

**ANNUAL PERFORMANCE PROGRESS REPORT - EXECUTIVE SUMMARY**

TIME PERIOD: FISCAL YEAR - JULY 1, 2004 – JUNE 30, 2005

The Oregon Department of Geology and Mineral Industries is dedicated to achieving the targets set in its Performance Measures. The Measures reflect the agency’s progress in achieving its mission to produce and use geologic information to promote the health, safety, and welfare of Oregon. The agency reports to the Legislature on 11 Key Performance Measures submitted to, and approved by, the 2003 Legislative session as part of the budget request. The Measures directly reinforce agency goals to:

1. Prevent the loss of life and property from geological natural hazards, such as earthquakes, tsunamis, landslides, volcanic unrest, and coastal change.
2. Improve public awareness of these geological hazards, and educate communities on mitigation.
3. Secure financial bonding of active minerals and energy exploration and mining sites, to assure reclamation of disturbed surface areas for beneficial secondary use.
4. Create, compile, and provide practical geological data needed for natural hazard, natural resource, and land use problem solving.
5. Improve the efficiency and effectiveness in the delivery of earth science information.

<b>2004-2005 Performance Target Achievement</b>	<b>#</b>
<b>Total Number of Key Performance Measures (KPMs)</b>	11
# of KPMs at target for most current reporting period	7
# of KPMs not at target for most current reporting period	4

**1) How the agency did in achieving its Performance Measure targets.**

The agency’s performance is described in detail in the Key Measure Analysis that follows. The agency chose to expand the reach of five Performance Measures to serve more Oregon communities at risk from natural hazards, and to serve more customers requesting geological data. This expansion is necessary due to the coincidence of high population growth areas with higher hazard risk and greater resource needs. The effect of this expansion is to systematically lower the data point results for Performance Measures 2, 3 and 7 for 2004-2005, as compared with the previous period’s results.

There is an accelerating need for more comprehensive, and more useable geological information for use in hazard and resource assessment in the three highest growth regions in Oregon: northern Willamette Valley, central Oregon, and the southern I-5 corridor communities, as well as along the Oregon coast. The agency has responded to these needs by focusing new geological mapping in these growth hot spots, and by commencing a digital geological compilation of the best available maps and earth science data across all of Oregon. This work has propelled the agency ahead of the targets set for compiling regional geological data.

Performance Measures 1 through 4 link directly to emergency preparedness, and to Oregon Benchmark 67a-Geological Hazards: percent of Oregon counties & communities with geological hazard data and prevention activities in place. In this regard, work during 2004-2005 has increased the agency’s progress in exceeding the targets in providing geological hazard information, and the agency is currently taking steps to help counties and communities achieve their hazard prevention and mitigation plan targets.

The agency’s goal to increase Oregon’s public awareness of the risk we face from natural hazards received an unwelcome but effective boost by the huge earthquake of the coast of Sumatra, and the horrific effects of the resulting tsunami around the Indian Ocean, on December 26, 2004. Oregon has experienced 20 such earthquakes and tsunamis over the past 10,000 years, due to periodic catastrophic ruptures along the 600-

mile-long Cascadia Subduction Zone that lurks off our coast. The last event occurred on January 26, 1700. The agency works with federal, county, civic, industry and non-profit partners to prevent loss of life and property when the next event occurs. A tsunami warning for the Oregon Coast issued on June 14, 2005, provided direct evidence that significant progress has been made in increasing public awareness, and identified flaws in the emergency response systems that will be remedied.

The agency continues to examine and implement opportunities to deliver ever-improving service in an effective and efficient manner to our customers. The Legislature provided additional focus during the 2005 Legislative session, agreeing to modify several of these Performance Measures, and has also implemented a uniform approach to customer service surveys that will be implemented during 2005-2006.

## **2) Department of Geology and Mineral Industries' accomplishments during 2004-2005.**

The agency had several significant accomplishments during the performance period. Our success at meeting, exceeding, and improving upon our performance targets has been due, in part, to the success the agency has had in generating independent funding from, and in collaboration with, numerous state and federal agencies and other partners.

- With regards to Performance Measure 1, community preparedness for geological natural hazards, the agency began important steps to meet the targets by winning four competitive grants for Oregon from FEMA, totaling \$6.1 million, for Pre-disaster mitigation. The agency is leveraging the funds from two of these awards to help 17 Oregon counties meet their hazard preparedness targets. The agency is helping the Oregon University System leverage the funds from the other two grants to seismically upgrade five buildings on four Oregon university campuses. This achievement is especially noteworthy given the determined shift in philosophy by the federal authorities away from natural hazard preparedness.
- Further to Measure 1, the agency was awarded \$100,000 by FEMA to continue an assessment of earthquake hazard risk in Oregon k-20 schools, where 575,000 students attend k-12 schools, 90,000 students attend community colleges, and 60,000 students attend universities. This award funded screenings of specific buildings at risk across Oregon's 17 community college campuses, and the University of Oregon. This work, in combination with other agency projects, represents a start to the agency fulfilling the directives of Senate Bill 2. Senate Bill 2 (2005) provides an initial \$500,000, and requires the agency to conduct a statewide seismic assessment, which is to be completed by July 1, 2007, and then rank the results by a variety of risk categories. In addition, the agency was awarded \$150,000 by the USGS to continue earthquake hazard research along the Portland Hills Fault in and outside the Metro area. This funding included the collection of extreme resolution LIDAR data that is phenomenally useful for mapping existing and landslide-prone areas.
- The Measure 2 data point, related to tsunami hazard maps and mitigation plans, appears to show a significant shift backwards in performance. However it does represent the reality that all 63 of Oregon's coastal communities need more help to ensure that their emergency plans are in place, that they are functioning properly, and that public awareness will translate into public action when an emergency arises. On June 14, 2005 following an earthquake off the northern California coast, a tsunami warning was issued. After action reporting revealed that the warning served as a credible test of readiness, that the overall response by participating evacuees was favorable, that a variety of communications problems occurred, that shortcomings in emergency protocols were identified, and that considerable further work is required to improve the plans. The event provided an excellent learning opportunity for the agency and its state, county, civic, business and other partners to identify how it can help the general public accept personal responsibility for knowing what to do in the event of a geological disaster, and when they need to do it.

## Department of Geology & Mineral Industries - Annual Performance Progress Report – FY2005

- Prior to the June 14, 2005 tsunami warning, and prior to the December 26, 2004 Sumatra earthquake and tsunami, the agency arranged a \$50,000 award from the National Tsunami Hazard Mitigation Program to fund an innovative Tsunami outreach education and awareness project in Seaside, an Oregon city that is particularly vulnerable to a Cascadia-induced tsunami. The coordinator was highly successful at recruiting neighborhood educator volunteers, and this project is now considered a model for how to amplify tsunami awareness along the Oregon coast.
- Related to Measure 3, coastal communities with erosion hazard maps, the agency initiated and continued twelve separate research partnerships totaling \$327,000 funded by Oregon Department of Transportation, Department of Land Conservation and Development, Oregon Parks and Recreation, US Army Corps of Engineers, NOAA, Oregon Health Sciences University, Curry County and the City of Port Orford to complete projects measuring coastal change along the Oregon coast. These partnerships provide real data for use regarding the appropriate siting of new coastal development and need for shoreline protection for existing property and infrastructure. These partnerships accelerate the agency's ability to exceed the Measure's targets.
- Related to Measure 6b, active mining areas under regulation and secured financially, the agency has worked with compliers to develop more effective mechanisms for data collection to improve the accuracy of the Measure.
- Related to Measure 7, providing detailed-scale geological maps for local problem solving, the agency received \$230,000 of federal funds from the US Geological Survey and the US Bureau of Reclamation to map the geology in the upper Grange Ronde Basin, Grants Pass area, and the Klamath Basin as it related to groundwater flow systems, sediment loading, geochemistry, and other hydrological and ecological applications. These funds provided the basis to complete six additional map areas, of the 176 total required to complete the detailed geological mapping of the 6.4% of Oregon that contains all incorporated communities and their urban growth boundaries.
- Related to Measure 8, providing average-scale geological maps for regional problem solving, and following a decade of internal development, the agency received \$220,000 of federal and other state agency funds, in partnership with the US Geological Survey, the US Forest Service and the Oregon Geographic Information Council, to initiate the ambitious digital geological compilation GIS project for Oregon. During 2004-2005, the NE portion of the state was completed, launching the agency ahead of the Measure's target. When complete in 2009, the digital geological data will provide a foundation to support ecosystem analysis, hazard and risk assessment, infrastructure engineering, construction materials sourcing, and minerals and energy projects.

