

State Board for Community and Technical Colleges
High-Demand Fields of Study Equipment List
LEAP Capital Document No. 2012-34
Developed March 7, 2012

	Amount
Bates Technical College	689,000
Advanced Manufacturing	283,000
Haas Horizontal Machining Center with Twin Pallet Changer	195,000
Haas Minimill CNC Vertical Machining Center	42,000
Haas ST-10 CNC Lathe	46,000
Health Professions	406,000
(3) Medical Ventilators	45,000
SIMXpress: An audio-visual recording and simulation management system for SimMan.	41,000
Mobile Training Tower: For training in multi-story buildings	265,000
Cogent Axiom Headwall Simulator	18,000
Pyxis Medstation System - medication distribution system	37,000
Bellevue College	994,000
Advanced Manufacturing	55,000
ShopBot 5-axis CNC Router and MasterCAM operating software (required to run equipment)	55,000
Health Professions	939,000
Atomic Force Microscope	40,000
Inductively Couple Plasma Mass Spectrometer	60,000
Infrared (IR) Spectrometer	20,000
Ion Personal Genome Machine	65,000
Liquid Chromatograph Mass Spectrometer	70,000
Nuclear Magnetic Resonance Spectrometer	175,000
Fluorescence microscope with digital camera	40,000
Gel Image Analyzer: For molecular biology laboratories	40,000
High Pressure Liquid Chromatography: For analyzing organic molecules.	60,000
Real Time PCR machine: For gene analysis.	45,000
Thermocycler: For amplification of DNA	15,000
Demo Dose medDISPENSE system. A simulated medication administration system.	34,000
Diagnostic Ultrasound system	30,000
Evoked Potential Machine. For diagnosing nervous system disorders.	20,000
Scanning Electron Microscope	200,000
Xitek Evoked Potential and interoperative monitoring system - for central and peripheral nervous system disorders	25,000
Bellingham Technical College	1,087,000
Advanced Manufacturing	341,000
(2) Lab-Volt Instrumentation and Process Control Training System	152,000
(2) Lab-Volt Mechanical Training System	110,000
(3) Ludeca VIBXPERT II to collect inspection information for process controls	54,000
Miller Regulated Metal Deposition Welding System, State-of-the-Art Wire feed Welding System	25,000

**State Board for Community and Technical Colleges
High-Demand Fields of Study Equipment List
LEAP Capital Document No. 2012-34
Developed March 7, 2012**

Aerospace	650,000
Haas VF3SS with 5 axis trunnion table 5 axis vertical machining center, used for making complex parts such as turbines for jet engines.	150,000
Mazak Integrex I-100 5 axis multi-tasking machine tool, used for hands free production bio medical parts and other complex multi-tasking applications.	350,000
DMS D5 Gantry Router with Fagor CNC Control 5 Axis gantry router, used for composites	150,000
Health Professions	96,000
SimMan 3G with 17 inch monitor	96,000
 Big Bend Community College	 258,000
Advanced Manufacturing	60,000
Orbital Welding system with prep tools	30,000
CNC Plasma Arc cutting system with Oxy-fuel attachment	30,000
Health Professions	198,000
SimBaby – Advanced infant patient simulator.	35,000
SimMan 3G with 17 inch monitor	96,000
Pyxis Medstation System - medication distribution system	37,000
NOELLE® Maternal and Neonatal Simulator for maternal health and OB.	30,000
 Centralia College	 173,000
Advanced Manufacturing	153,000
6-axis robot arms with controllers and routers and switches	28,000
Metal Forming brake press & computer aided plasma cutter	75,000
(2) Model 105 Factory in a Box - PLC training	50,000
Health Professions	20,000
Simulated medication dispenser	20,000
 Clark College	 834,000
Advanced Manufacturing	86,000
Automation Studio	20,000
Instron Tensile Test Machine	40,000
Laser Alignment add-on to existing Mechanical trainer.	26,000
Aerospace	241,000
Chavalier Surface grinder	24,000
Haas VF-2 Vertical Mill	79,000
Coordinate Measuring machine	30,000
Trak CNC Milling machine	25,000
Clausing Lathe	30,000
Bridgeport Vertical Milling machine	25,000
Haas CNC lathe	28,000
Electric Power Industry	85,000
Doble F6150 Power System Simulator	85,000

