



# NORTHSHORE INSTRUCTIONAL TECHNOLOGY PROJECT PROPOSAL

**PROJECT TITLE** Chromebook Modernization 2019 - District 2 School - One to One Computing

**PROJECT MANAGERS** Shelby Reynolds and Sarah Lawrence

## Project Management Team

Director	Allen Miedema
Project Manager	Shelby Reynolds
Project Manager	Sarah Lawrence
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## Project Description

**The 2019 Chromebook Modernization Project District 2 School would allow for the deployment of 6500 new Chromebooks to bring all Northshore schools to a 1:1 computing ratio for student access.**

### Why Chromebooks?

ChromeOS laptops (Chromebooks) are essentially a “light” version of a laptop that relies on access to web-based tools, such as Google Drive, Office 365/OneDrive, and other web-based digital resources. Due to their low cost and ease of use, Chromebooks are the overwhelming choice of K12 public schools across the country. Because there is no specialized software to install or maintain, the cost to support and maintain Chromebooks is low, compared to higher priced and specialized devices such as MacOS devices.

### What model of Chromebook will meet our needs?

Our current fleet of Chromebooks include Lenovo and HP models. There are benefits to continuing to stay with our existing manufacturers to simplify support and maintain partnerships with local resellers and support providers. We explored base models from both manufacturers as well as models with touchscreen capabilities. When looking at HP and Lenovo models, HP’s 11” G6 was a solid candidate with the features we want from a manufacturer we have an existing relationship with. Lenovo does not make a touch unit comparable to the HP G6.

We engaged the NSEA/Admin Instructional Technology Leadership Committee (iTLC) with the question of whether touchscreen was a feature that was a necessary function for instruction. Unanimously, the iTLC agreed that having this additional feature adds functionality that expands instructional services that can be used with the device and increases accessibility for students in younger grades or with disabilities. For some students with motor skills challenges, touch capability allows them to access content that they may not be able to otherwise with traditional trackpad or mouse input methods. HP’s 11A G6 EE Touch meets these needs and is less expensive than similar models from other manufacturers.

### What will Chromebooks be used for? What won’t Chromebooks work for?

Chromebooks are the workhorses of our Instructional programs. For the vast majority of instructional uses, the Chromebook provides access to the tools and resources our students use regularly as part of their learning. Here are a few scenarios that describe what students and teachers can do with a Chromebook:

- Online research using databases provided by our Libraries (ProQuest, SIRS, KCLS, JStor, and PebbleGo)
- Creation of documents, presentations, and spreadsheets within the Google Suite; writing of essays, production of presentations to demonstrate learning, group project artifacts, etc

- Collaboration between students and teachers within a document or presentation, either within Google or Office 365 applications; use of Hapara utilities to share documents to an entire class
- Use of utilities such as Google’s subtitles and translation tools within Slides, or Microsoft’s Immersive Reader and Translation tools within Office 365 applications
- Access to online resources related to curriculum such as TCI, Pearson, and Fountas and Pinnell to support differentiation and instruction for individual students
- Access to online video content to support conceptual understanding (Khan Academy, YouTube, Hoonuit)
- Access to online assessments to provide data to inform instruction (iReady, STAR, SBA)

What Chromebooks *will not* be used for are specialized programs that require unique software or hardware configurations. These situations tend to be confined to a specialized program or activity and will continue to be supported through the use of other hardware, such as MacOS or Windows devices. With Chromebooks becoming the tool of choice for K12 classrooms across the region and country, the instances where vendors haven't updated their systems to support Chromebooks are very rare at this point. Here are a few non-Chromebook activities:

- North Creek HS’s new eSports program, which require Mac or Windows devices loaded with gaming software and requiring wired network connections for the highest-speed network access.
- CAD and Computer Science courses, which require specialized CTE approved utilities and software
- Yearbook and Video Productions classes, which require higher-functioning video production applications and robust design and layout software
- Instructional situations that require access to special software, such as MinecraftEDU, which is being used to serve selected HiCap students in a few schools

In all of the above situations, a Chromebook is not the best tool for the objective, but Northshore’s diverse fleet of computing devices will be supported in a way that allows teachers and students access to the right tools for the job.

