



It's like you're there, because you are..."

# Idaho Education Network and Wireless Deployment Update

## Students Come First Technology Taskforce

December 2011

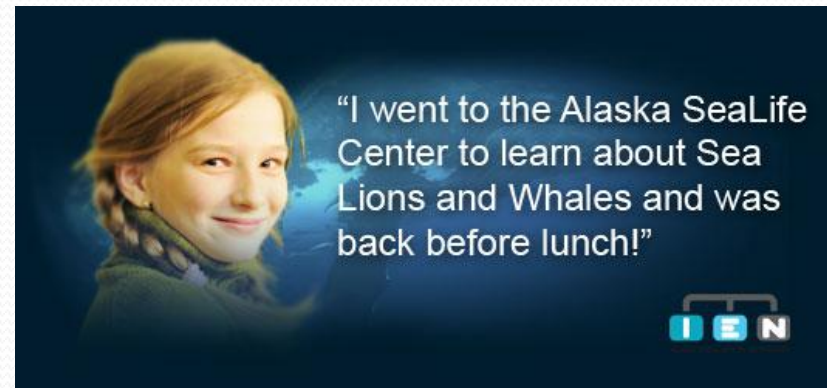
# Agenda

- Introductions
- IEN 40k view, status and future
- Status of Department of Administration's SCF wireless rollout
- Q&A



# What is the IEN?

- A *statewide*, coordinated and managed network solution connecting Idaho education institutions.
  - Access & Equity – a backbone of high speed internet
  - Access & Equity – VTC capability