**State Board for Community and Technical Colleges
High-Demand Fields of Study Equipment List
LEAP Capital Document No. 2012-34
Developed March 7, 2012**

Information Technology	285,000
Dell PS6010XVS SAN (Storage Area Network) Server. This is a rack server filled with hard drives, providing network storage for our student lab PCs for course/program required lab activities.	50,000
Storage Area Network Server and Switch used to store data in banks, hospitals, the internet, Google, Microsoft, data centers, government, etc.	205,000
Cisco Catalyst 4900M 10Gb Ethernet switch to provide connectivity of lab equipment.	15,000
Dell PowerEdge R910 virtualization server for teaching datacenter cloud computing.	15,000
Health Professions	137,000
inVision Cam System - for live demonstrations of dental hygiene procedures	100,000
Pyxis Medstation System - medication distribution system	37,000
Clover Park Technical College	1,009,000
Advanced Manufacturing	833,000
(3) Three Computer Numerical Control Machines (CNC) - Assists in computer-aided manufacturing and works with CAD	90,000
(8) Vectrax Mills - \$20K each (milling machine for use with various metals)	160,000
Flow Water Jet Cutting Machine (utilizes silica and water at high pressure to cut through metal)	175,000
Haas Horizontal VR8 Profiling 5-Axis (advanced machining capabilities)	290,000
Tool Pre-Setter (insures accurate CNC tool presetting for manufacturing tolerances)	72,000
Faro 7 axis inspection arm to inspect, reverse engineer or perform CAD-to-Part-analysis on parts, fixtures and assemblies.	46,000
Aerospace	80,000
Portable X-Ray Vault (industrial X-ray and CT inspection system for non-destructive material testing)	80,000
Health Professions	96,000
SimMan 3G with 17 inch monitor	96,000
Columbia Basin College	310,000
Aerospace	185,000
Automatic Coordinate Measuring Machine (CMM).	35,000
CNC Lathe with Tailstock and Live Tooling	100,000
Electromechanical materials testing system.	50,000
Health Professions	125,000
Demo Dose Med Dispense Medication Dispensing System	25,000
(2) Diagnostic ultrasound machines	100,000
Edmonds Community College	397,000
Advanced Manufacturing	166,000
Lathes	60,000
3D Printer (Additive Manufacturing Machine) for composite materials	78,000
Master3DGage Measurement Arm used in manufacturing quality control.	28,000

**State Board for Community and Technical Colleges
High-Demand Fields of Study Equipment List
LEAP Capital Document No. 2012-34
Developed March 7, 2012**

Aerospace	160,000
CNC Plasma Cutter	50,000
Magnetic Particle Inspector	40,000
REV Scan	40,000
Laser Cutter	30,000
Health Professions	71,000
SimBaby – Advanced infant patient simulator.	35,000
Virtual Phlebotomy system	17,000
Birthing simulator – Interactive child birthing system.	19,000
 Everett Community College	 763,000
Advanced Manufacturing	548,000
Bridgeport "knee mill" milling center; which forms materials manually	96,000
CNC Plasma Cutter 4X4 system	29,000
Wilton 8020FW-Z 20 inch vertical bandsaw	27,000
CNC 4 Axis Mill. Produces three dimensional items from 3D CAD files.	76,000
310Q Series Tabletop Electromechanical Test Machine	40,000
Haas Turning Center used to form materials	120,000
HAAS TM-1 Milling Center used to form materials	160,000
Health Professions	215,000
TNT Rescue Power Unit, including cutter, spreader, RAM and hose; 12 Lif-Pak; provides realistic simulated training for future fire and EMT personnel.	28,000
Sim Mom Advanced /complete peripheral kit	53,000
Simulation Laboratory Image Capture System.	38,000
SimMan 3G with 17 inch monitor	96,000
 Grays Harbor College	 272,000
Health Professions	272,000
Simulation Laboratory Image Capture System	80,000
(2) SimMan 3G with 17 inch monitor	192,000
 Green River Community College	 1,045,000
Aerospace	925,000
HAAS CNC Lathe Machine HAAS Vertical Mill CNC Milling Machine	170,000
Haas Horizontal VR8 Profiling 5-Axis (advanced machining capabilities)	290,000
Lab Volt Hydraulic Bench training stations x 3 Lab Volt Pneumatic Training stations x 3 Hampden	
HMCWT Electrical Training Station x 1 Lab Volt Rigging Station x 2	225,000
HAAS Horizontal Machining Center and Minimill	240,000
Information Technology	120,000
Virtual Server	120,000

