**Before the**
**FEDERAL COMMUNICATIONS COMMISSION**
**Washington, D.C. 20554**

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| In the Matter of | ) | |
| | ) | |
| Modernizing the E-Rate Program for Schools and Libraries | ) | WC Docket No. 13-184 |
| | ) | |

## OFFICE OF SUPERINTENDENT OF PUBLIC INSTRUCTION COMMENTS

The Office of Superintendent of Public Instruction (OSPI) in the State of Washington respectfully submits these comments in response to the Wireline Competition Bureau's March 6 Public Notice.[1] OSPI recognizes that the *E-Rate PN* as "an important mile marker on the road to E-rate modernization,"[2] and appreciates the Commission's commitment to an E-Rate Modernization Order that would be effective in time for Funding Year 2015.

***Broadband Deployment Within Schools.*** We agree with the *E-Rate PN*'s proposal to target E-Rate funds to support high-speed connectivity both *to* and *within* schools and libraries.[3] A school building may be served with high-speed bandwidth today, but without the internal infrastructure connecting that broadband to students and teachers in the classrooms, the promise of digital learning will remain unfulfilled. In other words, "internal connections are every bit as important as connectivity to the building."[4]

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[1] Wireline Competition Bureau Seeks Focused Comment on E-Rate Modernization, WC Docket No. 13-184, *Public Notice*, DA 14-308 (rel. March 6, 2014) ("*E-Rate PN*").

[2] Julie Veach, Chief, Wireline Competition Bureau, Moving Forward on the E-rate Modernization Path (March 6, 2014), http://www.fcc.gov/blog/moving-forward-e-rate-modernization-path.

[3] *E-Rate PN*, ¶ 6.

[4] Julie Veach, Chief, Wireline Competition Bureau, Moving Forward on the E-rate Modernization Path (March 6, 2014), http://www.fcc.gov/blog/moving-forward-e-rate-modernization-path.

Educators need flexibility to apply E-Rate funds on network components when the demands of digital learning necessitate additional support. Furthermore, advanced Wi-Fi deployment can realize infrastructure costs savings, and 1:1 initiatives continue to increase, further underscoring the need to prioritize in-school infrastructure in the Commission's reform efforts.

***Encouraging Cost Effective Purchasing Through Consortia and Bulk Buying.*** Fiscal responsibility requires that the Commission ensure the efficient use of E-Rate funds for broadband projects. To that end, the FCC should encourage consortia and bulk buying through more active state participation in the E-Rate program.[5]

- **Consortia**. Consortia enable greater competition and economies of scale, and the bulk buying enabled by consortium purchasing can in fact "drive down prices of the products necessary for Wi-Fi and LAN connectivity."[6] The K-20 Education Network in Washington is an example of how such efforts can maximize the use of E-Rate funds and pool resources and technical expertise.

The K-20 Education Network is a high-speed, high-capacity network that connects colleges, universities, K-12 school districts and libraries across Washington State. Over the past 7 years, the total E-rate funding for the K-12 portion of the K-20 Network has risen by a total of 51%, while the incredible growth in online usage during that period has seen a 1544% growth in endsite capacity (see Figure 1, Appendix A). The total funding requested for Funding Year 2014 actually *decreased* by 6% from Funding Year 2013, and we anticipate the total request for Funding Year 2015 to decrease even further.

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[5] *E-Rate PN*, ¶¶ 34-36.

[6] *E-Rate PN*, ¶ 35.

Even more strikingly, since 2001 the E-rate funding commitment for Internet Access for K-12 schools has decreased from $1.86 million to $78,000, while the Internet traffic itself has skyrocketed from .2 Gbps to over 6 Gbps (see Figure 2, Appendix A). This lone funding request provides unlimited Internet Access to well over 90% of the schools in the state, and demonstrates how the overall cost in the marketplace for this aggregated service is actually decreasing over time.

Ironically, despite the reductions in cost for Internet Access for the K-20 Network, overall requests in the Internet Access category of service for non-consortia applicants in Washington State have increased dramatically in the past few years, primarily due to the expanding definition of what is funded as part of Priority 1, and particularly the growth in hosted VoIP (see Figure 3, Appendix A).

