

**CAPITAL IMPROVEMENT PROGRAM  
FISCAL YEAR 2012-2013 THROUGH 2016-2017  
ITEM/PROJECT DESCRIPTION FORM**

<b>REQUESTING DEPARTMENT:</b> Information Technology	<b>PROJECT TITLE:</b> MCNC Fiber Connection for Public Works
<b>PROJECT DESCRIPTION:</b> <p>The MCNC Golden Leaf Rural Broadband Initiative (GLRBI) fiber project is scheduled to be completed by the end of 2012. This project will provide a connection from the Nags Head Public Works office at 2200 Lark Ave to the MCNC fiber that will run alongside Highway 158.</p> <p>The Town can utilize this new fiber run to reduce the cost of existing LAN connections. However, the Town must pay initial construction costs for connecting to the new fiber. Contracting this run in conjunction with the MCNC fiber project will allow the Town to piggyback on construction rates that will likely be obtainable only in conjunction with the MCNC project.</p> <p><b>Note:</b> At the present time, no written quotations have been provided for this project. All figures in this request are based upon rough, typical construction costs stated during phone conversations and meetings with an MCNC representative. Further, an effort is underway to partner with the Town of Kill Devil Hills and to contact cell tower tenants at 401 S Eighth St to propose partnering with the Town to share connection costs. As there are no agreements or written quotes in effect at this time, this request is written based on rough, typical construction costs with the Town bearing the entire cost of construction.</p>	
<b>PROJECT JUSTIFICATION:</b> (What need is being met: Where is this documented: How does this project address the need?) <p>Our current cost for the fiber connection from Public Works to Town Hall is \$600/month. The 5 year contract that was in place for this service expired in September 2010 and the provider has stated they no longer offer this product. Though it could be terminated on short notice at any time, the service has continued on a month to month basis.</p> <p>The Town attempted to renegotiate the contract 9 months before it expired. Eventually, we were offered a replacement product that was approximately 50% higher in cost.</p> <p>MCNC has stated they can provide this fiber connection at a cost of approximately \$200/month once their project is completed. However, the Town must pay for running fiber from the Public Works office to the proposed path along Highway 158.</p> <p>Based on cost estimates from MCNC for replacing the existing fiber services, annual savings to the town should be approximately \$4,800 per year after the initial construction cost is recouped.</p>	
<b>LOCATION OF PROJECT:</b> (Attach a map if applicable) <p>Two paths to complete the fiber run from Highway 158 to the Public Works office at 2200 Lark Avenue are being considered. One path would be alongside W. Satterfield Landing and Lark Avenue. The other would be alongside W. Eighth St and Lark Avenue.</p>	

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DEPARTMENT PRIORITY: (Choose One)

Does the requested project:

- X     a) Correct an unsatisfactory level of service?  
           b) Maintain a current level of service?  
           c) Increase a level of service?  
    X     d) Represent a "vision"?

DEPARTMENTAL RANK: (Prioritize your request in relation to other departmental project request)

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PAST ACTION: (Choose one)

Is the requested project currently scheduled for implementation:

Yes           

No     X    

If yes, what year?           

PROJECT ALTERNATIVES: Alternatives ranging from other communications providers to the construction of a town owned wireless link have been considered over the past two years to replace the existing connection. All solutions considered were either higher in monthly cost or involved high initial costs. In the case of a town owned wireless link, reliability and serviceability are questionable especially during inclement weather.

PROJECT DEPENDENCY:

- Funding
- Obtaining written cost quotations from MCNC that verify the rough figures.
- Completion of the MCNC GLRBI project in our area. (This seems inevitable at this point.)

NEGATIVE IMPACTS: None, other than initial construction cost and inconveniences of the construction.

OTHER CONSIDERATIONS: The Information Technology Department is currently working to share the construction cost with the Town of Kill Devil Hills. They are likely to include their Water Plant with this connection. The initial meeting resulted in a very favorable response. As advised by the MCNC Engineer, we're also trying to contact cell phone tenants on the cell tower at 401 W. Eighth St to see if they are interested in partnering on a connection.

This project also presents the potential for Kill Devil Hills and Nags Head to share the cost of leasing a fiber connection to the Dare County offices at a very reasonable rate. This would present opportunities to improve the efficiency and information sharing of town and county Public Safety applications. The project will also open the possibility of utilizing interagency connections and cooperation for sharing other servers and storage to reduce the cost of backing up data and provide greater geographic separation of data backups. Other shared government "cloud" applications could be discussed and implemented at later dates

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as well.

Once connected, Nags Head and Kill Devil Hills could also share an Internet connection from MCNC. For Nags Head, this would provide roughly the same Internet bandwidth that we currently and provide an additional savings of approximately \$4,000 per year.

The provider of the current fiber connection to Public Works could terminate the service at any time and require that we purchase their replacement service to maintain the connection from Town Hall to Public Works. This would increase the cost to maintain the existing connection by approximately \$3,000 per year until another alternative can be sourced and implemented.

**ADDITIONAL FUNDING SOURCES:**

Are there grants or additional funds which might be used in conjunction with the CIP to fund this project:

Yes \_\_\_\_\_

No     X    

If yes, describe:

**ESTIMATED COSTS**

<b>Capital/ One Time Costs</b>	<b>Description of Capital/One Time Costs</b>	<b>Cost</b>
		\$ 17,000
	<b>TOTAL Capital (One Time Costs)</b>	\$ 17,000
<b>Continuing Annual Operating Costs</b>	<b>Description of Continuing Annual Operating Costs (A)</b>	
		\$ 2,400
	<b>TOTAL A (Continuing Annual Operating Costs)</b>	\$ 2,400
<b>Salary (If Additional Personnel Needed)</b>	<b>Description of Salary (B)</b>	
		\$ 0
	<b>TOTAL B (Salary if Additional Personnel Needed)</b>	\$ 0
	<b>TOTAL ANNUAL COSTS (A+B)</b>	\$ 2,400

YEAR REQUESTED: FY 2012 - 2013

PRIORITY RECOMMENDATION:  
(By CIP Committee)