**State Board for Community and Technical Colleges
High-Demand Fields of Study Equipment List
LEAP Capital Document No. 2012-34
Developed March 7, 2012**

Highline Community College	204,000
Information Technology	23,000
High-capacity server, isolated/secure network, and Storage Area Network (SAN) for conducting cyber-defense simulations	23,000
Health Professions	181,000
High Fidelity Manikin: Simulate acute patient care	40,000
Mechanical Ventilator: breathing therapy	20,000
Simulation manikins	30,000
Gas Chromatography Coupled Mass Spectrometer (GC-MS) for testing/evaluation of chemical solutions	54,000
Pyxis Medstation System - medication distribution system	37,000
Lake Washington Institute of Technology	443,000
Advanced Manufacturing	75,000
(3) Prototrack Lathes	75,000
Aerospace	368,000
(2) 2- CNC milling machines	170,000
CNMC live lathe tooling	110,000
Circuit board etching prototype	20,000
Tektronics 2014C Oscilloscopes (24): Built-in Waveform Limit Testing, FFT Analysis for Simplified Waveform Analysis	48,000
Prospot i4 Inverter Spot Welder	20,000
Lower Columbia College	544,000
Advanced Manufacturing	405,000
Computer Numerical Control (CNC) Milling Machines	90,000
Press Brake for forming metals	125,000
Inverter welding machines	115,000
(4) Four Milling Machines used to manufacture parts	60,000
Advanced wire welding system for welding exotic metals	15,000
Health Professions	139,000
STAT Mannequin Adult - This is an enhanced mannequin used by students to practice their skills.	25,000
Pyxis Medstation System - medication distribution system	37,000
Virtual IV (Haptic Device, IV Simulator) - to practice insertion of intravenous lines.	77,000
North Seattle Community College	235,000
Advanced Manufacturing	235,000
Solar simulator with optics, filters, power supply, standards. This instrument creates a solar spectrum, which can be used for testing solar cells.	20,000
Scanning Electron Microscope with Energy Dispersive Spectroscopy.	215,000

**State Board for Community and Technical Colleges
High-Demand Fields of Study Equipment List
LEAP Capital Document No. 2012-34
Developed March 7, 2012**

Olympic College	624,000
Advanced Manufacturing	506,000
(8) pieces of Engineering Equipment: Data collection hardware, instrumentation electronics, Single Physics systems, software; Bench top control units, sequential machine system, industrial robot; multi-physics systems.	206,000
Welding Shop Ventilation Hood System	300,000
Health Professions	118,000
Medcom Video Collection - Nursing Streaming Video	44,000
Pedia-SIM, including Muse Software: a pediatric simulator	48,000
Meti-vision: recording system for clinical simulations	26,000
Peninsula College	131,000
Health Professions	131,000
SimBaby – Advanced infant patient simulator.	35,000
SimMan 3G with 17 inch monitor	96,000
Pierce College Ft. Steilacoom	625,000
Health Professions	625,000
Dental sensor kits for digital radiography. Replaces the need for dental X-ray film.	16,000
Digital Panelipse for digital panoramic imaging.	54,000
BOD POD-EX. Measures fat vs. muscle	31,000
(4) Dental Hygiene operatory system - light, patient chair, operatory chair, and delivery system for full dental treatment to patients.	524,000
Pierce College Puyallup	167,000
Health Professions	167,000
SimBaby – Advanced infant patient simulator.	35,000
Sim Junior.	36,000
SimMan 3G with 17 inch monitor	96,000
Renton Technical College	255,000
Health Professions	255,000
Camsight Digital Magnifying Video Explorer System	20,000
Electronic Medical Records System	22,000
Camera system in the operating room labs to video record skills demonstrations	80,000
SimMan 3G with 17 inch monitor	96,000
Pyxis Medstation System - medication distribution system	37,000

