



State Interoperability Executive Council Agenda

Meeting:
February 12, 2012 1:30 PM
Dept. of Public Safety Standards & Training
Hall of Heroes Conference Room
4190 Aumsville Hwy SE
Salem, Oregon 97317

Executive Committee Briefing:
February 12, 2012 12:30 PM
Dept. of Public Safety Standards &
Training Staff Dining Room
[http://www.oregon.gov/SIEC/
RadioProjectInfo@odot.state.or.us](http://www.oregon.gov/SIEC/RadioProjectInfo@odot.state.or.us)

INTRODUCTIONS & QUORUM VERIFICATION (Quorum = 9)

COUNCIL MINUTES

- Review October 9, 2012 council minutes
Action: Approval
- Review December 4, 2012 council minutes
Action: Approval

CHAIR'S REPORT

STATE RADIO PROJECT REPORT – Tom Lauer

COMMITTEE REPORTS

- Strategic Planning Committee – Bob Cozzie
- Partnership Committee – Kathy George
- Technical Committee – Rick Iverson
- State Radio User Group – Tom Lauer
- 700 MHz Regional Planning Committee – Joe Kuran

STATEWIDE INTEROPERABILITY COORDINATOR'S REPORT

- Broadband Planning white paper discussion, SAIC presentation

OPEN DISCUSSION, QUESTIONS & PUBLIC TESTIMONY

ADJOURN

NEXT MEETING: Tuesday, May 14, 2013

UPCOMING ACTIVITIES:

- SCIP Workshop | Tuesday April 16 and Wednesday April 17, 2013

REMINDER! DPSST is now a smoke-free property. The only acceptable location to smoke is on the sidewalk outside the main gate.

PLEASE NOTE

Agenda – The meeting will begin at 1:30 PM and proceed chronologically through the agenda. If you wish to receive written materials prepared for any of the agenda items, please contact Kourtney Largent at the State Radio Project office in Salem, 503-934-2113 or kourtney.largent@odot.state.or.us, to request a packet for those items which interest you or see the council website at <http://www.oregon.gov/SIEC/>.

Parking – Parking is available to anyone who attends the meeting.

Reasonable Accommodation of Disabilities – Reasonable accommodations, such as assistive hearing devices, sign language interpreters and materials in large print or audiotape, will be provided as needed. In order to ensure availability, please contact the State Radio Project office at 503-934-6946 at least 72 hours prior to the meeting with your request. TTY users can reach the State Radio Project by using the Oregon Telecommunications Relay Service. Please dial 711 and ask to be connected to 503-934-6946.



OREGON PUBLIC SAFETY BROADBAND NETWORK

Imagine public safety first responders

- Viewing live video from monitoring cameras inside the school while traveling in police vehicles to a school emergency
- Sending video of patient and vital health stats to the emergency room from the ambulance en route to the hospital
- Being alerted immediately to a downed firefighter via a helmet camera transmitting real-time video and aware of the dangerous surroundings and vital signs via clothing mounted heat and bio sensors

All these and more become possible with the deployment of Oregon Public Safety Broadband Network (OPSBN), a high speed broadband data communications network dedicated to public safety.¹ OPSBN will be part of the nationwide public safety broadband network (NPSBN), a single interoperable network that will allow police officers, firefighters, emergency medical personnel, and other public safety officials to transparently communicate with each other as appropriate across jurisdictions.