### 3) Future Challenges.

Despite these achievements, the agency faces formidable challenges:

- Customer demand continues to grow while state funding and staffing are static.
- Funding partners are under renewed stress to do more with less also, with uncertainty ahead for the National Tsunami Hazard Mitigation Program and the STATEMAP geological mapping program.
- Oregon's population growth patterns coincide with areas of higher natural hazard risk, and higher natural resource demand, increasing the need for timely, high quality digital geologic data. The pace of areas affected by development frequently exceeds the agency's ability to map these near-urban locations, requiring a prioritization scheme that drifts out of sync with customer needs.

The agency must continue to identify ways and means to more effectively and more efficiently deliver high quality, unbiased, and timely service to reduce risk, increase awareness, provide compliance assurance, and help to sustain the economy of Oregon. In this way the agency will attain and surpass all of its Performance Measure targets.

**ANNUAL PERFORMANCE PROGRESS REPORT - PART I, MANAGING FOR RESULTS**

TIME PERIOD: FISCAL YEAR - JULY 1, 2004 – JUNE 30, 2005

Agency: Department of Geology and Mineral Industries	Date Submitted: September 30, 2005	Version No.: 1
Contact: Don Lewis	Phone: 503-731-4100	
Alternate:	Phone:	

Agency Name: Department of Geology and Mineral Industries	Agency No.: 63200
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**The following questions shed light on how well performance measures and performance data are leveraged within your agency for process improvement and results-based management.**

<p>1 How were staff and stakeholders involved in the development of the agency's Performance Measures?</p>	<p><i>Key staff</i> and the <i>Governing Board</i> helped develop our 2003-2009 Strategic Plan that provides the basis for Performance Measures. A Performance Measures Team was assembled in April/May 2004 to review and recommend revisions of the agency's Performance Measures, leading to preparation of the 2005-2007 budget.</p> <p><i>Agency Compliers</i> participated by providing voluntary written feedback along with the customer service survey. <i>Consumers</i> participated by visiting the Nature of the Northwest Information Center and examining, selecting, and purchasing earth science information, and by visiting the agency's website to download data, technical reports, brochures and briefs. <i>Constituents</i> participated in organized outreach seminars, workshops, training sessions, and summits. <i>Clients</i> participated by inviting and awarding competitive grants and collaborative partnerships to fund the agency's research, geological hazard and resource assessment, and outreach activities that directly flow from the Performance Measures.</p> <p>The <i>Legislature</i> provided objective feedback, streamlining, direction, and approval of modified Performance Measures during the 2005 legislative session. These modifications took effect July 1, 2005.</p>
<p>2 How are Performance Measures used for management of the agency?</p>	<p>Achieving Performance Measure targets impacts the agency's area-of-need selection, project design, collaboration &amp; partnership opportunities, implementation sequencing, and information distribution.</p>
<p>3 What training has staff had in the use of Performance Measurement?</p>	<p>The Oregon Progress Board conducted an in-house training for managers and section leaders. Staff attended Progress Board forums.</p>
<p>4 How does the agency communicate Performance Results and for what purpose?</p>	<p>The agency seeks critical feedback on the Annual Report from the Governing Board, Governor, Legislature, and Oregon citizens. The results are available on the agency website for agency customers to provide recommendations for continual improvement. Technical oversight committees are provided agency performance versus Performance Measure targets to aid them in their prioritization and selection of agency projects to directly link agency activity to customer needs.</p> <p>The Annual Report and Performance Measures are available on the agency's website: <a href="http://www.oregongeology.com">http://www.oregongeology.com</a>.</p>
<p>5 What important Performance Management changes have occurred in the past year?</p>	<p>The agency recommended modifications to eight, the deletion of one, and addition of four new Performance Measures. (One of these four new Measures was directed in a Budget Note from the 2003-2005 Legislatively Approved Budget.)</p> <p>During the 2005 session, the Legislature approved modifications to six, the deletion of one, the retention of one, and the addition of two Performance Measures. The Legislature also deleted two old and introduced two new Performance Measures.</p>

**ANNUAL PERFORMANCE REPORT- PART II, KEY MEASURE ANALYSIS**

TIME PERIOD: FISCAL YEAR - JULY 1, 2004 – JUNE 30, 2005

Agency Name: Department of Geology and Mineral Industries				Agency No.: 63200						
Key Performance Measure (KPM)		1999	2000	2001	2002	2003	2004	2005	2006	2007
#1 - Percent of Oregon cities and towns that meet community preparedness standards for geological natural hazards.	Target	30%	40%	45%	50%	53%	55%	57%	60%	62%
	Data	30%	40%	45%	46%	47%	50%	50%		

Data Source: Federal, State, and local emergency preparedness agencies, land use agencies, natural resource agencies, and internal data accumulation.

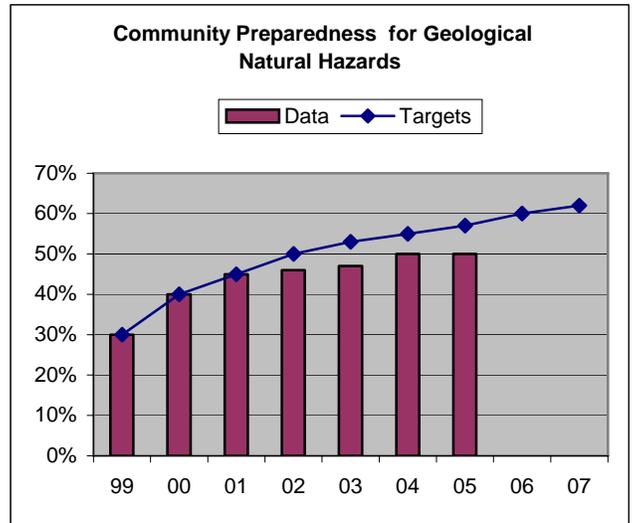
**Key Performance Measure Analysis**

**To what goal(s) is this Performance Measure linked?**

Goal 1: Reduce risk to Oregon communities from geologic natural hazards (linked to OBM 67 – Percentage of Oregon counties and communities with hazard data and mitigation plans in place).

**What do benchmark (or other high-level outcome) data say about Oregon relative to the goal(s)? What is the impact of your agency?**

Oregon is half way to the objective of 100% preparedness, and we have drifted further away from the target in recent years. This suggests that our agency has not made adequate impact for Oregon, and renewed efforts are due in both hazard assessment and mitigation education. As background information, the 50% data point is a composite number reflecting the percentage of specific Oregon communities that have sufficient study of three separate geological hazards AND that have mitigation plans in place. Our agency is examining ways for the number of generally smaller communities that do not yet have mitigation plans in place, or in some cases geological hazard information, to become informed and prepared. It may provide some comfort that 68% of the populace residing in incorporated communities, and 76% of Oregon’s citizens overall, as measured by county data, have geological hazard assessments AND have hazard mitigation plans in hand, yet the converse is also true.