**State Board for Community and Technical Colleges
High-Demand Fields of Study Equipment List
LEAP Capital Document No. 2012-34
Developed March 7, 2012**

Seattle Central Community College	742,000
Health Professions	742,000
Drager Evita Infinity V500 Ventilator	25,000
Respironics V60, Non-invasive Ventilation System	20,000
Sensormedics Vmax Encore PFT:	100,000
SimBaby – Advanced infant patient simulator.	35,000
STERIS Amsco 3080 Surgical Table	20,000
(12) operatory dental chairs	360,000
SimMan 3G with 17 inch monitor	96,000
Aberometer: advanced vision-assessment system that combines topography, wave front, auto refraction, keratometry, and pupillometry — allowing accurate and reliable analysis of corneal aberration	15,000
(3) Sets if Dexis digital radiographic sensors for digital dental imaging.	71,000
Shoreline Community College	729,000
Advanced Manufacturing	364,000
Four-axis horizontal machining center Haas EC-300 - HMC 20" x 14" Twin Pallet w/ shipping and tax	148,000
Minitech - Mini-Mill/3	30,000
Multi-axis machining center	110,000
Haas CNC Lathe ST-10 with 2-axis capability	76,000
Health Professions	365,000
BD Accuri C6 Flowcytometer	49,000
CSampler - 96 well plate and 24 tube rack automated sampler for C6 Flow Cytometer	25,000
NuAir Biosafety Cabinet, Type A 3B	16,000
Sanyo MDF-C2156VANC: 8.2 cu. ft. VIP® PLUS -150°C Cryogenic Freezers	40,000
Thermo Scientific* NanoDrop* 8000 Spectrophotometer	25,000
(5) Digitized dental chairs	85,000
(6) Genesys 10S UV_VIS spectrophotometer	25,000
NMR 60-90 MHz Spectrometer	100,000
Skagit Valley College	172,000
Advanced Manufacturing	32,000
Forklift-Propane powered, side shift unit.	17,000
1 Rotary Screw Air Compressor	15,000
Health Professions	140,000
(4) SimBaby – Advanced infant patient simulator.	140,000

**State Board for Community and Technical Colleges
High-Demand Fields of Study Equipment List
LEAP Capital Document No. 2012-34
Developed March 7, 2012**

South Puget Sound Community College	367,000
Advanced Manufacturing	87,000
Haas Mini Mill is a precision 3 axis computerized milling machine	41,000
VRTEX virtual welder	46,000
Health Professions	280,000
Sirone MD intra oral X-Ray system	42,000
Anasazi Instruments 60MHz Eft Fourier Transform nuclear magnetic resonance spectrometer.	105,000
SimMan 3G with 17 inch monitor	96,000
Pyxis Medstation System - medication distribution system	37,000
South Seattle Community College	393,000
Advanced Manufacturing	120,000
CNC - 4 axis makes tooling for composites	100,000
Shape cutter	20,000
Health Professions	273,000
(3) 3 sets of Gendex digital x-ray oral sensors: 1 pedo set and 2 adult sets	78,000
Digital Panorex X-ray unit	75,000
STERIS Amsco 3080 Surgical Table	24,000
SimMan 3G with 17 inch monitor	96,000
Spokane Community College	320,000
Advanced Manufacturing	69,000
Trotec Speedy 100 Laser Cutter	23,000
Faro 7 axis inspection arm to inspect, reverse engineer or perform CAD-to-Part-analysis on parts, fixtures and assemblies.	46,000
Health Professions	251,000
P5 GE Ultrasound System	60,000
Simulator SimMan Essential.	54,000
Pyxis Medstation System - medication distribution system	37,000
Sonara Transcranial Doppler System. Ultrasound device used to evaluate intracerebral arteries.	50,000
Computerized radiography system	50,000
Spokane Falls Community College	111,000
Health Professions	111,000
Vacuum Station - A state of the art six station lab station allows students to perform thermal plastics forming and lamination.	15,000
SimMan 3G with 17 inch monitor	96,000