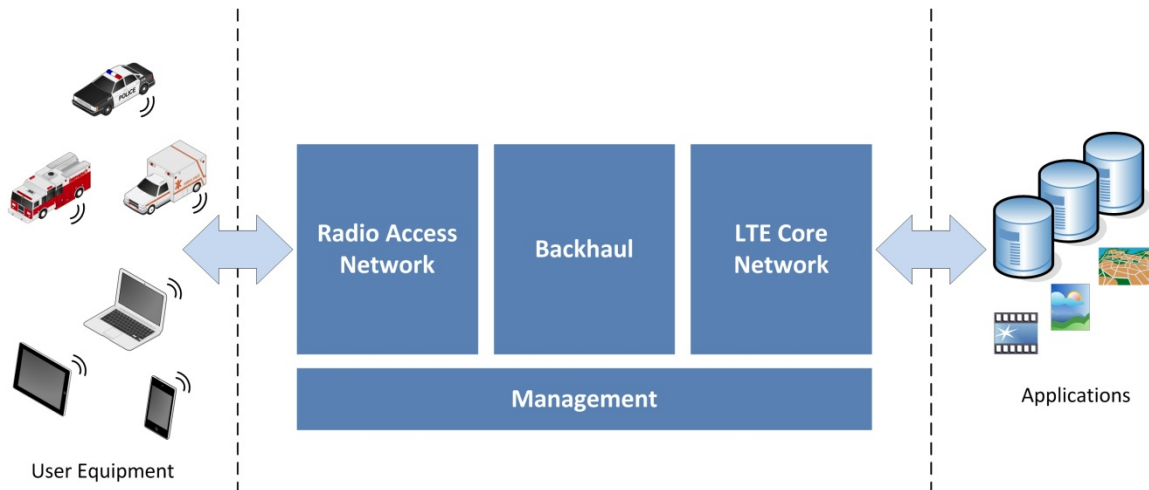
FirstNet. Title VI, “Public Safety Communications and Electromagnetic Spectrum

Auctions,” of the Middle Class Tax Relief and Job Creation Act of 2012 (PL112-96) includes provisions to fund and govern the NPSBN, reallocate the 700 MHz D Block spectrum to public safety, and authorize the FCC to conduct incentive auctions to raise \$7 billion for building and managing the new network. It establishes the First Responder Network Authority, or FirstNet, within the Department of Commerce’s National Telecommunications and Information Administration (NTIA) to oversee network planning, construction, and operation. FirstNet members were announced on August 20, 2012 by the U.S. Commerce Secretary and include Chief Jeffrey Johnson, the former chair of the Oregon State Interoperability Executive Council (SIEC).

LTE Network. To ensure interoperability and foster the availability of low cost user devices, the Act directs a specific wireless technology be used for the network – Long Term Evolution or LTE. LTE is the fourth generation (4G) cellular technology currently being deployed by commercial service providers. An LTE network consists of these major elements:

- User Equipment (UE), such as a vehicle mounted modem, laptop computer air card, handheld smartphone or tablet

¹ The Department of Homeland Security Command, Control and Interoperability Division Basic/Futures Research program has developed a compelling video to illustrate broadband’s potential within emergency management. See <http://precisioninformation.org>.



Major Elements of an LTE Broadband System

- Radio Access Network (RAN) consisting of towers and cell site base station equipment which make the wireless connection to the UE mobile devices
- Evolved Packet Core (EPC), performing core LTE controller activities, such as identifying subscribers and establishing connections between them and application packet gateways
- Backhaul network, which interconnects the RAN equipment to the EPC, typically via suitable fiber optic and microwave links
- Management functionality, which includes network management, provisioning, billing, accounting, authorization, and access control

Applications. However, the high speed data network in and of itself is simply the transmission medium. The real value of OPSBN is in the life changing, lifesaving public safety applications that it will enable. LTE technology opens the door to entirely new operational processes for public safety operations. The expansive data throughput of LTE broadband, which is theoretically *more than 15 times faster* than third generation (3G) cellular data today, is truly a transition “from garden hose to fire hose,” enabling a broad range of new public safety support capabilities that, until now, were simply not possible. Listed in the table on the

next page is a sampling of these exciting applications, some of which are in use today.

Mission Support vs. Mission Critical. When discussing applications, it’s important to make a distinction between mission *critical* and mission *support* use by public safety users. The mission critical voice communications provided by Land Mobile Radio (LMR) technology are supported today by wide coverage, highly reliable networks. Until OPSBN is similarly deployed, *LTE high bandwidth data applications such as streaming video will be for mission support use.* For example, note that the last item in the table is Push-To-Talk Voice over Internet Protocol (VoIP). LTE VoIP is still in development in standards bodies and requires a relatively dense build-out of tower and communications infrastructure as compared to LMR. Therefore, the National Governors Association (NGA) has stated, “it will be many years before VoIP will be carried over the [LTE] network, so states will need to continue to sustain LMR systems...even as they build toward public safety broadband.”