By prioritizing consortium funding at each priority level using a consortium-specific process, and allocating expert consortium reviewers, the FCC can remove existing disincentives to consortia participation. Further, the we strongly urge the FCC to implement a 5 percent consortium-specific funding discount as it considers broader changes to the discount matrix, and consider allocating a small funding stream for state-level services, such as application administration, state consortium management, and technical and network planning. We believe this would enable more states to manage E-rate eligible statewide purchasing and networking from a central location, driving down both costs and administrative complexity.

- **Bulk Buying.** The FCC should enable applicants to take advantage of statewide contracting and bulk buying opportunities, which can help achieve the goal of cost-effective purchasing while reducing some of the complexities of technology purchasing. The benefits of pooling technology purchases together in this manner are numerous: higher cost savings,

increased incremental purchasing power, access to contractual negotiating expertise, efficiencies of scale, mitigation of administrative burdens, greater awareness of best practices, and reduced E-Rate funding demands. We encourage the FCC to explore prohibiting districts from receiving E-rate funds for the excess cost of substantially similar services and equipment over available consortium pricing, when purchasing consortia are available for them to join.

***Voice (including VoIP).*** The Commission should institute a clear, reasonable, and predictable process to de-emphasis, and potentially phase out, voice support, including VoIP. Such a process should recognize the immediate and dramatic budgetary impact on completely removing support for voice services, and minimize disruptions to school systems currently funding voice services through E-Rate. The possibility of phasing in these reductions over 3-5 years should be explored, as this reduction in funding is a MAJOR concern for a number of Washington districts. An alternative approach would be to phase out support by categories, e.g., remove support for paging and cellular in FY 2015, remove support for webhosting and email services in FY 2016, and remove all remaining voice telephone services – including hosted VoIP, SIP trunks, and PRI in FY2017.

Regarding VoIP, the Commission's Public Notice states that "As schools and libraries increasingly transition to voice over Internet protocol (VoIP) services, we expect the price they pay for voice services to decrease."[7] While we are aware that VoIP can, in some instances, reduce costs for voice services, we are concerned that this may be a faulty premise upon which to build the new E-rate funding structure.

We have seen numerous examples where applicants are now contracting for multi-year hosted VoIP services at a much higher cost than they would pay for traditional voice services, or for district-managed VoIP. Of note, we are seeing this trend in the higher-discount schools at a

[7] *E-Rate PN*, ¶ 40

much greater rate than in those who qualify for lower discounts. This leaves one to question if the selected VoIP solution is truly the most cost-effective, or simply that a non-discount portion of the solution is more cost-effective for the district. We believe that by treating ALL voice services alike, the Commission can help to level the playing field for all applicants, and encourage the procurement of the most *cost-effective* solution, rather than the *'most E-rate eligible'* solution.

***Funding Methodology.*** OSPI recommends that the discount calculations for all funding requests, both Priority 1 and particularly Priority 2, should be computed for school districts using the simple district average discount, and there should no longer be separate discount calculations for different buildings. This change was proposed in the July 19, 2013 NPRM and OSPI strongly supports it as a streamlining and simplification step as well as an important tool in equitably distributing funds. This approach is consistent with the way in which districts manage their finances (at the district level and not at the individual building level), as well as how state networks/consortia approach district and regional wide area network design. By using the exact same method of computing library and district discounts, all applicants will be on the same footing and will have equal access to Priority 2 funds.

***Next Steps.*** The Commission has set forth a thoughtful two-step process to reform of the E-Rate program. Ensuring that all existing funds are used as efficiently and effectively as possible is the most appropriate and responsible first step. It is equally important for the Commission to commit to evaluate its initial reforms, its E-Rate programmatic goals, and the sufficiency of funding under the program to meet the demands of new emerging models of education.