## 3 *Goals* of the IEN

- *Connect*
- *Instruct*
- *Achieve*

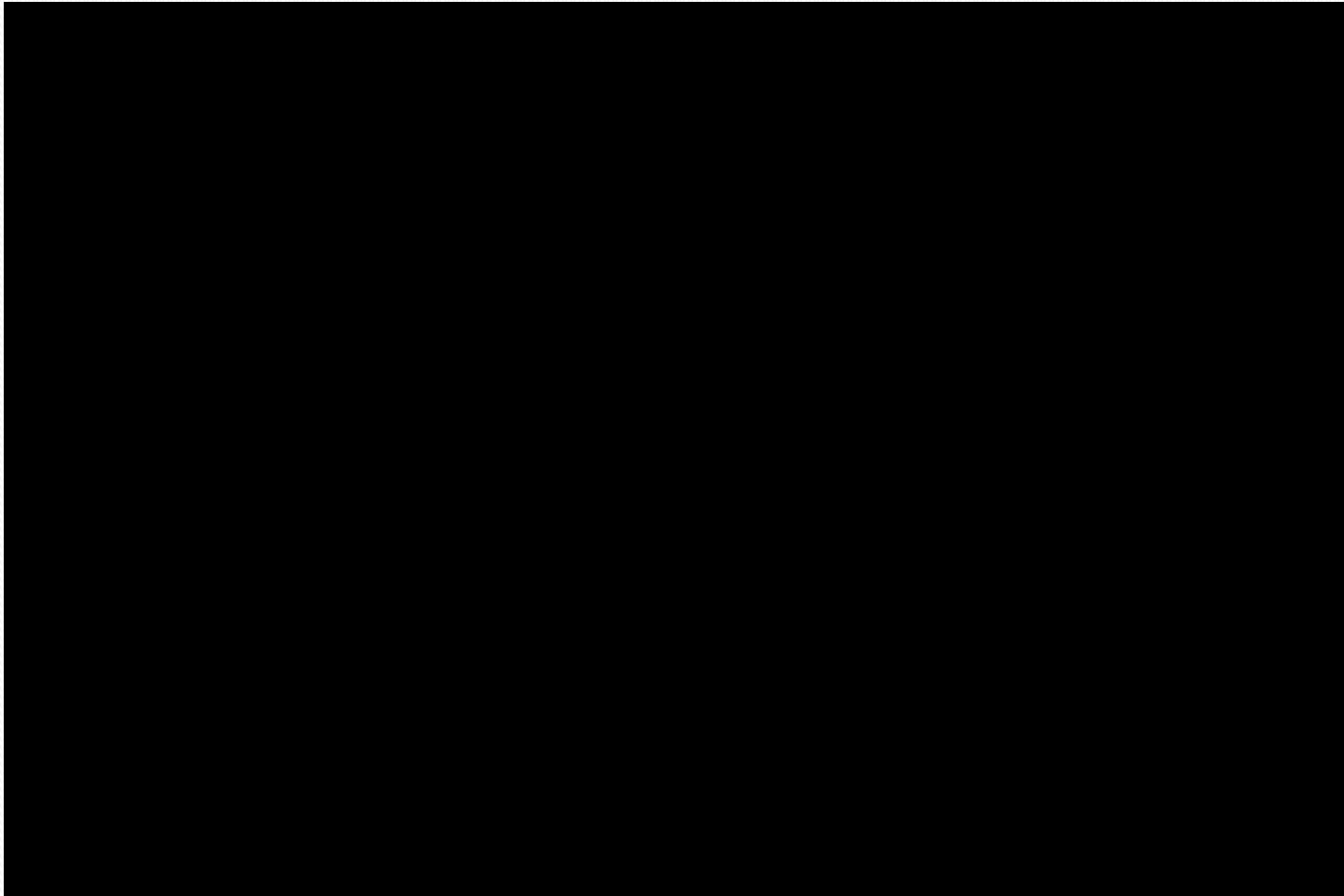


# Statutory *Phases* of IEN

- **Phase 1** – connect high schools
- **Subsequent Phases**
  - connect each elementary and middle school
  - connect libraries and migrate state agencies



# How Does IEN Support Education?



# How does IEN Support Education?

- **Supporting Idaho Schools**
  - Highly Effective Teachers and Leaders
  - 21<sup>st</sup> Century Classrooms
  - Transparency and Accountability
  - Other
- **Supporting the State Board of Education, State Department of Education and other Education Agencies and Institutions in Idaho**
  - Preparation for College
  - Advanced Placement
  - Dual Credit
  - SBOE's 60% Goal

# Status of IEN

- Just finishing Phase 1
  - One year ahead of schedule and 16% under budget
  - Estimated \$50 million to build and it came in at ~\$42 million
  - Funded through federal stimulus and e-rate dollars as well as Albertson Foundation grant monies (no state monies to date)
  - 194 high schools have high speed broadband through IEN
    - 1000% increase in bandwidth in Salmon
    - 900% in Preston
    - Average is 200-300% increase
  - VTC Capabilities
    - 45 “sending” units have been installed
    - 155 “receiving” units have been installed
  - IEN reduced the original contract cost per mb from \$419.85 to \$277.66 and is ~\$230 now...

# Status of IEN

- **Schools are delivering content**
- This fall the IEN hosted several courses both from high school locations as well as colleges
  - Over 20 high school teachers offered dual credit, AP and other advanced courses such as Latin, Chinese, Health Occupations and Calculus
  - SAT and ACT prep courses offered
  - College advising for parents and students
  - For the spring schools are expanding offerings to include courses such as astronomy, marine biology, range sciences, trig, history of rock and roll and Cisco Academies, etc...



# The Future

- Strategic Planning for IEN
  - Purpose – bring together high level decision makers to chart a path for IEN which supports all major stakeholders such as SBOE, SDE, PTE, Office of the Governor, Community Colleges, Universities, School Districts and Parents and Students...
  - Goal – 1, 3, 5, 7 and 10 year plan for the IEN focusing on IEN “Instruct” and “Achieve” Goals
  - Once completed the plan will be operationalized.
  - Timeline – Begin December 1, 2011, completed by March 31, 2011