**How does the Performance Measure demonstrate agency progress toward the goal?**

The Performance Measure does not illustrate agency activity directly, and it is being modified to better reflect agency progress. However, this below-target performance has motivated the agency to complete new hazard assessments for broader areas and to help educate and train communities on mitigation planning. As one example of greater agency impact, the agency has formed and helped fund collaborative partnerships with 17 Oregon counties for them to be better prepared.

**Compare actual performance to target and explain any variance.**

Actual performance continues to show that Oregon communities have fallen short of targeted goals for preparedness over the last four years. This is a result of a variety of factors. One important factor relates to federal funding. There has been a purposeful shift in priorities away from natural disaster preparedness at the federal level since September 11, 2001. In July 2005, the Government Accountability Office concluded that the federal all-hazards approach to preparedness were similar in capabilities for protection, response and recovery between natural disasters and terrorist events, but differed most for prevention. The GAO reported that despite a ten-fold increase in grant programs towards terrorism preparedness, the majority of state and local first responder departments said that they had a greater need for assistance preparing for natural or accidental disasters, but did not have the flexibility within the system to focus on those needs. Oregon communities depend nearly entirely upon federal funding to fund natural disaster prevention research, educational awareness, and plan preparation. State Emergency Managers have explained their deep concern about this to their federal counterparts, yet no corrective action has been taken.

**Summarize how actual performance compares to any relevant public or private industry standards.**

This is not a function that is performed by private industry and no relevant comparison can be made.

**What is an example of a department activity related to the measure?**

To address the federal funding challenge, the agency has pursued competitive grants. As a result, Oregon has been awarded four Pre-Disaster Mitigation grants from FEMA, totaling \$6.1 million. The majority of grant funds are passed through to the Oregon University System for seismic structural reinforcement of five critical facilities. For the balance, contained within the two grants awarded for pre-disaster planning preparedness, the agency is responsible for geological hazard assessment, mitigation planning and training of personnel across 17 Oregon counties (Benton, Lane, Linn, Marion, Polk, Yamhill, Gilliam, Hood River, Jefferson, Morrow, Sherman, Umatilla, Wasco, Wheeler, Harney, Lake and Malheur).

The agency also arranged \$50,000 funding for, and partnered with, the City of Seaside in September 2004 on a nine-month-long Tsunami Awareness Outreach Program pilot project. A tsunami education coordinator was hired, who organized a network of neighborhood educator volunteers to increase awareness. The neighborhood educators reached 68% of Seaside households, and 2,200 people participated in Outreach events.

The Agency was awarded an \$80,000 grant by the USGS National Landslide Hazards Program to advance landslide hazard understanding, increase awareness of landslide hazard map use in local planning, and increase agency and public awareness on landslide hazard mitigation techniques.

**What needs to be done as a result of this analysis?**

1. Continue geological hazard assessment and help communities with the need to become prepared for natural disasters.
2. Refine Performance Measure criteria to include locales other than Oregon cities and counties. For example, during July and August there are 11,000 visitors resident each night in State Parks along the Oregon coast, the area most at risk from catastrophic earthquakes, tsunamis, and landslides.
3. This Performance Measure was redefined during the 2005 Legislative Session to state, "Percent of communities and other stakeholders provided with hazard maps and risk studies for earthquake and landslide hazards." This rewording resulted in a more exact representation of what the agency is able to provide to communities and other stakeholders to prepare for, and mitigate, earthquake and landslide hazards. Tsunami preparedness will be incorporated into a separate Performance Measure.

**ANNUAL PERFORMANCE REPORT- PART II, KEY MEASURE ANALYSIS**

TIME PERIOD: FISCAL YEAR - JULY 1, 2004 – JUNE 30, 2005

Agency Name: Department of Geology and Mineral Industries		Agency No.: 63200								
Key Performance Measure (KPM)		1999	2000	2001	2002	2003	2004	2005	2006	2007
#2 - Percent of coastal communities with tsunami hazard maps and mitigation plans.	Target	65%	70%	75%	80%	85%	85%	88%	90%	90%
	Data	65%	70%	75%	76%	77%	80%	69%		

Data Source: Federal, State, and local emergency preparedness agencies, land use agencies, natural resource agencies, and internal data accumulation.

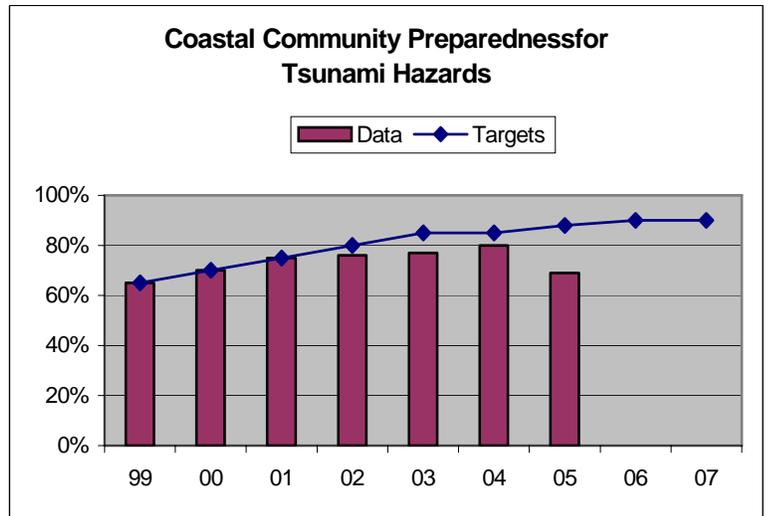
**Key Performance Measure Analysis**

**To what goal(s) is this Performance Measure linked?**

Goal 1: Reduce risk to Oregon communities from geologic natural hazards (linked to OBM 67 – Percentage of Oregon counties and communities with hazard data and mitigation plans in place).

**What do benchmark (or other high-level outcome) data say about Oregon relative to the goal(s)? What is the impact of your agency?**

Highlights that only two-thirds of Oregon coastal communities have the information needed. The agency has provided general tsunami information for 100% of the coast, and has provided tsunami evacuation brochures for 39 of 63 communities (and 68% of the population), and detailed tsunami inundation studies for only 10 communities (but for 70% of the population). The agency has had a relatively high profile impact, but has fallen below the target measure.



**How does the Performance Measure demonstrate agency progress toward the goal?**

The agency has increased the number of communities at risk of tsunami inundation to 63 that now includes every named community along the Oregon Coast, although this does not include State parks. The purpose is to identify 100% of those at risk, to achieve 100% preparedness, and 100% survival.

**Compare actual performance to target and explain any variance.**

Actual performance shows downward adjustment, reflecting expansion in the number of coastal communities to include every incorporated coastal community. This identifies that 24 communities do not yet have tsunami evacuation brochures. There is a backlog of new brochures in preparation, and the agency will be expediting their completion in the near term.

The agency is taking steps to increase detailed studies, expand the number and coverage of evacuation brochures, increase community outreach activities and pursue additional federal funding through the National Tsunami Hazard Mitigation program. Ironically, despite a very large increase in Oregon community awareness due to the December 26, 2004, earthquake and tsunami in the Indian Ocean, there is a risk that net Federal funding for the five Pacific Coastal States may decline due to the possible addition of Atlantic and Gulf Coast States to the program. Such an outcome will have significant negative effects upon the agency’s ability to expand services.

**Summarize how actual performance compares to any relevant public or private industry standards.**

This is not a function that is performed by private industry and no relevant comparison is possible.