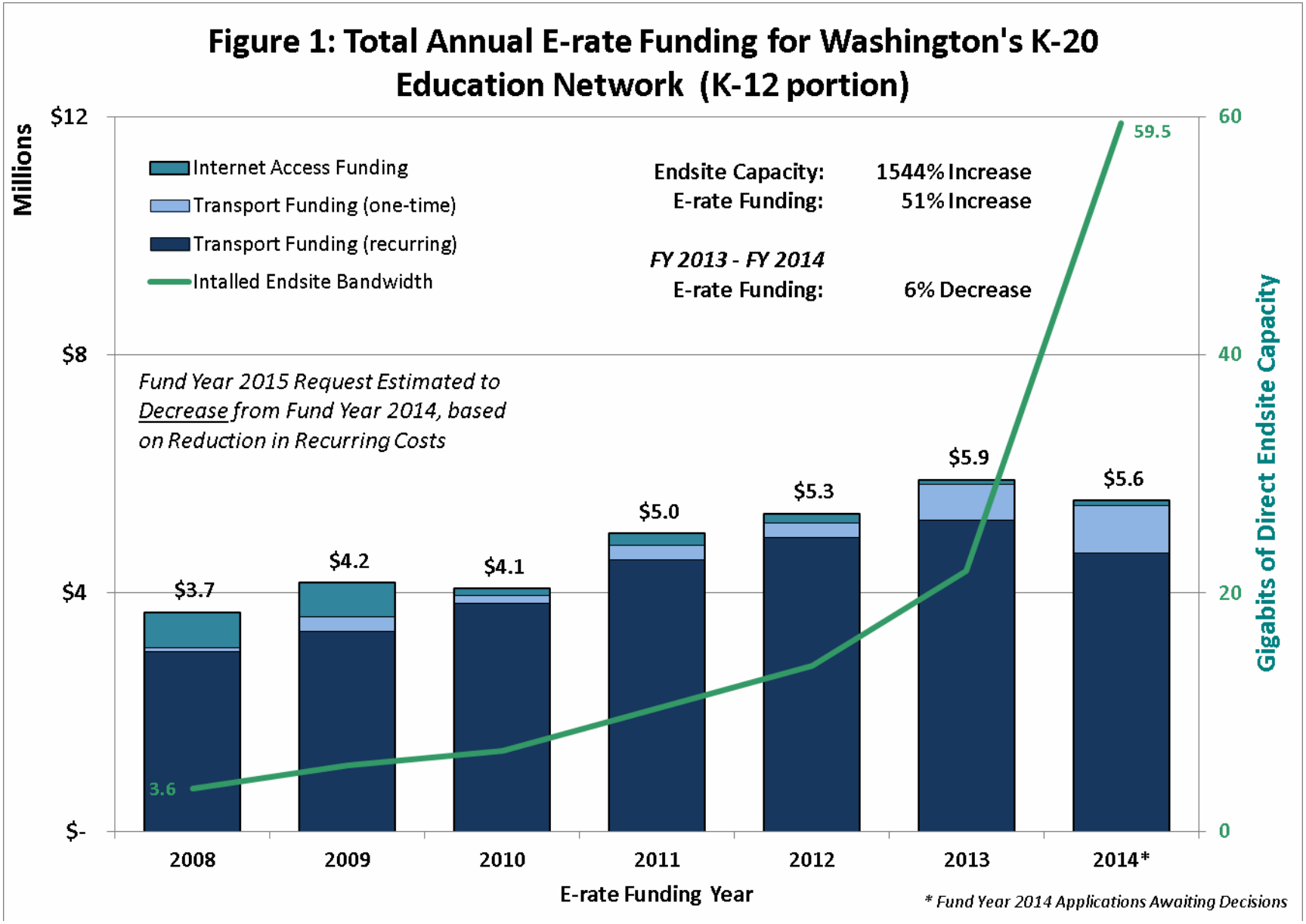
Figure 1: Total Annual E-rate Funding for Washington's K-20 Education Network (K-12 portion)
Millions
$12
$8
$4
$-
Internet Access Funding
Transport Funding (one-time)
Transport Funding (recurring)
Intalled Endsite Bandwidth
Endsite Capacity: 1544% Increase
E-rate Funding: 51% Increase
FY 2013 - FY 2014
E-rate Funding: 6% Decrease
Fund Year 2015 Request Estimated to Decrease from Fund Year 2014, based on Reduction in Recurring Costs
$3.7
$4.2
$4.1
$5.0
$5.3
$5.9
$5.6
3.6
59.5
60
40
20
0
Gigabits of Direct Endsite Capacity
2008
2009
2010
2011
2012
2013
2014*
E-rate Funding Year
* Fund Year 2014 Applications Awaiting Decisions