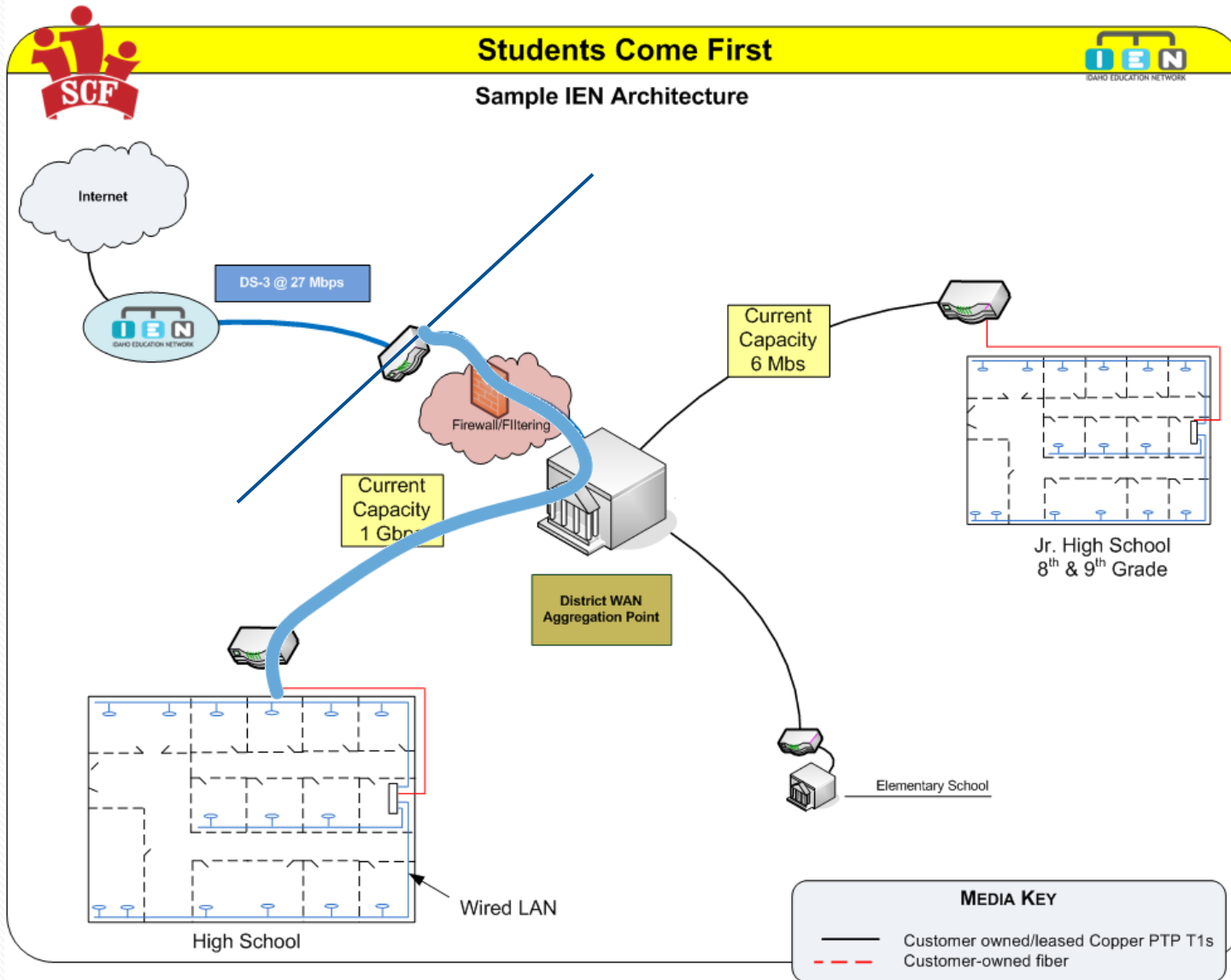
# Wireless

- Important to Note– The IEN enhanced backbone runs to each district’s door. Districts have what is called an “aggregation point” where bandwidth is then doled out to buildings within the district.
- The wireless project is not an IEN project, it is a project of the Department of Administration which when completed will work in concert with the IEN infrastructure already in place.
- SDE contracted Admin to deploy wireless to all Idaho high schools and junior high schools that qualify under SCF.