**What is an example of a department activity related to the measure?**

The agency is the Oregon representative for the National Tsunami Hazard Mitigation Program. During 2004-2005 this program awarded \$274,000 to prepare tsunami evacuation brochures, build detailed tsunami inundation computer models to

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study the details of inundation in key population centers, and to educate those at risk as to how they can save their own lives during a catastrophic earthquake and resultant tsunami. Half of this amount will carry forward into the 2005-2006 period, and will be used to accelerate information production and distribution. Following the December 26 Sumatra earthquake and tsunami, awareness has increased dramatically and 190,000 additional brochures have been requested.

In September 2004, the agency also arranged funding for the City of Seaside, a city particularly at risk, to conduct a Tsunami Awareness Program pilot project. Neighborhood educators reached 68% of households, and 2,200 people participated in Outreach events. The project was a tremendous success and is now the model for improving awareness and prevention.

### **What needs to be done as a result of this analysis?**

1. Explore avenues for increasing the pace and expanding the coverage of the needed information, especially in areas where visitors to Oregon's coast congregate, such as in State Parks facilities.
2. As directed by SB 557 (2005), the Office of Emergency Management will consult and coordinate with the agency to develop tsunami warning information for transient lodging facilities located within a tsunami inundation zone, and facilitate and encourage the distribution of these warning materials. The agency will examine alternatives to partner with facilities, communities and other agencies to execute this mandate.
3. This Performance Measure was reworded during the 2005 Legislative Session to state, "Percent target communities with official, reviewed evacuation map brochures produced by DOGAMI." This resulted in a more exact representation of what the agency is able to provide to communities to prepare for tsunamis.

**ANNUAL PERFORMANCE REPORT- PART II, KEY MEASURE ANALYSIS**

TIME PERIOD: FISCAL YEAR - JULY 1, 2004 – JUNE 30, 2005

Agency Name: Department of Geology and Mineral Industries		Agency No.: 63200								
Key Performance Measure (KPM)		1999	2000	2001	2002	2003	2004	2005	2006	2007
# 3 - Percent target communities with landslide and/or coastal erosion hazard maps and mitigation plans.	Target	35%	45%	50%	55%	60%	70%	75%	77%	80%
	Data	35%	42%	50%	60%	72%	75%	36%		

Data Source: Federal, State, and local emergency preparedness agencies, land use agencies, natural resource agencies, and internal data accumulation.

**Key Performance Measure Analysis**

**To what goal(s) is this Performance Measure linked?**

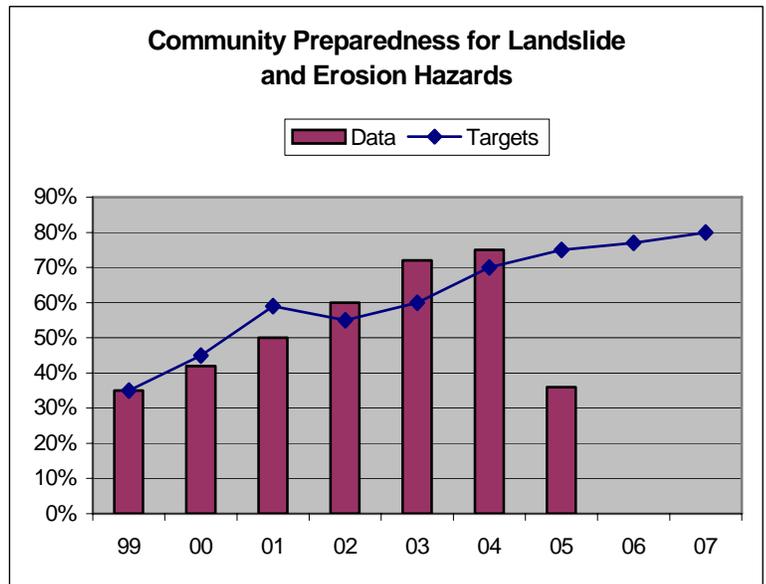
Goal 1: Reduce risk to Oregon communities from geological natural hazards (linked to OBM 67 – Percentage of Oregon counties and communities with hazard data and mitigation plans in place).

**What do benchmark (or other high-level outcome) data say about Oregon relative to the goal(s)? What is the impact of your agency?**

The data illustrates that the majority of the Oregon coastline does not yet have the information it needs. The agency is solely responsible for meeting the target.

**How does the Performance Measure demonstrate agency progress toward the goal?**

The Agency has produced six studies providing coverage of 62% of the 60 coastal communities (representing 36% of the Oregon coastal population) at risk from coastal erosion and landslides. However, these studies total only 39% of the 296-mile-long length of Oregon’s Pacific Coast, and primarily have taken place along the northern portion. This data demonstrates insufficient progress towards the goal.



**Compare actual performance to target and explain any variance.**

The trend is a radical downward adjustment as a result of a change in the calculation to reflect the need for this information along the entire Oregon coastline, reflecting the patterns of growth and development along the coast, including areas between incorporated communities.

**Summarize how actual performance compares to any relevant public or private industry standards.**

This is not a function that is performed by private industry and no relevant comparison is possible.

**What is an example of a department activity related to the measure?**

The Department of Land Conservation and Development has partnered with the agency to provide \$75,000 in funds to map 17 miles of southern Lincoln County coastline during 2005-2006.

**What needs to be done as a result of this analysis?**

1. Develop new partnerships with other agencies and communities to fund coastal erosion hazard assessment.
2. The Performance Measure was redefined during the 2005 Legislative Session to state, “Percent target communities with standardized, 4-risk zone erosion hazard maps.”

**ANNUAL PERFORMANCE REPORT- PART II, KEY MEASURE ANALYSIS**

TIME PERIOD: FISCAL YEAR - JULY 1, 2004 – JUNE 30, 2005

Agency Name: Department of Geology and Mineral Industries		Agency No.: 63200								
Key Performance Measure (KPM)		1999	2000	2001	2002	2003	2004	2005	2006	2007
#4 - Percent of communities with ground response maps and mitigation plans for earthquake hazards	Target	50%	50%	50%	55%	60%	65%	75%	78%	80%
	Data	54%	70%	70%	75%	76%	78%	82%		

Data Source: Federal, State, and local emergency preparedness agencies, land use agencies, natural resource agencies, internal data accumulation.

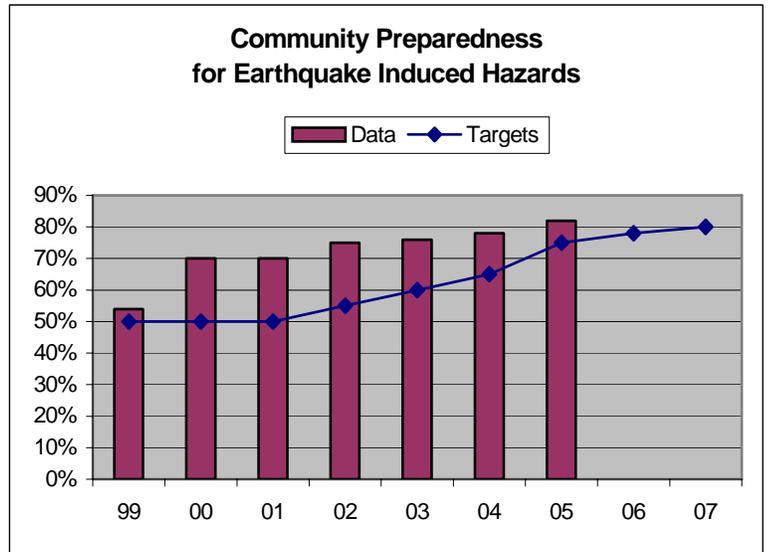
**Key Performance Measure Analysis**

**To what goal(s) is this Performance Measure linked?**

Goal 1: Reduce risk to Oregon communities from geological natural hazards (linked to OBM 67 – Percentage of Oregon counties and communities with hazard data and mitigation plans in place).

