

Martha's Vineyard Public Safety Communications System Development

# FY20 Maintenance Cost Funding Request

**Dukes County Sheriff's Office** 

## Proposed Communications System

Phased Approach Timeline

#### Five Year Project Goals

#### Management Framework

- Secure System Maintenance Funding from Towns
- Execute MOU for Technical Services with all Towns
- Establish Advisory Committee with Town membership

#### Phase I (Infrastructure)

- Replace/upgrade existing infrastructure equipment
- Upgrade Law Enforcement Channel (860)
- Install backhaul network

#### Phase II (Radio hardware)

- Upgrade Fire, EMS, Government, and Interop Channels
- Integrate all systems from Phase I

#### Phase III (Subscriber Units)

- Replace all existing subscriber units
- System cutover to digital

## System User Maintenance Payments

**Historical Perspective** 

- Island Towns funded RECC operations through County assessments, based on real estate valuations, from 1964 to 2009, when Sheriff's Office became a State agency (2007 County Charter Study explains impact of State transition to Island Towns re Sheriff's Office services). Approx. savings to Towns between 2010-2019 fiscal years now exceed \$5M.
- Commonwealth does not fund the operation of RECC in Sheriff's General Appropriation, but rather provides limited grant funding through State 911 Department, which pays for some staff costs.
- Last year, Sheriff's Office requested an assessment to help offset approx. \$600,000 in deficit spending from the Towns, allocated based on the call volume per participating municipality. Annual deficit spending is to be eliminated as a mandate from the Legislature.
- Since then, Sheriff secured additional State 911 Dept. grant funding for personnel costs, reducing operational deficit. This only leaves other RECC maintenance costs to be funded by system users.
- Sheriff also secured developmental grant funding to upgrade the regional radio system; however, this funding specifically precludes maintenance and some development costs. Such maintenance and development costs are to be also funded by system users.

## System Maintenance and Technical Services

Services Covered under Motorola Service Agreement and by Dukes County Sheriff

- Backup power supply
  - Fuel
  - Maintenance
- Radio equipment
  - Tuning/Alignment
- Tower maintenance
  - Hardware Alignment
  - Feed line integrity
- Software
  - Updates
  - System security
- 24 X 7 X 365 Technical Support
- On island technical services
- Ongoing technical certification training
- Motorola onsite support services within 24 hours
- Annual Preventative Maintenance





# System Maintenance Costs

Grant Ineligible Development, Maintenance and Management Items - Year 1

- Motorola Essentials+ Service Package
  - **\$69.411**
- Service Package Exclusions
  - Passive equipment such as feed line, antenna's, combining equipment, and dehydrators; UPS and UPS Batteries and Tower Climbing personnel expenses, if necessary.
  - Maintenance costs of towers, shelters, HVAC, or site generators.
  - **\$17,353**
- Permitting Legal Services
  - Assistance with Zoning Approvals and Negotiation of Option/Lease/License Agreement and Acquisition of Clear Land Title/Site Lease/Shared Use Agreement -\$5,972
  - Coordination of Zoning and Permitting of New Tower -\$9,492





## System Maintenance Costs

Grant Ineligible Development, Maintenance and Management Items – Year 1

#### • Reserve for Site Development Contingencies

- Tower structural enhancements if Structural Analysis fails at Pennywise, RECC, Peaked Hill, or the DCR tower.
- If at Oak Bluffs during the Phase I environmental assessment, Motorola discovers hazardous soils, and site needs remediation to soil or additional testing.
- If any of the sites require non-typical grounding upgrades.
- If there are any utility fees required for any sites other than RECC and DCR tower, as Motorola is using existing shelters, etc.
- The Path surveys are based on paper path studies only, which were accounted for in Motorola's Tower design. Once the physical path surveys are completed, the design with be finalized and updated based on that.
- Re-programming cost of existing Kenwood mobile and portable radios
- \$79,642 (10% of Phase 1a Site Development Costs)





# System Maintenance Costs

Grant Ineligible Development, Maintenance and Management Items - Year 1

#### Project Management Items

- Planning and facilitation of project meetings.
- Monthly and quarterly project reports.
- Assist the Office of Sheriff in the procurement process for the primary vendor.
- Coordinate with the State 911 Department staff.
- Develop the FY20 State 911 Department Regional Development Grant for Phase 2.
- **\$4,331**