**Connections to the NSD Strategic Plan**

Goal 3: Growth for Every Student, Elimination of Outcome and Opportunity Gaps

Building Block #1: Equitable Access to Personalized and Culturally Responsive Teaching and Learning

Building Block #4: Data-Informed, Needs-Based Resource Allocation

**Connections to the NSD Instructional Technology Plan**

Page 7: “The Instructional Core forms the basis for Northshore’s Vision for Instructional Practice. To ensure optimal learning experiences for our students, we leverage practices from three domains that produce the best outcomes. Technology provides support for these practices as students and teachers work in relationship with content to further understanding.

Our leaders ensure that policies and resources equip teachers with the right tools and ongoing support to personalize learning in their classrooms. At the Organizational level, we focus on deploying and maintaining technological resources equitably and effectively across the district to ensure that students have what they need when they need it to support their learning journey.”

**Site(s), Grade Level, or Region Affected**

These units will be used to bring all sites to a 1:1 ratio of students to available, supported computing devices. All schools will have a mix of Chrome, Windows, Mac, and iOS (iPad) devices.

Estimated Cost	
HP 11A G6 Touch EE	\$1,469,000.00 (QTY 6500, Quote from MicroK12, DES Contract)
Google Management Licenses	\$175,500.00 (Micro DigitalEdge Contract, ESD112)
Carts	\$437,250.00 (Quote from MicroK12, DigitalEdge Contract, ESD112)
Partner Deployment Costs	\$308,000.00 (OETC Contract; includes warehousing, asset tagging, enrollment in management console, delivery to schools in pre-configured carts, and 3 year repair service by partner - MicroK12 - who already provides this service for other units in our fleet)
10.4% Sales Tax	\$248,534.00
<b>Total</b>	<b>\$2,638,284.00</b>

**Funding Source(s)**

2018-2022 Technology Levy Funds

**Key Stakeholders**

Instructional Technology Leadership Committee

Technology Leadership Team

**Anticipated Outcomes**

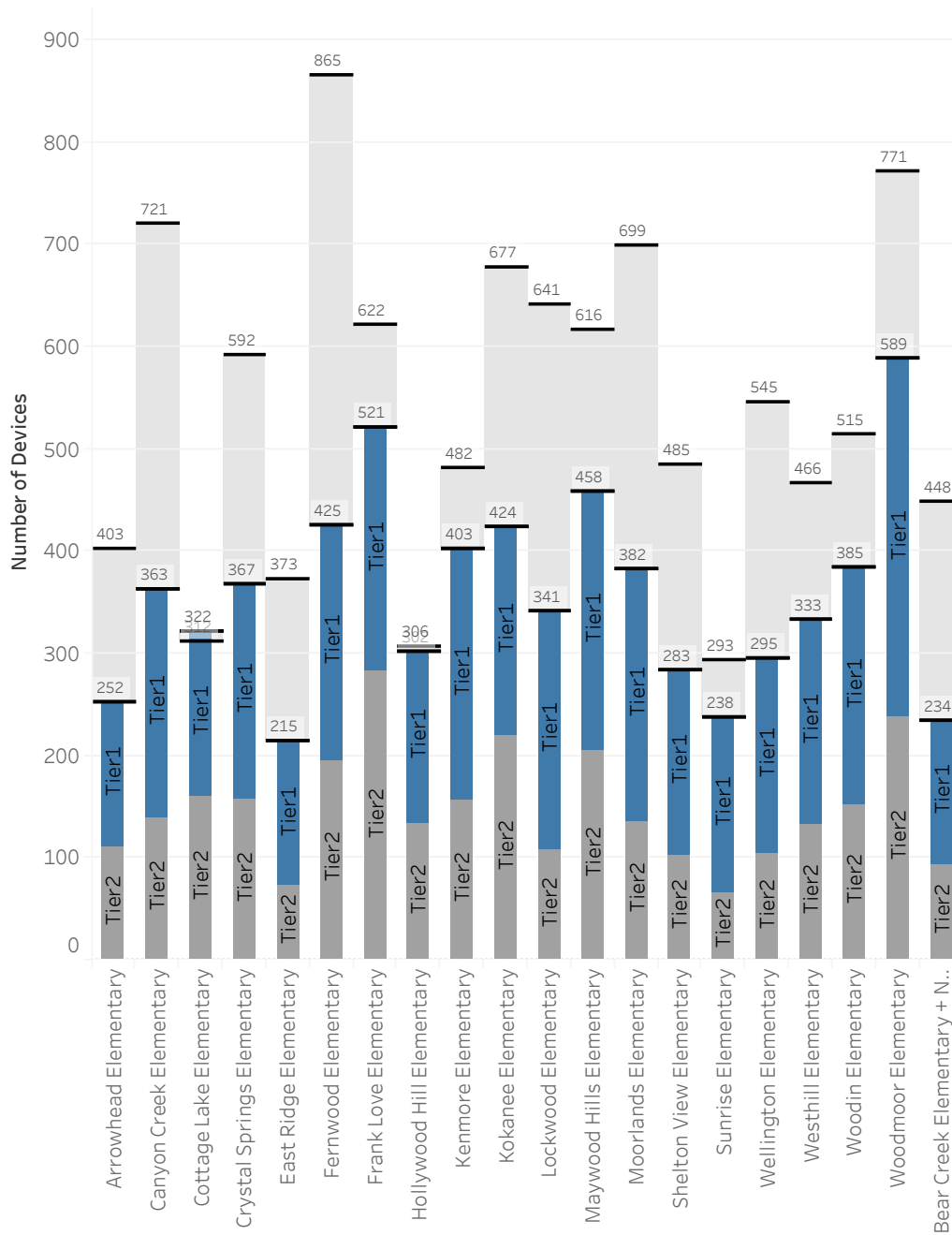
Improve student access to devices for learning within the school day.