**What do benchmark (or other high-level outcome) data say about Oregon relative to the goal(s)? What is the impact of your agency?**

The significant majority of Oregon citizens have this information available due to the cumulative mapping and reporting efforts of the agency on this subject over the past decade.



**How does the Performance Measure demonstrate agency progress toward the goal?**

Ground response and hazard maps provide a key to saving Oregon lives and property from hazardous earthquakes. The data reflects that the agency has produced these maps for 82% of Oregon’s 2.3 million citizens that reside in communities numbering greater than 3,000, or reside in at-risk smaller communities along the coast. The majority of communities that remain to be done are smaller than those completed, are situated along the south coast, are found along the southern I-5 corridor, or are east of the Cascades.

**Compare actual performance to target and explain any variance.**

Actual performance is ahead of targets set several years ago. Rapid progress is being made at the county level through the agency’s collaboration with 17 Oregon counties on pre-disaster mitigation planning.

**Summarize how actual performance compares to any relevant public or private industry standards.**

This is not a function that is performed by private industry and no relevant comparison is possible.

**What is an example of a department activity related to the measure?**

The agency has won competitive grants for Oregon totaling \$1.4 million to fund additional work. The agency is providing hazard assessment, risk analyses, and mitigation plans in partnership with 17 Oregon counties (Benton, Lane, Linn, Marion, Polk, Yamhill, Gilliam, Hood River, Jefferson, Morrow, Sherman, Umatilla, Wasco, Wheeler, Harney, Lake and Malheur).

**What needs to be done as a result of this analysis?**

This Performance Measure was deleted during the 2005 Legislative Session. It is now a major component of revised Performance Measure #1.

**ANNUAL PERFORMANCE REPORT- PART II, KEY MEASURE ANALYSIS**

TIME PERIOD: FISCAL YEAR - JULY 1, 2003 – JUNE 30, 2004

Agency Name: Department of Geology and Mineral Industries		Agency No.: 63200								
Key Performance Measure (KPM)		1999	2000	2001	2002	2003	2004	2005	2006	2007
#5 - Public Awareness of Geologic Hazards and Mitigation Efforts.	Target					80%	85%	90%	95%	100%
	Data					75%	95%	94%		

Data Source: Internal data accumulation recording the occurrences of geological natural hazard events that result in media contact.

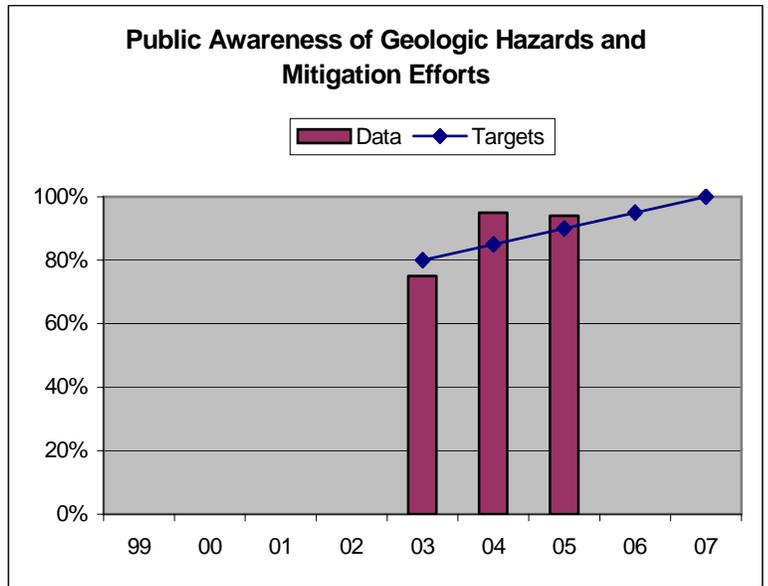
**Key Performance Measure Analysis**

**To what goal(s) is this Performance Measure linked?**

Goal 2: Improve public awareness of geological hazards and educate communities on mitigation.  
 Goal 5: Improve the efficiency and effectiveness in the delivery of earth science information.

**What do benchmark (or other high-level outcome) data say about Oregon relative to the goal(s)? What is the impact of your agency?**

The Agency is increasingly recognized as the authority on natural hazards and mitigation issues in Oregon. We communicate with community groups and individuals on a constant basis.



**How does the Performance Measure demonstrate agency progress toward the goal?**

Natural hazard events trigger media and public interest, and raise awareness of geological hazards and mitigation efforts. Extraordinary events in the past year have heightened public awareness of specific hazards, including volcanic unrest (renewed activity on Mount St. Helens), and catastrophic earthquake and tsunamis (December 26, 2004 around the Indian Ocean). Lesser events, including earthquake swarms off the Oregon coast in June 2005, also command attention, with the agency sought as a subject matter expert.

**Compare actual performance to target and explain any variance.**

Once again, extraordinary events have commanded the public's attention during the year with agency scientists acting as technical authorities during natural disasters. The Sumatra tsunami and the June 14th tsunami warning on the Oregon coast, coupled with workshops and seminars up and down the coast, and mitigation efforts in Seaside, have pushed the agency into the spotlight throughout the year. A heightened awareness of the earthquake risk in the state has even small, rural newspapers contacting the agency's public information officer for technical information and mitigation advice.

**Summarize how actual performance compares to any relevant public or private industry standards.**

This is not a function performed by private industry and so no relevant comparison is possible.

**What is an example of a department activity related to the measure?**

DOGAMI oversaw a 9-month effort to increase awareness of the tsunami risk in Seaside, considered the most vulnerable of all coastal Oregon communities. This concentrated effort, including workshops, public presentations and door-to-door solicitations was very well received. Post-program surveys indicated a 100% understanding of tsunami causes and risks.

**What needs to be done as a result of this analysis?**

Continue to build effective relations with media outlets, communities and other agencies with similar missions.

**ANNUAL PERFORMANCE REPORT- PART II, KEY MEASURE ANALYSIS**

TIME PERIOD: FISCAL YEAR - JULY 1, 2004 – JUNE 30, 2005

Agency Name: Department of Geology and Mineral Industries		Agency No.: 63200								
Key Performance Measure (KPM)		1999	2000	2001	2002	2003	2004	2005	2006	2007
#6a - Percent mined acres returned to secondary environmentally compatible beneficial use.	Target	19%	20%	21%	23%	25%	25%	25%	25%	25%
	Data	19%	20%	21%	22%	25%	25%	29%		

Data Source: Internal data accumulation, input from industry and public. Note: amount of mined and reclaimed land varies annually.

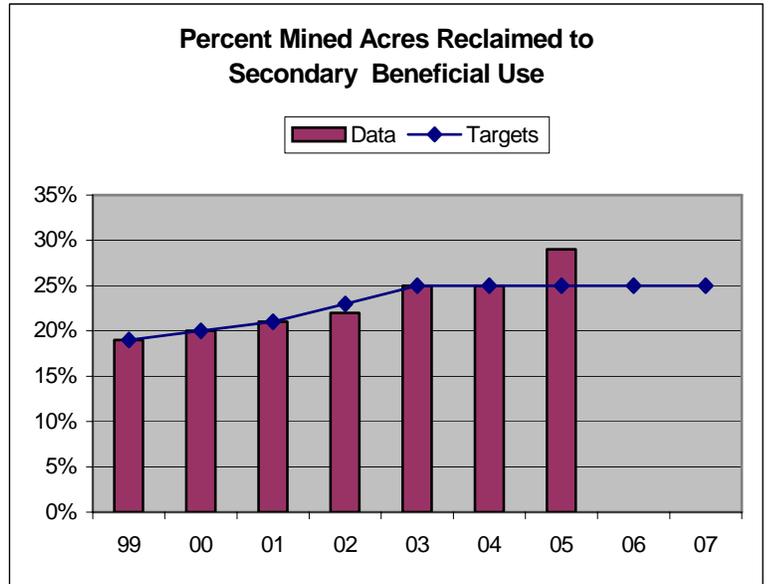
**Key Performance Measure Analysis**

**To what goal(s) is this Performance Measure linked?**

Goal 3: Resource management via prompt reclamation of acres disturbed during exploration or mining or fluid mineral drilling, and secure bonding of mining activity sites.