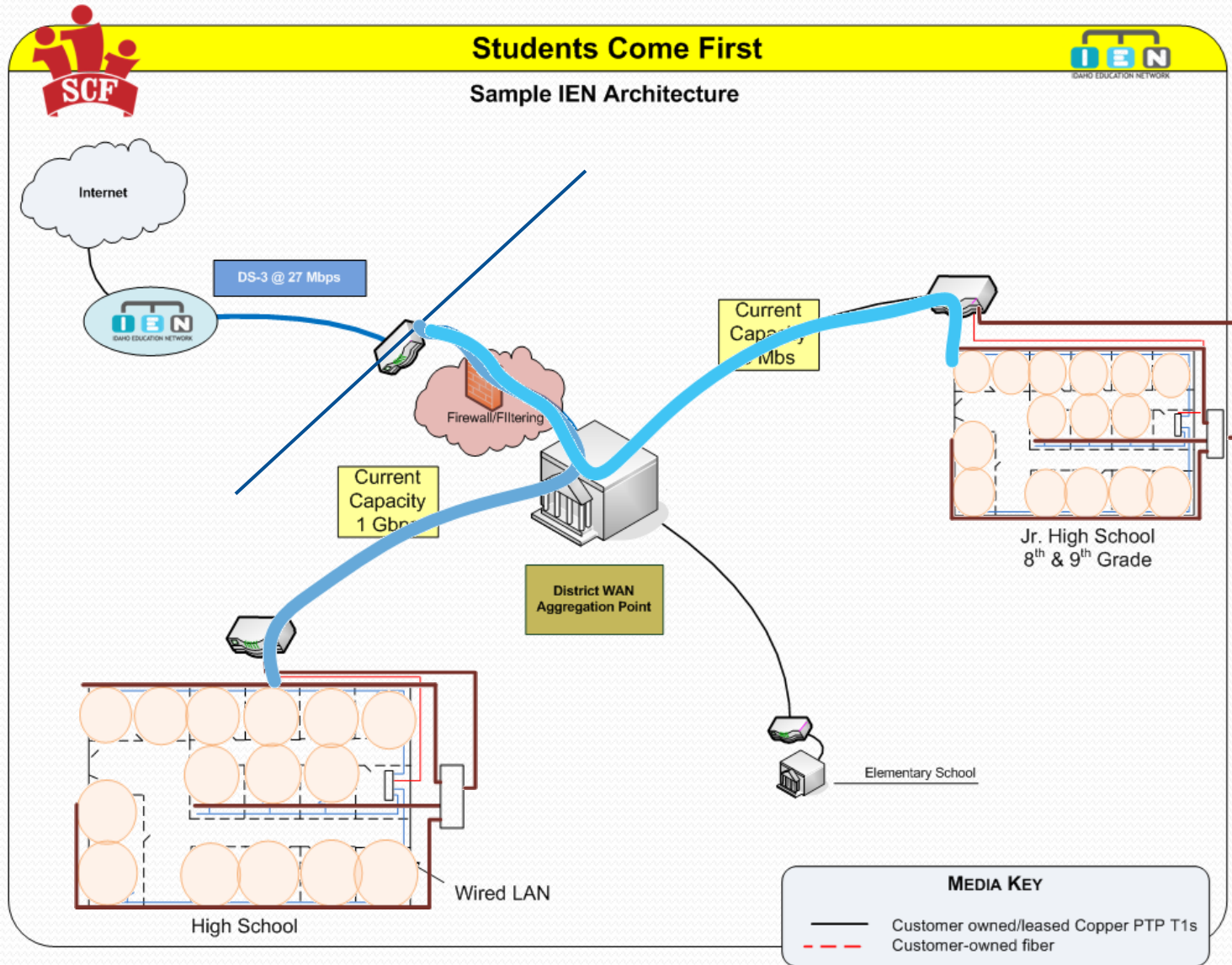
# Wireless – 3 Areas to Discuss

- **Increased Bandwidth** – bandwidth is monitored and increased to high schools on the IEN backbone as needed to support utilization.
- **Wireless Deployment** – a “Functional” RFP will be let which will specify performance benchmarks, not specific technical requirements. Like Maine...
  - “inside the school building they must provide adequate wireless connectivity to support education anywhere learning is taking place.”
  - We need to be careful about making public any information on the RFP... Questions should go to Brady Kraft or purchasing...
- **Closing the “Idaho Gap”**