Business Model. Once constructed, FirstNet intends to sustain network operations using a fee based business model, with revenue coming from three sources:

- Network User Fee – Fee from each public safety or secondary network user

Public Safety Broadband Applications

<ul style="list-style-type: none"> • Video Surveillance, Remote Monitoring (streaming) • Remote Database Access/Queries (mug shots, finger prints, reporting, NCIC, criminal history, hot files) • Multimedia Command and Control (floor plans, incident stills, surveillance) • Computer-Aided Dispatch (CAD), Next Generation 9-1-1 (NG 9-1-1) • Records Management Systems Access (local queries) • Mobile Incident Command • Medical Telemetry • Field Based Reporting • Remote Control of Robotic Devices 	<ul style="list-style-type: none"> • Dynamic Mapping, Weather, Traffic • Instant Messaging, SMS, One-way Notifications, Tactical Chat Rooms • Real-time, One- and Two-Way Video in Vehicles or Handhelds • Geo-Location and Asset Tracking (vehicle, personnel, assets) • Mobile Office (bulk file transfer, email, Internet web access, virtual private networking – VPN) • Geospatial Applications • Automated License Plate Recognition • Digital Signage, Traffic Alerts, Automated Transactions • Standardized Push-To-Talk (PTT), Voice over IP (VoIP) - <i>future</i>
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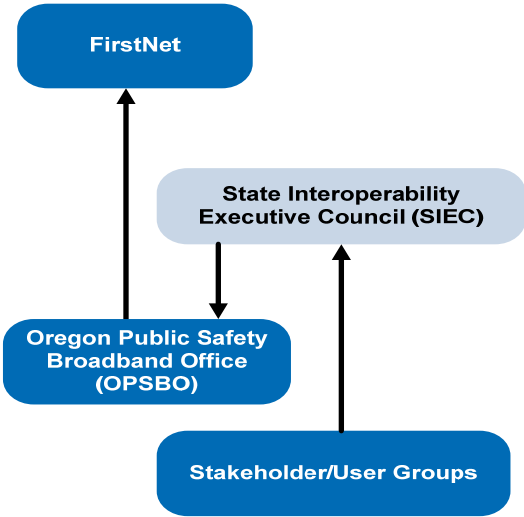
High Bandwidth Data Communication is Key to many Public Safety Applications

- Lease Fee for Network Capacity – Access fee from secondary user
- Lease Fee for Network Equipment/Infrastructure – Fee for use of FirstNet antennas, towers, and other assets

Commercial LTE service will not be allowed on NPSBN. Secondary users, such as utilities, will be allowed to use the network on a for-fee basis, increasing the subscriber base and making the network more affordable for public safety users. There is no information yet whether the User Fee will be a flat monthly rate per subscriber or a usage based arrangement. Oregon public safety users have typically preferred a flat rate, due to its predictability and ease in budgeting.

Governance. The Act requires each state to designate a single officer or governmental body to coordinate with FirstNet. Oregon plans for an Oregon Public Safety Broadband Office (OPSBO) to serve as this single voice to FirstNet. Similar to the administration of the State Radio Project (SRP), the proposed OPSBO will handle day-to-day program management and coordination functions. The OPSBO will

initially reside within Oregon Department of Transportation’s Major Projects Branch (MPB), and later transition to the Department of Administrative Services (DAS). A multi-agency Management Steering Committee is proposed to advise and oversee the activities of the OPSBO. The SIEC will consolidate and communicate stakeholder and user needs to the OPSBO for conveyance to FirstNet.



Stakeholder and User Information Flow

Next Steps. Requirements for the State and Local Implementation Grant Program were released by NTIA in August 2012. The 56 states and territories are eligible for \$135M in planning funds through the program, which may be used to create or expand governance structure, ensure local and tribal consultation, plan education and outreach, and determine and manage staffing. They can also be used to establish standard Memorandums of Agreement (MOUs) to facilitate use of existing assets. A Request for Proposal (RFP) for the grant funds is scheduled to be released in the first half of 2013, with distribution and use of those grant funds for planning activities in 2013 and 2014. In the first quarter of 2015, FirstNet is expected to begin informing states of their national deployment plan and funding levels. 2015 is also when the first funding from spectrum auctions is anticipated to become available for network construction. The spectrum auction process is expected to continue through 2022.

Opt-In or Opt-Out Decision. FirstNet is required to develop and present a plan to each state to build, operate, and maintain both the nationwide network and the network in each state. Once FirstNet has developed a plan, notified Oregon, and provided funding levels to achieve the plan objectives, Oregon will have 90 days to decide whether to **opt in** and participate in the deployment of the nationwide public safety broadband network or **opt out** and deploy its own portion of the national network. If a state

opts out, it still must achieve the level of connectivity and interoperability that is specified by FirstNet for the nation. Based on the information that is currently available regarding FirstNet and the status of Oregon's existing network facilities, we recommend that Oregon adopt an **Opt-In** position.