Appendix A

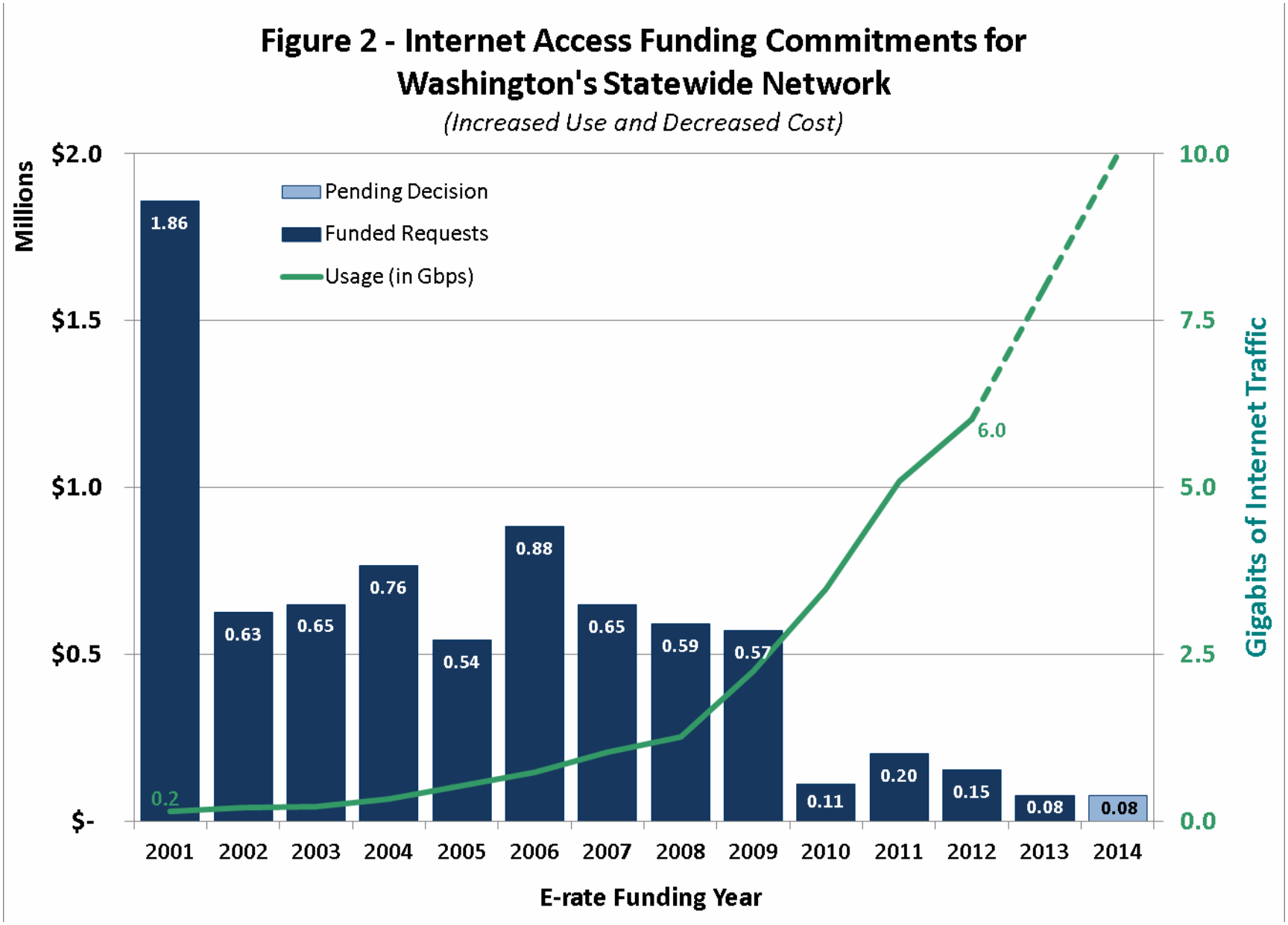
Figure 2 - Internet Access Funding Commitments for Washington's Statewide Network
(Increased Use and Decreased Cost)
Millions
$2.0
$1.5
$1.0
$0.5
$-
Pending Decision
Funded Requests
Usage (in Gbps)
1.86
0.63
0.65
0.76
0.54
0.88
0.65
0.59
0.57
0.11
0.20
0.15
0.08
0.08
0.2
6.0
10.0
7.5
5.0
2.5
0.0
Gigabits of Internet Traffic
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
E-rate Funding Year