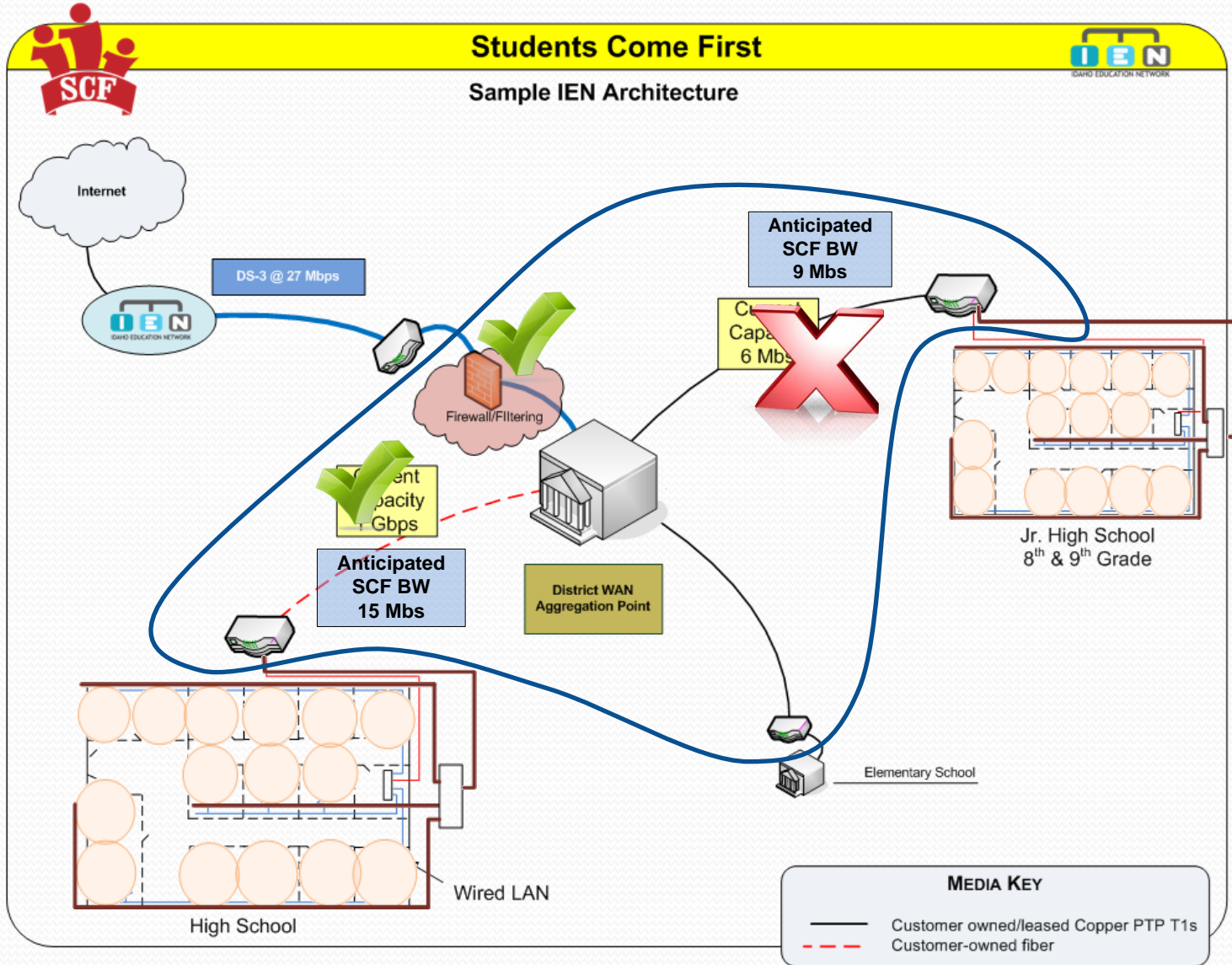
# Typical District



# Typical Wireless Deployment



# The Gap



# The Idaho Gap

- IEN Services run up to the district aggregation point (the point at which the district re-directs bandwidth to their buildings)
- The Wireless Project will provide wireless access for SCF 1:1 multi-function computing devices in each applicable building.
- There is a “gap” between the wireless and the IEN service which is owned by the district(s).
  - A gap analysis is being performed by the Department of Administration who is looking at the firewalls and filtering capabilities and well as potential bottlenecks.
  - Funds have been set aside from the wireless budget to purchase a one time point-to-point upgrade of district infrastructure to close wireless gap.
  - By June 2013 the gap will be closed and systems will be ready for 1:1 student devices...

# Timelines

- RFP out end of January to mid February 2012
- Award contract August/Sept 2012
- Implementation timeframe is 11 months (Maine/Apple did it in 5 1/2 months)
- All bandwidth will be upgraded for SCF by July 2013
- The project will be completed by end of August 2013, but will shoot for end of June
- Students get devices August of 2013

# FAQs

- Q: What is the timetable for IEN to install wireless in high schools?
- A: The IEN will release an RFP for the installation of wireless in high schools by mid-February 2012. The contract will be awarded in August or September of 2012. Deployment will take approximately 11 months, and will be completed by August 2013.
  
- Q: How will it be determined which schools get the infrastructure first?
- A: All high schools will receive wireless in the 2012-2013 school year.
  
- Q: Does the infrastructure include upgrade of switches?
- A: This will depend on how vendors respond to the RFP. However, the RFP will be written to ensure all components are adequate to support the wireless.
  
- Q: Does the infrastructure include ripping out and replacing cables?
- A: This too will depend on how vendors respond to the RFP. Some may propose to utilize existing cables, and others may propose to install new cables.
  
- Q: Why not give Districts the money for infrastructure, and let them install their own wireless infrastructure?
- A: There are a few reasons for deploying wireless infrastructure from the state level. First, a state contract guarantees a minimum set of performance standards. Second, a common wireless system is easier and more efficient to maintain. Finally, a state-wide contract allows the state to leveraging buying power and drive down cost.
  
- Q: Does the wireless infrastructure include Alternative Schools?
- A: Wireless will be deployed in buildings serving any students in grades 9-12.
  
- Q: Does the wireless infrastructure include Juvenile Corrections?
- A: The IEN will work with the Department of Corrections to determine if this is permissible with their governing laws and policies.
  
- Q: Can a District purchase on its own the discounted infrastructure installation for Middle or Elementary Schools from IEN?
- A: Yes, the wireless RFP will include a public agency clause, which will allow schools to buy infrastructure for middle or elementary schools at the same rate as the state is paying to install wireless in buildings serving 9-12<sup>th</sup> graders.