Managing Expectations. During this long, multi-year network deployment, it will be important to manage stakeholder expectations of this exciting technology by emphasizing these key messages:

- LTE is not a replacement for LMR technology today.
- LMR will continue to provide mission critical voice communications for the foreseeable future.
- LTE introduces new capabilities to assist the first responder and makes current data applications even better. It is a supplementary technology that offers the first responder new data and video services, providing additional and timely information.
- OPSBN is a high speed data communications network. Its true power and value will be realized once useful, interoperable applications are in the hands of users.
- States will need to prepare their local networks and establish new processes to make full use of this promising capability.

Additional information, references, and permissions can be found in *Oregon Public Safety Broadband Network Planning for FirstNet* Technical Report, SWIC-OPSBN-12-01.



This document is provided as a courtesy by The Interoperability Group and is not a substitute for careful review of the subject federal publication. Readers are welcome to share this document with others.

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**Brief Summary and Analysis of
the State and Local Implementation Grant Program (SLIGP)
Federal Funding Opportunity (FFO) Released February 6, 2013**

Applications due March 19, 2013

As required by the Middle Class Tax Relief and Job Creation Act of 2012 (Act), the National Telecommunications and Information Administration (NTIA) has established the SLIGP to fund state, local and tribal planning activities in support of the nationwide public safety broadband network (NPSBN) to be deployed by the First Responder Network Authority (FirstNet). NTIA released the FFO setting forth the application process and rules for the grant program, available at <http://www.ntia.doc.gov/other-publication/2013/slignp-federal-funding-opportunity>.

Awards. The Act authorized \$135 million in awards to a total of 56 states, districts and territories; NTIA will make available \$121.5 million. NTIA will grant each state and territory \$500,000 for initial planning, consultation and outreach activities, but it will also use a formula based upon population (weighted at 75 percent) and geographic area (weighted at 25 percent) to allocate the remaining funds, capping awards at \$6 million. The amounts allocated to each state are specified in the FFO (and at the end of this document), and NTIA expects to make awards no later than July 15, 2013. Awards will be issued by the National Institute of Standards and Technology, which is the Grants Office for SLIGP.

Not a competitive grant. Each state and territory will receive a grant according to its allocation, if it designs an acceptable project, provides the information NTIA requires, and agrees to the conditions NTIA places upon the award, including providing the required non-federal matching contribution.

One grant, two spending phases. While all funds will be obligated at the time of award, spending will be divided into two phases with half of the funds held for the second phase. SLIGP funds may be spent on planning, consulting and development activities in phase one, including strategy and timeline development, meetings, governance planning, and outreach and education. Phase two activities, which include collection of data on existing government-owned assets, may not begin until FirstNet has consulted with the states and informs NTIA that it is ready for those activities to begin, or else NTIA requests revised budgets from recipients regarding phase two activities.

Grant period and deliverables. The grant period will be three years. NTIA will require recipients to show seven key deliverables by the end of the grant period:

1. governance structure to consult with FirstNet as provided in the Act;
2. process for including local and tribal representatives in the consultation;
3. process for education and outreach to stakeholders;
4. identified potential public safety users;



5. standard agreement for use by FirstNet's contractor(s) of existing infrastructure;
6. staffing plan to facilitate governance structure; and
7. description of public safety needs included in the Statewide Communications Interoperability Plan.

Matching Requirement. As provided in the Act, NTIA will provide only 80 percent of the cost of the project, leaving the recipient to find cash or in-kind match (compliant with OMB cost principles) for at least the remaining 20 percent unless waived by NTIA upon a showing of good cause supported by extraordinary circumstances. The match is waived for Guam, American Samoa, the U.S. Virgin Islands, and the Commonwealth of the Northern Mariana Islands. Note that some pre-award costs may be counted against the match. In addition, if the recipient applies to the Department of Commerce for a negotiated indirect cost rate, such indirect costs (overhead costs for basic operational functions that cannot be separated from other projects) may be eligible costs and therefore applicable to the match.