**What do benchmark (or other high-level outcome) data say about Oregon relative to the goal(s)? What is the impact of your agency?**

Tracks the amount of mined land that is no longer active and has been reclaimed for beneficial secondary use as compared to all disturbed mined land, both active and inactive.



**How does the Performance Measure demonstrate agency progress toward the goal?**

The value calculated includes all final reclamation and all concurrent reclamation for mining and mineral exploration. Reaching the target indicates reclamation activity is proceeding at an effective pace.

**Compare actual performance to target and explain any variance.**

Actual performance is tracking ahead of target. Acres reclaimed depend on industry activity and rate of reclamation.

**Summarize how actual performance compares to any relevant public or private industry standards.**

This is not a function that is performed by private industry and so no relevant comparison is possible.

**What is an example of a department activity related to the measure?**

The agency partnered with a consortium of public, private and non-profit stakeholders to complete a multi-year, \$1.3 million effort, to restore a reach of the Upper Rogue damaged by the New Year’s 1997 flood. Funding for this reclamation project came from a variety of sources including the Oregon Watershed Enhancement Board, other state agencies, local jurisdictions, and industry.

Beyond this success story, identifying who is responsible for reclamation can be complicated where abandoned sites are concerned, as well as at other sites not covered by present-day reclamation legislation. The agency continually works to forge partnerships with all stakeholders, both those responsible and those who will be impacted, in the decision-making process, resulting in a better understanding between parties.

**What needs to be done as a result of this analysis?**

1. Continue to increase the accuracy of data collection.
2. The Measure was redefined during the 2005 Legislative Session to state, “Total number of mining acres that have been reclaimed and returned to secondary beneficial use.” This modification more accurately depicts the agency's mission.

**ANNUAL PERFORMANCE REPORT- PART II, KEY MEASURE ANALYSIS**

TIME PERIOD: FISCAL YEAR - JULY 1, 2003 – JUNE 30, 2004

Agency Name: Department of Geology and Mineral Industries		Agency No.: 63200								
Key Performance Measure (KPM)		1999	2000	2001	2002	2003	2004	2005	2006	2007
#6b - Active mining acres under regulation and review and/or secured financially.	Target	6,500	15,000	17,000	17,000	17,000	17,500	18,000	19,000	20,000
	Data	6,300	15,200	17,200	19,800	20,200	20,210	21,586		

Data Source: Internal data accumulation, input from industry and public. Note: total amounts of mined and reclaimed land varies annually with industry activity and practices.

**Key Performance Measure Analysis**

**To what goal(s) is this Performance Measure linked?**

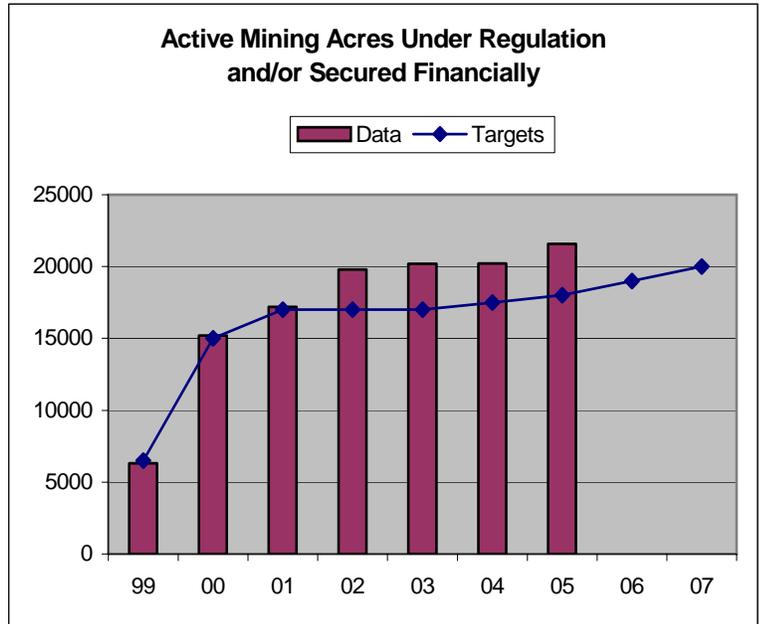
Goal 3: Resource management via prompt reclamation of acres disturbed during exploration or mining or fluid mineral drilling, and secure bonding of mining activity sites.

**What do benchmark (or other high-level outcome) data say about Oregon relative to the goal(s).**

Records the amount of mined land presently in production and under regulation by the agency.

**How does the performance measure demonstrate agency progress toward the goal?**

The Measure tracks the amount of mined land subject to agency regulation. Acres shown are being actively mined; financial security is variable depending on provisions of the law. In practice the most effective method of providing compliance assurance for Oregon is by consistent field monitoring of active sites. [Note: the number of acres is for solid mineral commodities (metals, industrial, sand and gravel), and excludes oil, gas, and geothermal sites.]



**Compare actual performance to target and explain any variance.**

Actual data reflect market cycles and show that demand has increased. The change between 1999 and 2000 was the result of improved remote sensing data collection that led to more accurate data analysis and compilation.

**Summarize how actual performance compares to any relevant public or private industry standards.**

This is not a function that is performed by private industry and so no comparison is made.

**What is an example of a department activity related to the measure?**

The agency’s staff works closely with industry compliers and other stakeholders to monitor procedures of mineral extraction and disturbed land reclamation to ensure regulatory compliance and to achieve sustainable land use. By reinforcing best practices, and by maintaining an atmosphere of mutual trust, government, industry and community can work together to achieve a positive balance of primary resource development and secondary beneficial use.

**What needs to be done as a result of this analysis?**

The Measure was redefined during the 2005 Legislative Session to state, “Total number of mining acres that have been reclaimed and returned to secondary beneficial use.” This modification more accurately depicts agency mission and goals.

**ANNUAL PERFORMANCE REPORT- PART II, KEY MEASURE ANALYSIS**

TIME PERIOD: FISCAL YEAR - JULY 1, 2004 – JUNE 30, 2005

Agency Name: Department of Geology and Mineral Industries		Agency No.: 63200								
Key Performance Measure (KPM)		1999	2000	2001	2002	2003	2004	2005	2006	2007
#7 - Percent of Oregon where geological data, in the form of high resolution maps, have been published to be used for local problem solving.	Target	43%	48%	50%	52%	53%	54%	55%	57%	60%
	Data	43%	48%	50%	52%	53%	54%	43%		

Data Source: Internal data collection.

