replacement (35 yrs)	\$50,000,000	Sys. Equip. Purchase	\$500,000	\$500,000		
															In- House Capital Prog	\$1,310,000	\$51,310,000	
															IT Department	\$500,000	\$500,000	
															Administration	\$75,000	\$75,000	
															Operations	\$125,000	\$125,000	
															Capital Maintenance	\$250,000	\$250,000	\$56,650,000



20 YEAR - CAPITAL PROGRAM PROJECTION (2020 - 2040)

August 30, 2019

Year	Bear Mountain		Newburgh - Beacon South		Newburgh - Beacon North		Mid-Hudson		Walkway over the Hudson		Kingston - Rhinecliff		Rip Van Winkle		Systemwide		Total	Annual	
2036											(A) Deck Replacement (35 yrs)	\$50,000,000			Biennial Inspections	\$890,000	\$890,000		
															Sys. Equip. Purchase	\$500,000	\$500,000		
															In-House Capital Prog	\$1,310,000	\$51,310,000		
															IT Department	\$500,000	\$500,000		
															Administration	\$75,000	\$75,000		
															Operations	\$125,000	\$125,000		
														Capital Maintenance	\$250,000	\$250,000		\$53,650,000	
2037															Biennial Inspections	\$890,000	\$890,000		
															Sys. Equip. Purchase	\$500,000	\$500,000		
															In-House Capital Prog	\$1,310,000	\$1,310,000		
															IT Department	\$500,000	\$500,000		
															Administration	\$75,000	\$75,000		
															Operations	\$125,000	\$125,000		
														Capital Maintenance	\$250,000	\$250,000		\$3,650,000	
2038	Main Cable Evaluation	\$2,500,000	West Approach Rdwy	\$2,000,000	East Approach Rdwy	\$2,000,000	Main Cable Evaluation	\$3,000,000							Biennial Inspections	\$890,000	\$890,000		
															Sys. Equip. Purchase	\$500,000	\$10,000,000		
															In-House Capital Prog	\$1,250,000	\$1,250,000		
															IT Department	\$500,000	\$500,000		
															Administration	\$75,000	\$75,000		
															Operations	\$125,000	\$125,000		
														Capital Maintenance	\$250,000	\$250,000		\$13,090,000	
2039			(A) Pier Protection for Ship Collision	\$17,000,000	(A) Pier Protection for Ship Collision	\$17,000,000	(A) Pier Protection for Ship Collision	\$24,000,000	Biennial Inspection	\$500,000	(A) Pier Protection for Ship Collision	\$30,000,000	(A) Pier Protection for Ship Collision	\$9,000,000	Biennial Inspections	\$890,000	\$1,390,000		
															Sys. Equip. Purchase	\$500,000	\$97,500,000		
															In-House Capital Prog	\$1,250,000	\$1,250,000		
															IT Department	\$500,000	\$500,000		
															Administration	\$75,000	\$75,000		
															Operations	\$125,000	\$125,000		
														Capital Maintenance	\$250,000	\$250,000		\$101,090,000	
2040	Substructure Repairs	\$300,000	Substructure Repairs	\$500,000	Substructure Repairs	\$500,000	Substructure Repairs	\$600,000	Substructure Repairs	\$300,000	Substructure Repairs	\$500,000	Substructure Repairs	\$300,000	Biennial Inspections	\$890,000	\$3,890,000		
	Appr. Rehab/ Deck Overlay	\$3,500,000									Approach Paving	\$3,000,000			Sys. Equip. Purchase	\$500,000	\$7,000,000		
											Deck Overlay	\$2,500,000			In-House Capital Prog	\$1,250,000	\$3,750,000		
															IT Department	\$500,000	\$500,000		
															Administration	\$75,000	\$75,000		
															Operations	\$125,000	\$125,000		
														Capital Maintenance	\$250,000	\$250,000		\$15,590,000	
Totals		\$74,025,000		\$88,000,000		\$118,550,000		\$122,300,000		\$32,360,000		\$198,500,000		\$84,475,000		\$117,982,000	Program Total >>	\$836,192,000	

(A) - Evaluate Options

IT Department (Systemwide): Equipment Purchases, Electronic Data Processing Upgrade, Area wide networking and misc.

Admin / Ops Dept. (Systemwide): Equipment Purchases, Business Application Enhancement, EZ Pass, All Electronic Tolling (AET)

Component	Rehab. Cycle	Bear Mtn.	Newburgh (S)	Newburgh (N)	Mid-Hudson	Walkway Over Hudson	Kingston	Rip Van Winkle
Remove Toll Plaza - AET	20 - 25 yrs.	2020-2022	2020-2022	-	2020-2022	-	2020-2022	2020-2022
Electrical System	20 - 25 yrs.	2031	-	-	2025	-	2020	2020
Deck Replacement	35 - 50 yrs.	2026 (50yrs)	2050 (35 yrs)	2020 (37 yrs)	2033 (45 yrs)	-	2035 (35 yrs)	2032 (40 yrs)
Maintenance Painting	15 - 20 yrs.	2023	2027	2034	2021/22/26	2024-2026	2022	2022/2027
Joints & Overlay	12 - 15 yrs.	2029	-	-	2013	-	2020 / 2030	2019 / 2029
Approach Roadway	10 - 12 yrs.	2022	2019 / 2029	2018 / 2028	2019 / 2029	-	2019 / 2029	2019 / 2029
Miscellaneous Metalwork	5 - 7 yrs.	-	2019/2020	-	-	2018	-	-
Substructure	5 yrs.	2020/25/30/35/40	-	2020/25/30/35/40	20/25/30/35/40	2020/25/30/35/40	20/25/30/35/40	2025/30/35/40
Cable Investigation	10 yrs.	2028	N/A	N/A	2028	N/A	N/A	N/A
Suspender Replacement	80 - 100 yrs.	2028	N/A	N/A	2024	N/A	N/A	N/A