Eligible Costs. SLIGP is truly a planning grant, so award funds may not be used for site preparation, broadband deployment, or equipment acquisition to provide wireless broadband services. But the funds can be used for costs associated with:

1. hiring of staff and consultants,
2. meeting planning,
3. travel,
4. governance planning and development,
5. communication, education and outreach activities,
6. developing standardized agreements for use of existing infrastructure,
7. identifying potential public safety users of the NPSBN,
8. administrative services and program management (including equipment and supplies),
9. legal services,
10. training costs, and
11. application preparation and pre-award expenses.

How to Apply

The application package may be obtained at www.grants.gov. Applications must be received by NTIA by March 19. For those familiar with the application processes for Broadband Technology Opportunities Program (BTOP) and State Broadband Initiative (SBI) / State Broadband Data and Development Program grants, the forms and terminology will be familiar. Significant effort will be needed for the statement of project feasibility and the detailed budget justification, but the real work will go into Supplemental Application Narrative. As with other programs, it is best not to submit on-line applications at the last minute, as the system can slow down. Each state and territory must submit its own application for funds, but groups of states may coordinate in preparing their funding applications, as contemplated in the Act.

Supplemental Application Narrative. Not to exceed 50 pages, the Supplemental Application Narrative (also available at the link provided in the first paragraph of this document) is an overview of the proposed project and detailed responses to the 40 Supplemental Application Narrative Questions.



These questions are also central to NTIA’s evaluation of each application (see “Evaluation,” below). Given their weight in the evaluation process, it is clear that these questions essentially illustrate NTIA’s vision of the purpose of the grant program and so require substantial attention. The questions focus primarily on a description of current state and proposed activities relating to these 15 categories:

1. Existing Governance Body
2. Statewide Communications Interoperability Plan (SCIP)
3. State-level Involvement (including Statewide Interoperability Coordinator, Chief Information Officer and Chief Technology Officer)
4. Coordination with Local Government Jurisdictions
5. Regional Coordination
6. Tribal Nations
7. Rural Coverage
8. Existing Infrastructure
9. Existing Government-Owned Networks
10. Network Users
11. Education and Outreach
12. Memorandum of Agreement (obstacles to state participation in FirstNet or SLIGP)
13. Tools (for planning and data collection work)
14. Phase Two Funding
15. Other (list of entities that assisted in preparing the application)

Letter of Designation. The Act requires that in applications for SLIGP funds, states and territories must certify that they have designated a “single officer or governmental body” to coordinate with NTIA on the implementation of SLIGP funds. Though not directly relevant to this FFO, states should be aware that the coordinator for SLIGP purposes is also, under the Act, the officer or governmental body through which FirstNet will conduct its consultation with the state. As a result, the state should select an officer or body that can speak with authority to convey the state’s technical, operational and business needs with regard to the NPSBN, not solely one with grant management capabilities. The FFO specifies that if the coordinator is a single person, it must be a current government employee, and if it is a governmental body, NTIA requires a point of contact for that body.

Evaluation. As noted above, each state will receive its allocation only if it provides NTIA the information it requires to evaluate the project. At least three NTIA reviewers will evaluate each project, and NTIA will fund it only if it receives an average score of at least 70 out of 100; NTIA staff will work with applicants on revisions necessary to raise insufficient scores. The evaluation is based overwhelmingly on the applicant’s responses to the Supplemental Application Narrative Questions (75 points), followed by detailed budget justification (20 points) and project feasibility (5 points), which includes assessments of both staffing levels as well as applicant’s capacity, knowledge, and experience. Within the 75 points allocated to the questions, the most heavily weighted are the questions regarding the state’s existing governance body and the Statewide Communications Interoperability Plan, each valued at up to 12 points.



Reporting

SLIGP awards will require quarterly reporting requirements, familiar to those with experience with BTOP and SBI grants. Grantees must also provide a closeout report at project completion within 90 days of the award end date.