**State Board for Community and Technical Colleges
High-Demand Fields of Study Equipment List
LEAP Capital Document No. 2012-34
Developed March 7, 2012**

Tacoma Community College	576,000
Information Technology	81,000
Networking lab to support networking program	81,000
Health Professions	495,000
(3) Respiratory Ventilators	60,000
Birthing Bed Affinity III Hill Rom	19,000
Digital Radiology X-Ray machine	231,000
Pyxis cubie station	17,000
SimBaby – Advanced infant patient simulator.	35,000
Wireless Digital Radiography System	89,000
LifePak 15 Defibrillator/Monitory, Trending, Sp)@, NIBP, 12-lead ECG, EtCO2. For Emergency Simulations	44,000
Walla Walla Community College	391,000
Electric Power Industry	122,000
Turbine Nacelle Learning System - provides students adaptive skills for wind turbine operation	96,000
AC/DC Electrical Learning System	26,000
Health Professions	269,000
SimBaby – Advanced infant patient simulator.	35,000
Pedia-SIM including Muse Software	49,000
ICP-MS Mass Spectrometer - For Water Quality and Environmental Technology programs	185,000
Wenatchee Valley College	922,000
Advanced Manufacturing	81,000
Mazak Vertical machining center	81,000
Health Professions	841,000
Chemical Fume Hoods	634,000
5100 Gas Chromatograph - Mass Spectrometer System - For identification of chemical compounds	44,000
DLC-20G Binary Gradient High-pressure HPLC System	29,000
60 MHz FT-NMR for chemical compound identification	114,000
IR-200 Fourier-Transform Infra-red Spectrometer System - For chemical compound identification	20,000
Whatcom Community College	418,000
Information Technology	43,000
Vendor Cybati Laboratory Research Kit A preconfigured kit used to teach SCADA security, cyber security, industrial control security	24,000
Cisco CCNA Exploration & Discovery Premium Bundle to teach Cisco Exploration curriculum	19,000

**State Board for Community and Technical Colleges
High-Demand Fields of Study Equipment List
LEAP Capital Document No. 2012-34
Developed March 7, 2012**

Health Professions	375,000
Autoclave - microcomputer-controlled steam sterilizer with up to twenty-two selectable pre-programmed cycles and vertical sliding door	43,000
Large Capacity Autoclave	92,000
Nursing Lab Audio/Visual System	90,000
SimMan Simulates patient responses	40,000
SIM Lab including computer operated robotic medical manikins, technology infrastructure, hospital beds and furniture, bedside computers.	110,000
 Yakima Valley Community College	 430,000
Advanced Manufacturing	20,000
Universal Testing Machine to test compression	20,000
Aerospace	30,000
CNC - Computed Numerical Controls milling machines used for aerospace training	30,000
Information Technology	112,000
Computer systems for instructional lab.	96,000
CISCO routers, switches, and cables to prepare students for industry certification.	16,000
Health Professions	268,000
SimBaby – Advanced infant patient simulator.	35,000
3080 RC Amsco Manual Operating Room Table	16,000
(2) SimMan 3G with 17 inch monitor	192,000
Radiography reader used for interpreting density and contrast films.	25,000
<hr/> Grand Total	<hr/> 16,630,000