Support schools in the campus distribution of resources to support instruction.

Provide support for teachers in their use of technology for learning.

# Student Computing Devices - Elementary Schools

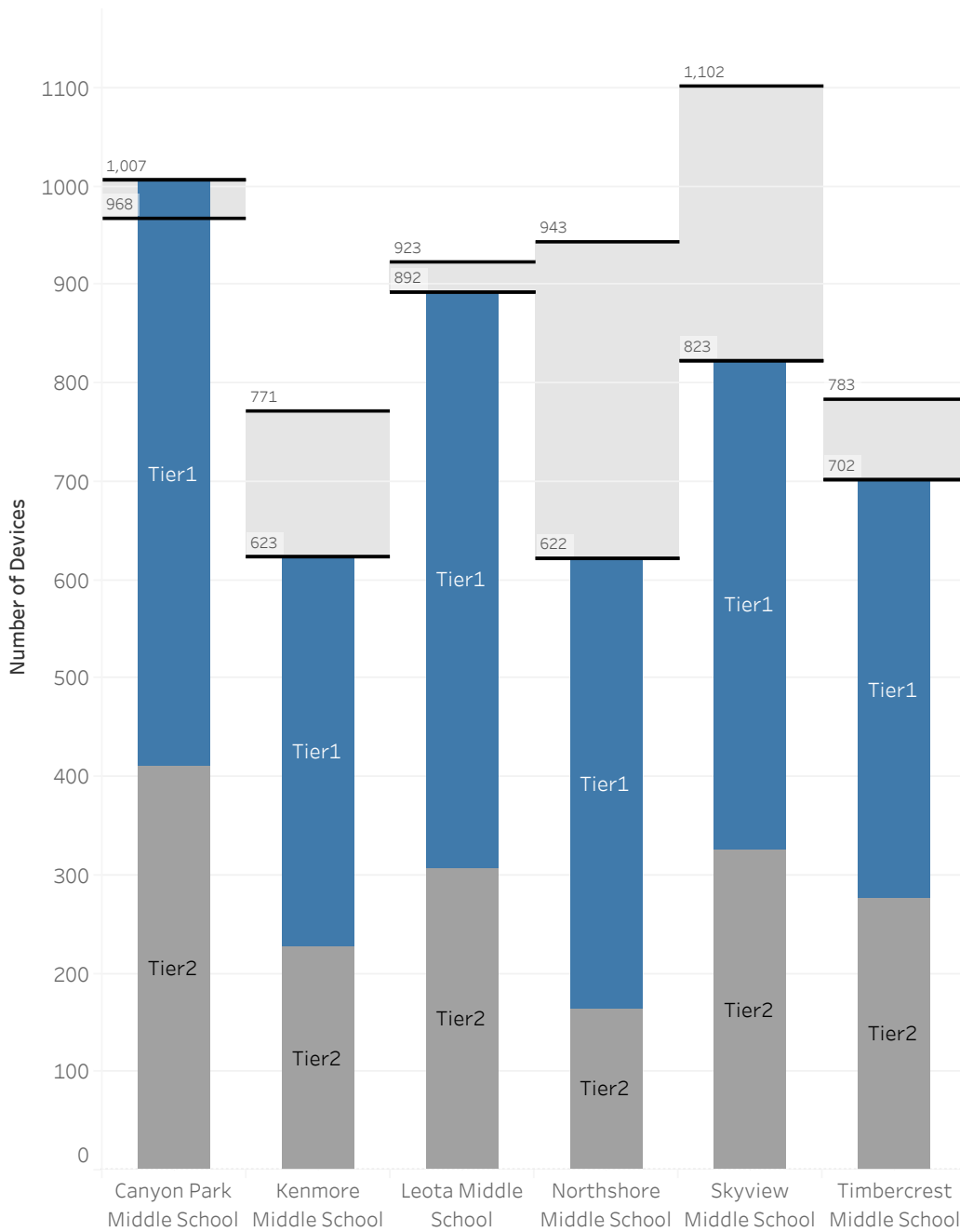
## Delta



Location	T1/T2		Delta
	Total	Target	
Arrowhead Elementary	252	403	151
Bear Creek Elementary + NFP	234	448	214
Canyon Creek Elementary	363	721	358
Cottage Lake Elementary	322	312	-10
Crystal Springs Elementary	367	592	225
East Ridge Elementary	215	373	158
Fernwood Elementary	425	865	440
Frank Love Elementary	521	622	101
Hollywood Hill Elementary	302	306	4
Kenmore Elementary	403	482	79
Kokanee Elementary	424	677	253
Lockwood Elementary	341	641	300
Maywood Hills Elementary	458	616	158
Moorlands Elementary	382	699	317
Shelton View Elementary	283	485	202
Sunrise Elementary	238	293	55
Wellington Elementary	295	545	250
Westhill Elementary	333	466	133
Woodin Elementary	385	515	130
Woodmoor Elementary	589	771	182
<b>Grand Total</b>	<b>7,132</b>	<b>10,832</b>	<b>3,700</b>

NOTE: Where Delta measures are negative, the school already has enough devices allocated to meet 1:1 threshold. This delta is counted as a zero rather than a negative in terms of the number of needed devices.

