Town of Nags Head Capital Improvement Program Request Fiscal Years 2016-2017 through 2020-2021

1. Project:	Reduce Costs by Replacing Leased Fiber with Fixed Wireless	2. Department	Information Technology	3. Rank (Completed by TM)	

4. Project Description

Reduce the connection cost for Fire Station 21 by replacing leased fiber with a wireless microwave connection.

5. Type of Project or Acquisition

- ☑ Replacement
- ☐ New
- ☐ Renovation
- ☐ Expansion
- ☐ Equipment
- ☐ Land

6. Project Justification

Fire Station 21 is currently connected to the Nags Head Town Hall via leased optical fiber from Charter Cable. The leased fiber cost $7,200 annually. The town has paid approximately $72,000 to maintain this connection over the past 10 years. Costing $32,000, this project would pay for itself in less than 5 years. The proposed solution should be adequate for 7 years and possibly longer, saving the town a significant amount of money over the life expectancy of the project. This project was proposed last year also. Please see the previous year proposal for more detail.

7. Implementation/Acquisition Schedule

Project Category	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Beyond 2021
Planning and Design	☑	☐	☐	☐	☐	☐
Land and Land Acquisition	☐	☐	☐	☐	☐	☐
Construction	☑	☐	☐	☐	☐	☐
Equipment Acquisition	☑	☐	☐	☐	☐	☐
Miscellaneous	☐	☐	☐	☐	☐	☐

8. Operating Budget Impact

	Personnel:	Capital/One Time Costs	Maintenance/ Operating Costs:	Other:	Total:
FY 2017:		$32,000			$32,000
FY 2018:					$0
FY 2019:					$0
FY 2020:					$0
FY 2021:					$0

9. Additional or Alternate Funding Sources

	FY 2017:	FY 2018:	FY 2019:	FY 2020:	FY 2021:	Beyond 2021:	Total:
Reserve:							$0
Grants:							$0
Other:							$0
Other:							$0
Other:							$0
Total:	$0	$0	$0	$0	$0	$0	$0

Town of Nags Head Capital Improvement Program Request Fiscal Years 2016-2017 through 2020-2021

1. Project:	Implement Port Network Access Control (PNAC) Security On the Town's Data Network	2. Department	Information Technology	3. Rank (Completed by TM)	

4. Project Description

Implement additional security measures to prevent unauthorized devices (not Town owned) from connecting to Town assets from inside the network. This would also be the first step in considering Bring Your Own Device (BYOD) access to the Town's network.

5. Type of Project or Acquisition

☐ Replacement	☑ New		
☐ Renovation	☐ Expansion		
☐ Equipment	☐ Land		

6. Project Justification

Currently there is only a policy that restricts conections to the Town's network to Town owned devices. However, any device physically attached to the network is granted connectivity. Though the network is adequately protected from external threats by a firewall, there is no mechanism to prevent unauthorized devices (not Town owned) from connecting to Town assets from the inside. Devices that are not under the Town's control, could harbor malware (intentionally or unintentionally) that could be harmful to the Town's computers and data systems. Implementing PNAC would prevent connectivity to Town assets by unauthorized devices.

7. Implementation/Acquisition Schedule

Project Category	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Beyond 2021
Planning and Design	☑	☑	☐	☐	☐	☐
Land and Land Acquisition	☐	☐	☐	☐	☐	☐
Construction	☐	☐	☐	☐	☐	☐
Equipment Acquisition	☐	☑	☐	☐	☐	☐
Miscellaneous	☐	☑	☐	☐	☐	☐

8. Operating Budget Impact

	Personnel:	Capital/One Time Costs	Maintenance/ Operating Costs:	Other:	Total:
FY 2017:					$0
FY 2018:		$15,000			$15,000
FY 2019:					$0
FY 2020:					$0
FY 2021:					$0

9. Additional or Alternate Funding Sources

	FY 2017:	FY 2018:	FY 2019:	FY 2020:	FY 2021:	Beyond 2021:	Total:
Reserve:							$0
Grants:							$0
Other:							$0
Other:							$0
Other:							$0
Total:	$0	$0	$0	$0	$0	$0	$0

| 1. Project: | Replace/Update Phone System and LAN Switches | 2. Department | Information Technology | 3. Rank (Completed by TM) | |

4. Project Description

Replace the Town's telephone system and network switches with new updated equipment.. Replacement estimated at $80,000, financed over three 93) years at 4%, total cost of $83,157.

5. Type of Project or Acquisition

- ☑ Replacement
- ☐ New
- ☐ Renovation
- ☐ Expansion
- ☐ Equipment
- ☐ Land

6. Project Justification

Phone systems and switches are usually replaced after 10-20 years of service. The Town's phone system and network switches will be 10 years old in 2021. Due to rapid changes in technology, it is difficult to anticipate how the performance of the existing equipment will be perceived in 2021. It is possible the existing equipment may be sufficient for several more years. Estimated cost is based on the previous replacement project completed in 2011 at a cost of $93,000. However, telephone and networking equipment costs have generally decreased over time.

7. Implementation/Acquisition Schedule

Project Category	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Beyond 2021
Planning and Design	☐	☐	☐	☐	☑	☐
Land and Land Acquisition	☐	☐	☐	☐	☐	☐
Construction	☐	☐	☐	☐	☑	☐
Equipment Acquisition	☐	☐	☐	☐	☑	☐
Miscellaneous	☐	☐	☐	☐	☐	☐

8. Operating Budget Impact

	Personnel:	Capital/One Time Costs	Maintenance/ Operating Costs:	Other:	Total:
FY 2017:					$0
FY 2018:					$0
FY 2019:					$0
FY 2020:					$0
FY 2021:		$27,719			$27,719
Beyond 2021:		$55,438			$55,438

9. Additional or Alternate Funding Sources

	FY 2017:	FY 2018:	FY 2019:	FY 2020:	FY 2021:	Beyond 2021:	Total:
Reserve:							$0
Grants:							$0
Other:							$0
Other:							$0
Other:							$0
Total:	$0	$0	$0	$0	$0	$0	$0