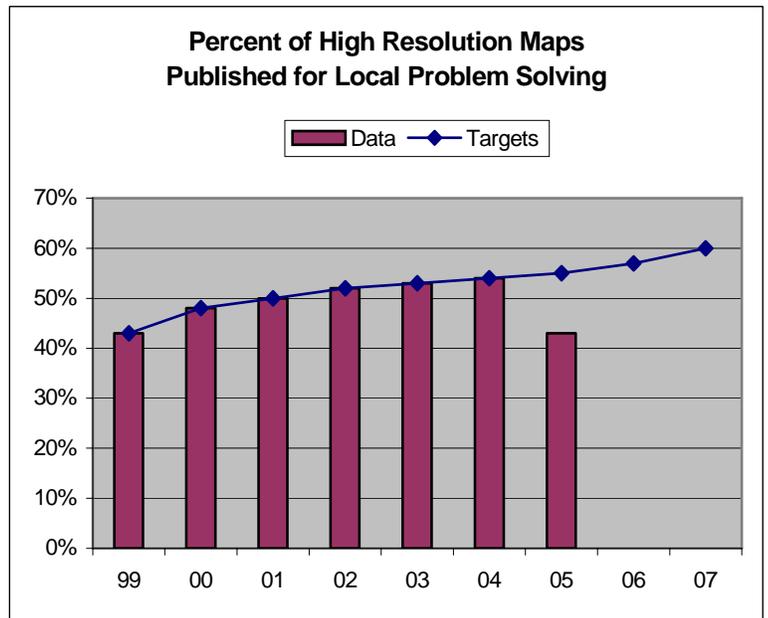
**Key Performance Measure Analysis**

**To what goal(s) is this performance measure linked?**

Goal 4: Create and compile geologic data needed in natural resource and land use problem solving.

**What do benchmark (or other high-level outcome) data say about Oregon relative to the goal(s)? What is the impact of your agency?**

Indicates overall progress toward having complete detailed geologic map coverage available for problem solving at a local level in needed communities. The agency performs detailed 1:24,000 scale geologic mapping that provides the earth science foundation for further natural hazard and natural resource assessments.



**How does the Performance Measure demonstrate agency progress toward the goal?**

The Measure reports where the agency stands relative to the goal towards detailed geologic mapping of all incorporated communities and their urban growth boundaries in Oregon. These 176 map areas total 6.4% of the surface area of Oregon.

**Compare actual performance to target and explain any variance.**

The downward adjustment reflects a re-measurement, and resulting increase, of the target areas. Had the 2003-2004 data been calculated with the same criteria, it would have been 40%. Discussions are in progress with the Oregon Geologic Mapping Advisory Committee as to whether this adjustment is adequate to capture the issues most relevant for local problem solving. For example, high-growth communities along the southern I-5 corridor have requested agency help in understanding their watershed geology, but these critical areas are situated outside their urban growth boundaries.

**Summarize how actual performance compares to any relevant public or private industry standards.**

This is not a function that is performed by private industry and so no relevant comparison is possible.

**What is an example of a department activity related to the measure?**

During 2004-2005, the agency was awarded \$230,000 of federal funds from the US Geological Survey and the US Bureau of Reclamation to map the geology in the upper Grange Ronde Basin, Grants Pass area, and the Klamath Basin as it related to groundwater flow systems, sediment loading, geochemistry, and other hydrological and ecological applications. These funds provided the basis to complete six additional map areas.

**What needs to be done as a result of this analysis?**

1. Examine partnership opportunities to increase the pace and timeliness of detailed geologic mapping in high-demand locales.
2. Examine the scope of the Performance Measure statistic with local partners and advisors.

**ANNUAL PERFORMANCE REPORT- PART II, KEY MEASURE ANALYSIS**

TIME PERIOD: FISCAL YEAR - JULY 1, 2004 – JUNE 30, 2005

Agency Name: Department of Geology and Mineral Industries		Agency No.: 63200								
Key Performance Measure (KPM)		1999	2000	2001	2002	2003	2004	2005	2006	2007
#8 - Percent medium resolution (1:100,000 scale) digital maps completed to be used for regional problem solving.	Target	6%	7%	8%	8%	9%	9%	10%	15%	20%
	Data	6%	7%	7%	7%	9%	10%	23%		

Data Source: Internal data collection.

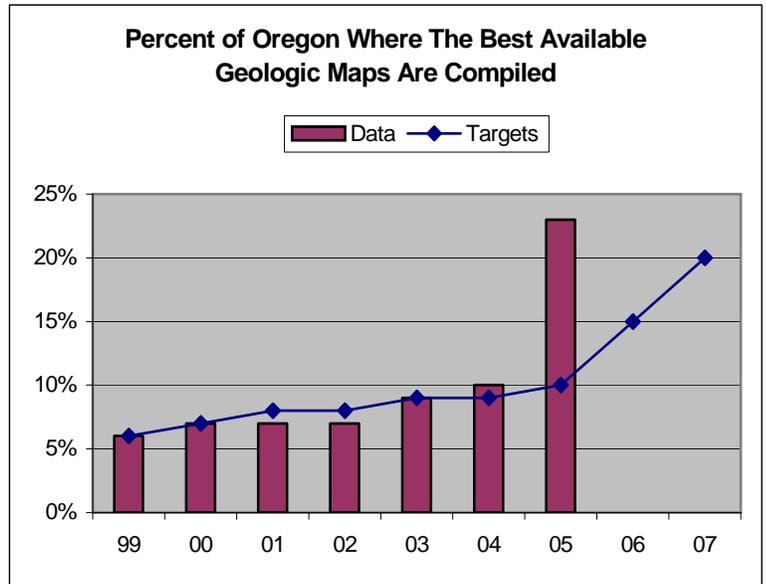
**Key Performance Measure Analysis**

**To what goal(s) is this Performance Measure linked?**

Goal 4: Create and compile geological data needed in natural resource and regional land use problem solving. Goal 5: Improve the efficiency and effectiveness in the delivery of earth science information.

**What do benchmark (or other high-level outcome) data say about Oregon relative to the goal(s)? What is the impact of your agency?**

The data indicates that the state is beginning to have this foundation data available. The agency’s decision to embrace digital technology and geographic information systems has propelled the data ahead of target.



**How does the Performance Measure demonstrate agency progress toward the goal?**

The Measure directly calculates the portion of Oregon where the digital geological map compilation is available. Targets beyond 2003 reflect the program to compile the entire state’s best available geological maps in digital format. The project is expected to take 6 years to complete. When complete in 2009, the digital geological data will provide a foundation for ecosystem analysis, hazard and risk assessment, infrastructure engineering, construction materials sourcing, and minerals and energy projects. The ultimate objective is to make the geological data available on-line, and user-friendly.

**Compare actual performance to target and explain any variance.**

Actual performance is exceeding targets. Rapid further increase in performance is anticipated in the near term.

**Summarize how actual performance compares to any relevant public or private industry standards.**

This is not a function that is performed by private industry and so no relevant comparison is possible.

**What is an example of a department activity related to the measure?**

The agency received \$220,000 of federal and other state agency funds, in partnership with the US Geological Survey, the US Forest Service and the Oregon Geographic Information Council, to initiate the ambitious digital geological compilation GIS project for Oregon. During 2004-2005, the NE portion of the state was completed, launching the agency ahead of the Measure’s target.

**What needs to be done as a result of this analysis?**

Determine how the pace and utility of the digital geological compilation project can be accelerated and improved.

*ANNUAL PERFORMANCE REPORT- PART II, KEY MEASURE ANALYSIS*

*TIME PERIOD: FISCAL YEAR - JULY 1, 2004 – JUNE 30, 2005*

Agency Name: Department of Geology and Mineral Industries		Agency No.: 63200								
Key Performance Measure (KPM)		1999	2000	2001	2002	2003	2004	2005	2006	2007
#9 - Regional resource assessments completed.	Target	20-75%	20-75%	22-75%	23-75%	23-75%	25-80%	25-80%	27-85%	27-85%
	Data	20-90%	20-90%	22-90%	22-90%	22-90%	25-90%	25-90%		

Data Source: Federal, state and local natural resources databases.

