ST. MARY'S COUNTY GOVERNMENT
DEPARTMENT OF THE
COUNTY ADMINISTRATOR
Dr. Rebecca B. Bridgett, County Administrator

Commissioners of St. Mary's County
James Randy Guy, President
Eric Colvin, Commissioner
Michael L. Hewitt, Commissioner
Todd B. Morgan, Commissioner
John E. O'Connor, Commissioner

DEPARTMENTAL PLAN OF ACTION

Issue: Addressing the Board of Education Broadband needs based upon remote Education due to COVID.

Date of Report: July 27, 2020

Department: Information Technology

Director: Robert Kelly

SUMMARY:

Preparations for the 2020-2021 school year and the of COVID-19 community response has elevated the multi-year Broadband efforts and accelerated the funding and cable plant buildout of Middle Mile and recent changes in the Public School operations have required consideration to include addressing the Last Mile needs of students in underserved areas within St. Mary's County.

St. Mary's County has invested in the expansion of existing commercial Cable Providers networks to allow service to be extended to areas which may not be economically feasible for the vendors to perform alone. The infusion of government grant funding has expanded the Middle Mile service to several identified underserved areas in our community. By funding the construction of these plant expansions, the county offsets the capital improvement costs of the vendor without assuming any maintenance and\or support costs associated with the services already being provided by the vendor. The Board of Education (BoE) has requested assistance from the county in identifying and resolving the connectivity limitations for students without broadband access.

To meet the challenge a collaborative effort between the Board of Education Information Technology Department and St. Mary's County Information Technology Department have been focused on data collection and analysis to identify the students which live in areas where wired broadband service is not currently offered. Wireless (4G, 3G, LTE, etc.) service is reported to have very good coverage in our county however; "real world" data speeds of these technologies have proven challenging when attempting data intensive operations utilized in the remote learning and remote working environment.

Significant investment in computer\tablet equipment has already been provided for students in the upcoming school year but, there are concerns with reportedly 10% of the estimated 18,000 student population may not have access to broadband at home. By combining County and BoE data staff should be able to identify and provide cost effective recommendations for immediate and long-term connectivity shortcomings of St. Mary's County students. The goal to provide broadband connectivity to all students will require accurate data, collaborative analysis, incorporation of all connectivity options, flexibility, and support.

PROJECT PLAN OF ACTION:

According to Federal Broadband Availability maps, St. Mary's County has greater than 90% broadband coverage within the county. Identification of the following categories of students will quantify most accurate number and cost to provide broadband service to underserved students:

1. Students which have access to wired broadband services and have service.

2. Students which have access to wired broadband (< 300" from cable plant) but, do not have service.

3. Students which are located near (> 300" from cable plant) and do not have access.

4. Students which are not located near existing cable plant.

Using the county's Geographical Information System (GIS) and BoE's student data staff will compare the students which have been identified as not having broadband available with ComCast's and Atlantic Broadband's current service area. Further analysis and possible filed testing would identify those locations:

1. Students without service and within the 300" free installation distance requirement.

2. Students without service but accessible with construction cost paid (> 300" from the existing plant).

3. Students beyond an existing broadband cable plant.

4. Students with wireless (4g) accessibility.

5. Students without wireless (4g) accessibility.

MILESTONES:

Date	Action	Status
July 14, 2020	BoE contacted St. Mary's to collaborate	Complete
July 14, 2020	CIO discussed tentative effort with County Administrator	Complete
July 14, 2020	BoE provided the county with all student addresses	Complete
July 15, 2020	County requested from Atlantic Broadband updated plant data. ComCast data was received earlier this year.	Complete
July 22, 2020	Data clean and de-duplication. 105 on Pax or out of county. 62 unmappable. 9,473 addresses mapped.	Complete.
July 22, 2020	Returned unmapped address for BoE review\correction	Complete
July 23, 2020	Received Atlantic Broadband data received	Complete
	Create Atlantic Broadband plant data overlay	
	Receive BoE underserved student list	
	Identify underserved students within 300" of existing cable plant. Provide cost to connect.	
	Identify underserved students >300" from existing cable plant. Provide cost to connect.	

	Identify underserved students beyond existing cable plant within 4g coverage area. Provide cost to connect.	
	Identify underserved students with no cable or 4g coverage	

RECOMMENDATION:

It is likely that to connect as many students as possible as quickly as possible a combination of Middle Mile, Last Mile, and wireless solutions will be necessary. Middle and Last Mile efforts require more initial capital to construct but, allow ongoing connectivity costs funded by the government to be eliminated. Wireless solutions present several challenges including security, ongoing cost, and bandwidth capacity which while necessary at some locations could be reduced if the analysis is completed. Additionally, these areas could be addressed in future Middle\Last Mile construction efforts. Staff recommends utilizing a data driven response to the connectivity need for students which incorporates all available options to provide the best solution possible in a such a varied environment.

SIGNED: _Bridgett_   7/28/2020
(Director/Department Head)

County Administrator Use