#### RECC Maintenance Costs

- Equipment Purchases \$16,413
- Equipment Lease Maintain & Repair \$10,437
- Infrastructure \$24,264
- Total \$51,114
- Total Year 1 Maintenance of Effort \$237,313







#### System Maintenance Costs Request

Financial Breakout

#### **Maintenance of Effort Costs**

	Year 1		Year 2		Year 3		Year 4		Year 5	
Motorola Essentials+ Service Package	\$	69,411.00	\$	122,175.00	\$	128,804.00	\$	133,204.00	\$	137,775.00
Essentials+ Exclusions Estimates	\$	17,352.75	\$	30,543.75	\$	32,201.00	\$	33,301.00	\$	34,443.75
Grant Ineligible Development Costs	\$	15,464.00	\$	15,850.60	\$	16,246.87	\$	16,653.04	\$	17,069.36
Development Contingencies Reserve	\$	79,641.80	\$	81,632.85	\$	83,673.67	\$	85,765.51	\$	87,909.65
Grant Ineligible Management Costs	\$	4,330.56	\$	4,438.82	\$	4,549.79	\$	4,663.54	\$	4,780.13
RECC Maintenance Projections	\$	51,113.00	\$	52,390.83	\$	53,700.60	\$	55,043.11	\$	56,419.19
Total Maintenance Costs	\$	237,313.11	\$	307,031.84	\$	319,175.92	\$	328,630.19	\$	338,397.07

<sup>\*</sup> Essentials+ Service Package excluded items are calculated using an added 25% projection to Service Package quotations.

These are preliminary "soft cost" estimates, to be finalized by Motorola Engineering team.

<sup>\*\*</sup> RECC maintenance is based on FY2019 projections, excluding personnel and other operational costs, with 2.5% annual growth.

Development Grant ineligible costs are estimated to continue during subsequent phases of the development, with 2.5% annual growth.

Site Development Contingencies Reserve is estimated at 10% of Phase 1a Development Costs, with 2.5% growth in later phases.

# System Maintenance Costs Request

Allocation - 50% Share + 50% Dispatch Volume

50% Share + 50% Call Volume Formula								
	Shares	Share %	Call %	Total %				
Aquinnah	1	16.67%	2.53%	9.60%				
Chilmark	1	16.67%	6.60%	11.63%				
Edgartown	1	16.67%	27.48%	22.07%				
Oak Bluffs	1	16.67%	29.45%	23.06%				
Tisbury	1	16.67%	22.98%	19.82%				
West Tisbury	1	16.67%	10.71%	13.69%				
Sheriff's Office			0.25%	0.13%				
	6	100.00%	100.00%	100.00%				

## System Maintenance Costs Request

Allocation - 50% Share + 50% Dispatch Volume

	50% Share				Syster						
	50% Call Volume	II Volume		Year 1		Year 2		Year 3		Year 4	
Aguinnah	9.60%	\$	22,778.10	\$	29,469.94	\$	30,635.57	\$	31,543.02	\$	32,480.48
Chilmark	11.63%	\$	27,607.43	\$	35,718.04	•	37,130.80	•	38,230.65	•	39,366.86
Edgartown	22.07%	\$	52,382.91	\$	67,772.16	\$	70,452.77	\$	72,539.64	\$	74,695.51
Oak Bluffs	23.06%	\$	54,720.45	\$	70,796.43	\$	73,596.65	\$	75,776.65	\$	78,028.73
Tisbury	19.82%	\$	47,043.37	\$	60,863.95	\$	63,271.31	\$	65,145.46	\$	67,081.58
West Tisbury	13.69%	\$	32,484.21	\$	42,027.54	\$	43,689.86	\$	44,984.00	\$	46,320.92
Sheriff's Office	0.13%	\$	296.64	\$	383.79	\$	398.97	\$	410.79	\$	423.00
Total M	aintenance Costs	\$	237,313.11	\$	307,031.84	\$	319,175.92	\$	328,630.19	\$	338,397.07