**Key Performance Measure Analysis**

**To what goal(s) is this Performance Measure linked?**

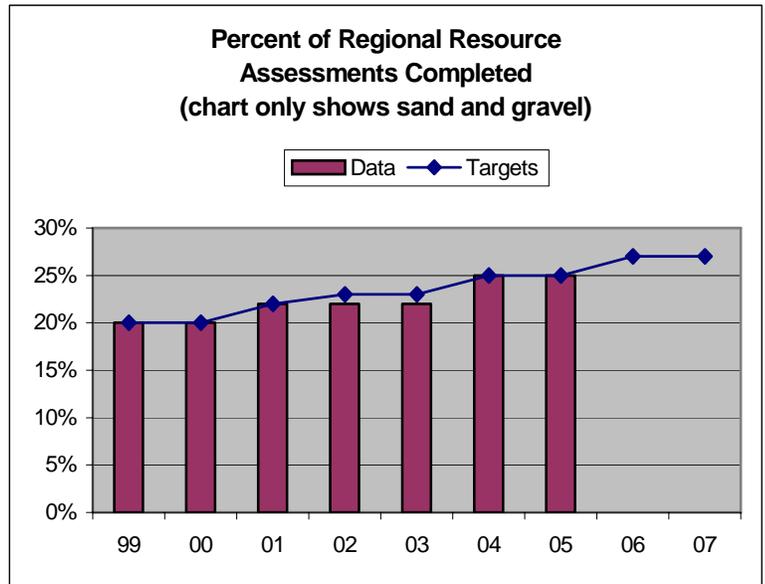
Goal 4: Create and compile geologic data needed in natural resource and land use problem solving.

**What do benchmark (or other high-level outcome) data say about Oregon relative to the goal(s)? What is the impact of your agency?**

Indicates degrees of completion of data compilation for a variety of customers.

**How does the Performance Measure demonstrate agency progress toward the goal?**

This Performance Measure is somewhat redundant, given the scope of Measure 8.



**Compare actual performance to target and explain any variance.**

Actual performance is highly variable by subject matter, and therefore the target statistics are poorly constrained.

**Summarize how actual performance compares to any relevant public or private industry standards.**

This is not a function that is performed by private industry and so no relevant comparison is possible.

**What is an example of a department activity related to the measure?**

The agency maintains the Mineral and Industrial Lands of Oregon (MILO) database, and has commenced the release of Oregon geochemical datasets in digital format. These products will ultimately be linked, and geospatially referenced, to the digital geological database of Oregon, as described in Measure 8.

**What needs to be done as a result of this analysis?**

This Measure is a subset of Measure 8, and was deleted during the 2005 Legislative session.

**ANNUAL PERFORMANCE REPORT- PART II, KEY MEASURE ANALYSIS**

TIME PERIOD: FISCAL YEAR - JULY 1, 2004 – JUNE 30, 2005

Agency Name: Department of Geology and Mineral Industries		Agency No.: 63200								
Key Performance Measure (KPM)		1999	2000	2001	2002	2003	2004	2005	2006	2007
#10 - Local government land use management and resource assessment plans that are based on appropriate geologic data (Developmental).	Target									
	Data									

Data Source: None.

**Key Performance Measure Analysis**

**To what goal(s) is this Performance Measure linked?**

Goal 5: Increase stakeholder awareness of geologic map input into problem solving for resource assessment and land use management.

No Chart

**What do benchmark (or other high-level outcome) data say about Oregon relative to the goal(s)? What is the impact of your agency?**

This was a developmental Measure that was to be linked to Oregon Benchmark 67a. No meaningful method was developed to gather quantitative and independently verifiable data, and as a result the Measure was deleted during the 2005 Legislative session.

**How does the performance measure demonstrate agency progress toward the goal?**

The intent of this Measure is incorporated in Measures 1-5 and 7-8.

**Compare actual performance to target and explain any variance.**

Not meaningful.

**Summarize how actual performance compares to any relevant public or private industry standards.**

Not applicable.

**What is an example of a department activity related to the measure?**

Described in Measures 1-5 and 7-8.

**What needs to be done as a result of this analysis?**

This developmental Performance Measure was deleted during the 2005 Legislative session.

**ANNUAL PERFORMANCE REPORT- PART II, KEY MEASURE ANALYSIS**

TIME PERIOD: FISCAL YEAR - JULY 1, 2004 – JUNE 30, 2005

Agency Name: Department of Geology and Mineral Industries		Agency No.: 63200								
Key Performance Measure (KPM)		1999	2000	2001	2002	2003	2004	2005	2006	2007
#11 - Percent of the regulated mining community who rate the service of the MLRR program as satisfactory or better.	Target						80%	85%	88%	90%
	Data						98%			

Data Source: Internal data collection.

**Key Performance Measure Analysis**

**To what goal(s) is this Performance Measure linked?**

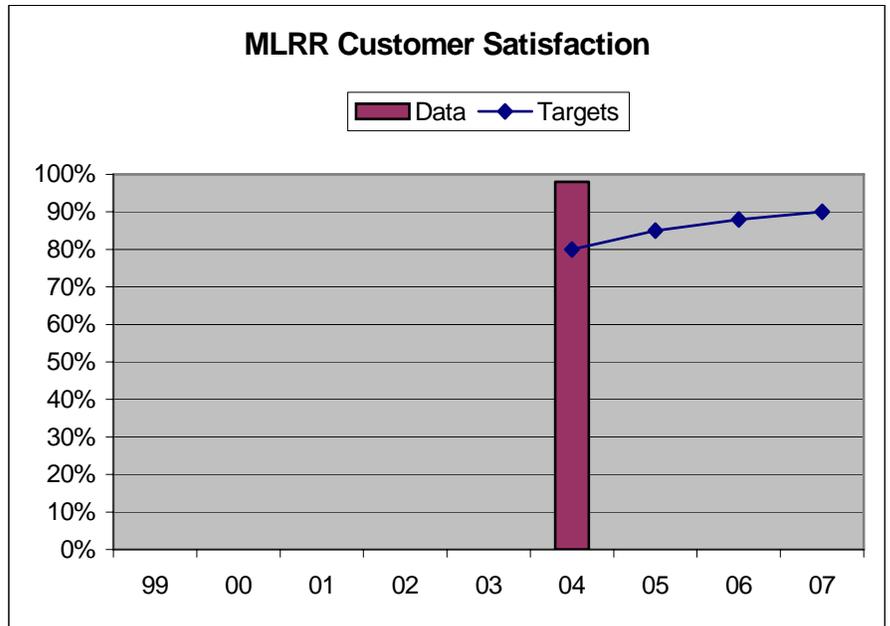
Positive customer service.

**What do benchmark (or other high-level outcome) data say about Oregon relative to the goal(s)? What is the impact of your agency?**

The data say that industry is highly satisfied with the service provided to them by the Mined Land Regulation and Reclamation (MLRR) program.

**How does the Performance Measure demonstrate agency progress toward the goal?**

The Measure provides direct feedback on the views of the agency’s compliers towards the service they received.



**Compare actual performance to target and explain any variance.**

The agency tracked well ahead of target during 2003-2004. A survey was not completed during 2004-2005. It is noteworthy that as compared with the new Statewide Customer Service Performance Measures [that will track the percent of customers (compliers, consumers, constituents, clients) that rate their satisfaction with the agency and the agency’s services as above average or excellent], the 2003-2004 survey data report an 81% rating of agency service as very good, or excellent (320/394 respondents; permits total about 600).

**Summarize how actual performance compares to any relevant public or private industry standards.**

Not applicable.

**What is an example of a department activity related to the measure?**

The agency gathered 252 comments during the initial customer service survey and is working to reinforce positive attributes and correct deficiencies.

**What needs to be done as a result of this analysis?**

This measure was deleted during the 2005 Legislative session. The entire agency will report on the new Statewide Customer Service Performance Measures beginning in 2005-2006.