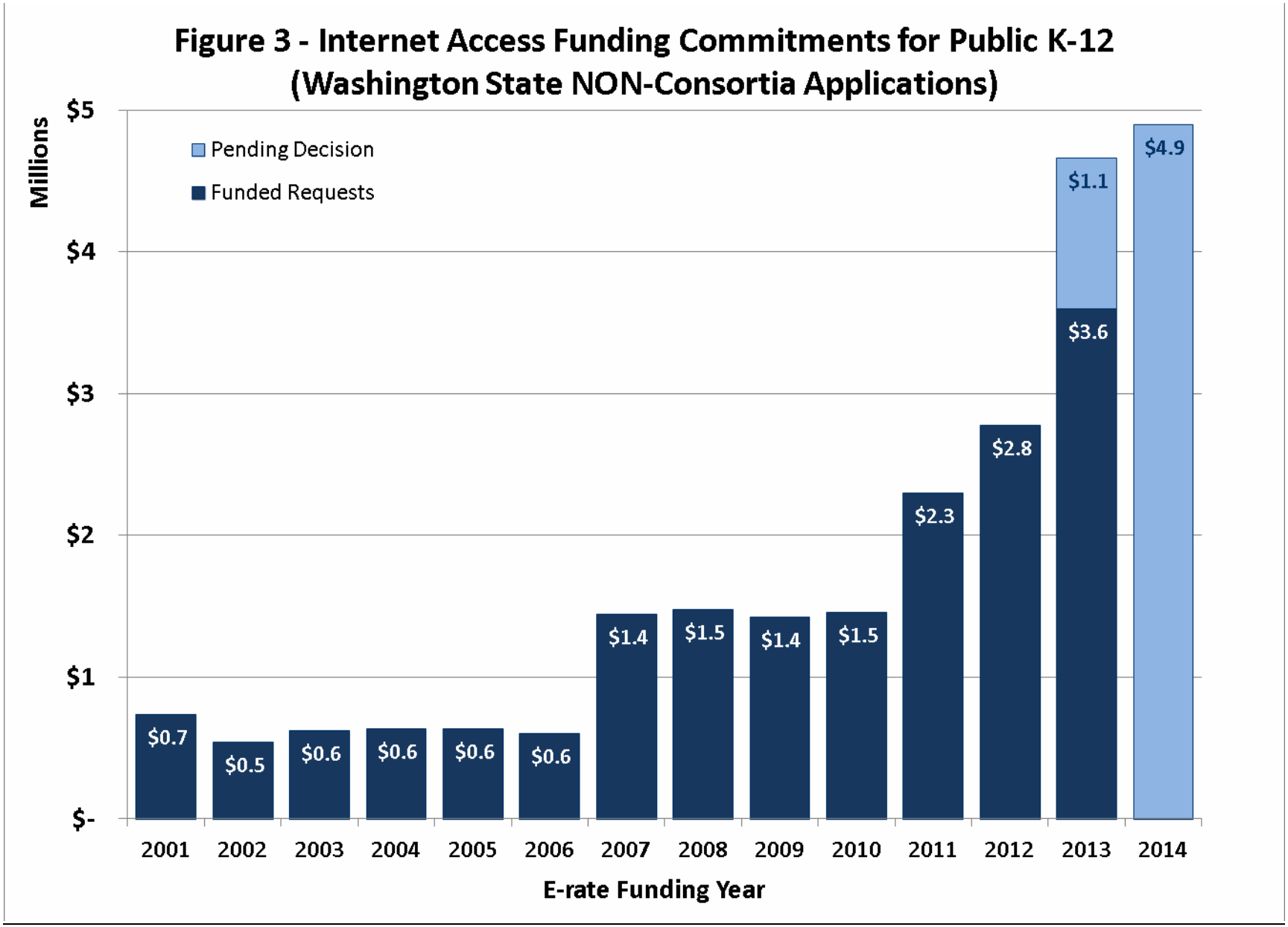
Figure 3 - Internet Access Funding Commitments for Public K-12
(Washington State NON-Consortia Applications)
Millions
$5
$4
$3
$2
$1
$-
Pending Decision
Funded Requests
$0.7
$0.5
$0.6
$0.6
$0.6
$0.6
$1.4
$1.5
$1.4
$1.5
$2.3
$2.8
$3.6
$1.1
$4.9
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
E-rate Funding Year