State-by-State Allocations

Federal	Non-federal minimum	Total	Federal	Non-federal minimum	Total		
Alabama	\$ 2,094,000	\$ 523,500	\$ 2,617,500	Mississippi	\$ 1,608,000	\$ 402,000	\$ 2,010,000
Alaska	\$ 2,054,000	\$ 513,500	\$ 2,567,500	Missouri	\$ 2,537,000	\$ 634,250	\$ 3,171,250
American Samoa	\$ 515,000	\$ 0	\$ 515,000	Montana	\$ 1,860,000	\$ 465,000	\$ 2,325,000
Arizona	\$ 2,981,000	\$ 745,250	\$ 3,726,250	Nebraska	\$ 1,547,000	\$ 386,750	\$ 1,933,750
Arkansas	\$ 1,634,000	\$ 408,500	\$ 2,042,500	Nevada	\$ 2,020,000	\$ 505,000	\$ 2,525,000
California	\$ 5,813,000	\$ 1,453,250	\$ 7,266,250	New Hampshire	\$ 901,000	\$ 225,250	\$ 1,126,250
Commonwealth of the Northern Mariana Islands	\$ 515,000	\$ 0	\$ 515,000	New Jersey	\$ 2,777,000	\$ 694,250	\$ 3,471,250
Colorado	\$ 2,561,000	\$ 640,250	\$ 3,201,250	New Mexico	\$ 1,945,000	\$ 486,250	\$ 2,431,250
Connecticut	\$ 1,440,000	\$ 360,000	\$ 1,800,000	New York	\$ 4,984,000	\$ 1,246,000	\$ 6,230,000
Delaware	\$ 742,000	\$ 185,500	\$ 927,500	North Carolina	\$ 3,280,000	\$ 820,000	\$ 4,100,000
District of Columbia	\$ 652,000	\$ 163,000	\$ 815,000	North Dakota	\$ 1,196,000	\$ 299,000	\$ 1,495,000
Florida	\$ 5,034,000	\$ 1,258,500	\$ 6,292,500	Ohio	\$ 3,726,000	\$ 931,500	\$ 4,657,500
Georgia	\$ 3,386,000	\$ 846,500	\$ 4,232,500	Oklahoma	\$ 1,971,000	\$ 492,750	\$ 2,463,750
Guam	\$ 542,000	\$ 0	\$ 542,000	Oregon	\$ 2,200,000	\$ 550,000	\$ 2,750,000
Hawaii	\$ 893,000	\$ 223,250	\$ 1,116,250	Pennsylvania	\$ 4,050,000	\$ 1,012,500	\$ 5,062,500
Idaho	\$ 1,526,000	\$ 381,500	\$ 1,907,500	Puerto Rico	\$ 1,467,000	\$ 366,750	\$ 1,833,750
Illinois	\$ 4,165,000	\$ 1,041,250	\$ 5,206,250	Rhode Island	\$ 774,000	\$ 193,500	\$ 967,500
Indiana	\$ 2,411,000	\$ 602,750	\$ 3,013,750	South Carolina	\$ 1,898,000	\$ 474,500	\$ 2,372,500
Iowa	\$ 1,696,000	\$ 424,000	\$ 2,120,000	South Dakota	\$ 1,284,000	\$ 321,000	\$ 1,605,000
Kansas	\$ 1,844,000	\$ 461,000	\$ 2,305,000	Tennessee	\$ 2,418,000	\$ 604,500	\$ 3,022,500
Kentucky	\$ 1,897,000	\$ 474,250	\$ 2,371,250	Texas	\$ 6,000,000	\$ 1,500,000	\$ 7,500,000
Louisiana	\$ 1,975,000	\$ 493,750	\$ 2,468,750	US Virgin Islands	\$ 528,000	\$ 0	\$ 528,000
Maine	\$ 1,071,000	\$ 267,750	\$ 1,338,750	Utah	\$ 1,825,000	\$ 456,250	\$ 2,281,250
Maryland	\$ 2,033,000	\$ 508,250	\$ 2,541,250	Vermont	\$ 728,000	\$ 182,000	\$ 910,000
Massachusetts	\$ 2,214,000	\$ 553,500	\$ 2,767,500	Virginia	\$ 2,823,000	\$ 705,750	\$ 3,528,750
Michigan	\$ 3,428,000	\$ 857,000	\$ 4,285,000	Washington	\$ 2,706,000	\$ 676,500	\$ 3,382,500
Minnesota	\$ 2,447,000	\$ 611,750	\$ 3,058,750	West Virginia	\$ 1,151,000	\$ 287,750	\$ 1,438,750
				Wisconsin	\$ 2,350,000	\$ 587,500	\$ 2,937,500
				Wyoming	\$ 1,383,000	\$ 345,750	\$ 1,728,750