# Student Computing Devices - Middle Schools

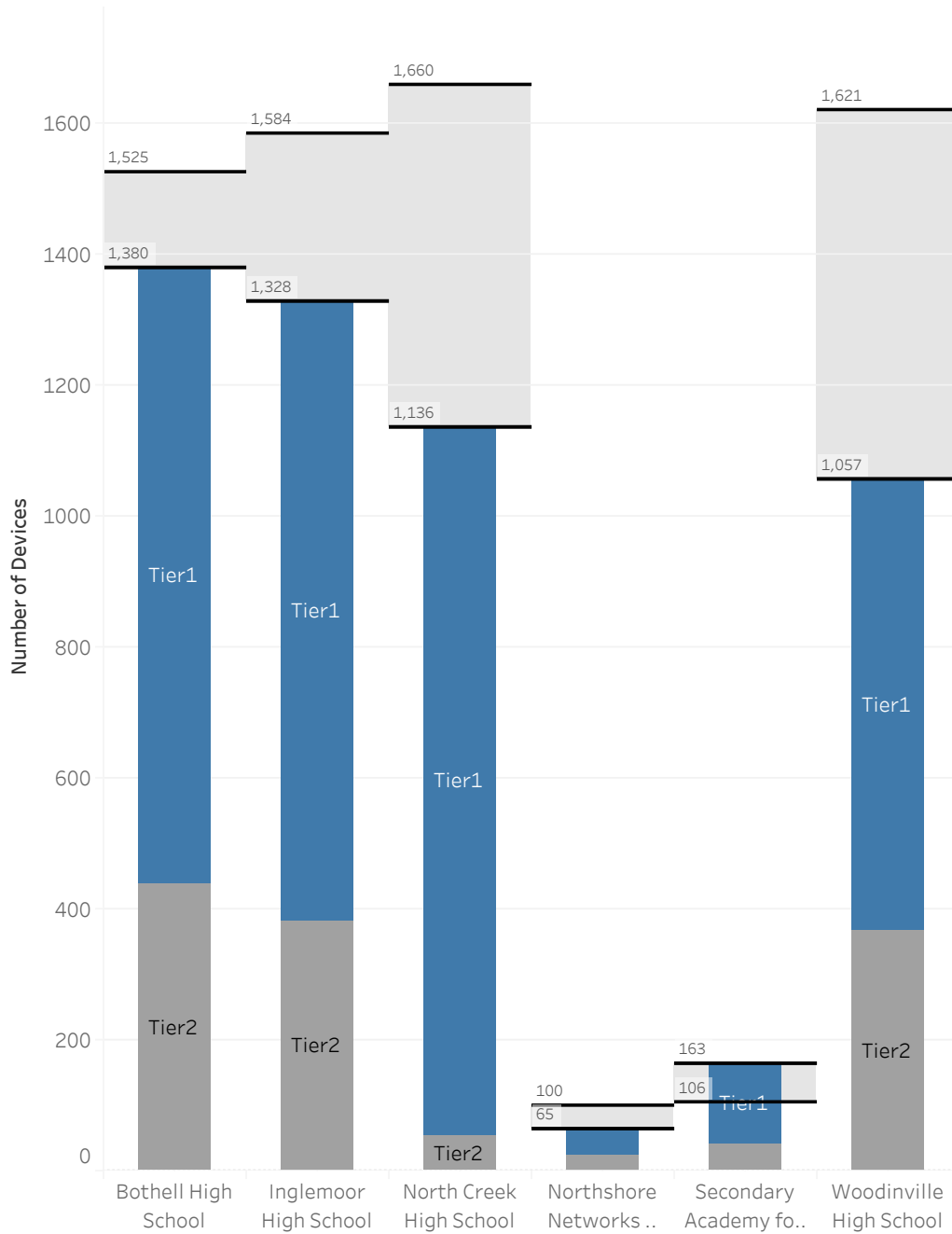


# Delta

Location	T1/T2		Delta
	Total	Target	
Canyon Park Middle School	1,007	968	-39
Kenmore Middle School	623	771	148
Leota Middle School	892	923	31
Northshore Middle School	622	943	321
Skyview Middle School	823	1,102	279
Timbercrest Middle School	702	783	81
<b>Grand Total</b>	<b>4,669</b>	<b>5,490</b>	<b>821</b>

NOTE: Where Delta measures are negative, the school already has enough devices allocated to meet 1:1 threshold. This delta is counted as a zero rather than a negative in terms of the number of needed devices.

# Student Computing Devices - High Schools



# Delta

Location	T1/T2		Delta
	Total	Target	
Bothell High School	1,380	1,525	145
Inglemoor High School	1,328	1,584	256
North Creek High School	1,136	1,660	524
Northshore Networks - Admin B..	65	100	35
Secondary Academy for Success	163	106	-57
Woodinville High School	1,057	1,621	564
<b>Grand Total</b>	<b>5,129</b>	<b>6,596</b>	<b>1,467</b>

NOTE: Where Delta measures are negative, the school already has enough devices allocated to meet 1:1 threshold. This delta is counted as a zero rather than a negative in terms of the number of needed devices.