

Final Report  
Nevada Earthquake Safety Council Project  
**Museum-Quality Displays for Seismology Visitors at UNR**

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### **Project Overview**

The hallway displays in the Seismological Lab receive thousands of visitors per year. They include many K-8 school tours conducted by Seismology or Keck Museum staff, as well as self-guided drop-ins. This project significantly upgraded the quality of the Lab's presentations to both groups of visitors, bringing some of our displays up to the museum level. We added electronic display capabilities to the LME hallways, where our past visitors viewed static graphics and instrumentation. The narrow hallways make it difficult for the usual school group of 40 or more to see what the tour guide is presenting. Giving the guide the ability to show visual aids on several wall-mounted monitors at once now allows all tour participants to view the materials. For casual visitors, now confused by our plethora of static displays, we have built a kiosk allowing them to view slide shows and video clips off DVDs and Powerpoint presentations we have prepared.

### **Benefits**

1. Accommodation of larger K-8 student groups, with an improved educational outcome for the tours.
2. Expansion of Seismology displays to museum-quality kiosks in the entry, providing better outreach to the casual visitor, and more effective recruiting of prospective Mackay students and majors.
3. Improved awareness of seismic safety issues by local school students, the visiting public, and UNR students from around Nevada. Create a more professional presence for State- and NESC-funded programs.

### **Tasks Accomplished**

1. *Buy and install Powerpoint display equipment of four 20-inch xVGA-LCD displays mounted in the glass front of our hallway drum display, with guide control by wireless mouse.* Most of the display equipment was purchased in mid-2004. A UNR Physical Plant renovation crew began the process of building ceiling mounts for the displays in August 2004 but did not finish until December, due to materials supplier problems. Quality and finish of the mounts is superior, as shown in figures 2-4. The displays are driven by a Windows PC and a long-range radio mouse for the tourguide. They were fully operational in February 2005.
2. *Buy and install in the LME entryway from the Quad kiosk equipment allowing casual visitors to view slide shows and video clips on a 42-inch wall-mounted plasma display.* Most of the display equipment was purchased in mid-2004. A UNR Physical Plant renovation crew installed the display in early October 2004 (figure 1). The display was demonstrated at the Geology Dept. Open House for the College of Science on Oct. 15, 2004, showing wave-propagation movies. Except for maintenance and repairs, the display has operated every day since. The display can be driven by either a Windows PC or a DVD/VCR player.

3. *Create content for these displays, producing Powerpoint presentations containing the visual aids needed by K-8 tours, and the DVDs for viewing by casual visitors. Content creation began in October 2003 with preparation of Powerpoint slide shows by undergraduate student Marcus Lambert. These shows were designed for the 5<sup>th</sup>-grade school audience, and contain the materials presented verbally by staff to school tour groups. Additional slide shows were contributed by faculty. In Summer and Fall 2004, undergraduate Jeff Hogue edited the slide shows and created DVDs holding all slide shows and video materials as well. Altogether more than six hours of presentation materials have been authored for the displays.*



**Fig. 1:** 42-in plasma display in LME entry from quad. Large cabinet to be removed, allowing installation of kiosk controls. Computer and DVD player driving display are in LME 320 behind wall.



**Fig. 2:** Four 18-in LCD displays in the LME-LMR passageway helicorder-drum display area, all showing the same Powerpoint slide.



**Fig. 3:** Three of the four displays, complementing active helicorder drums and static displays on opposite wall.



**Fig. 4:** Two of the displays as viewed from tour perspective, visible over crowds but not obstructing view of drums. All wires and connections are hidden in mounts and above false ceiling.

**Table of Equipment Purchased**

Manufacturer	Model	Description	Building Location	Room number	Purchase date	Approximate Cost
Viewsonic	N1800TV	18" LCD Display	LME	LME 209-temporary location	6/26/05	\$1,100
Viewsonic	N1800TV	18" LCD Display	LME	LME 209-temporary location	6/26/05	\$1,100
ADS Tech	API-550	Analog to Digital video converter (Mac)	LME	LME 217	12/2004	\$200
Panasonic	Th-42PWD6UY	42-inch Plasma Display	LME	Quad Entry	7/21/04	\$2,875
Radio Shack		universal remote 15-2115	LME	320	8/1/04	\$15
Radio Shack		Radio Shack RGB cable	LME	320	8/1/04	
Radio Shack		Radio Shack S-video/audio cable	LME	320	8/1/04	
Radio Shack		Radio Shack RCA audio cable	LME	320	8/1/04	
Radio Shack		Radio Shack RCA video cable	LME	320	8/1/04	
Sony	SLV D350P	DVD/VHS player	LME	LME 320	8/1/04	\$150
DELL	Optiflex GX280	computer	LME	LME 320	6/26/05	\$1,200
Hewlett-Packard	Pavilion 716N	computer	LME	LME 320	6/25/05	\$1,200
Viewsonic	N1800TV	18" LCD Display	LME	LME helicorder room	6/1/04	\$1,100
Viewsonic	N1800TV	18" LCD Display	LME	LME helicorder room	6/1/04	\$1,100
Viewsonic	N1800TV	18" LCD Display	LME	LME helicorder room	6/1/04	\$1,100
Viewsonic	N1800TV	18" LCD Display	LME	LME helicorder room	6/1/04	\$1,100
Dell	Optiplex GX280	Desktop computer	LME	LME helicorder room	8/1/04	\$1,100
Dell	E193FPp	19" flat panel monitor	LME	LME helicorder room	8/1/04	\$1,200
Interlink	RF Remote	USB remote mouse w/ laser pointer	LME	Helicorder Displays	12/1/04	\$135.28
ConnectPro	VSA-14	4-Port VGA splitter	LME	Helicorder Displays-ceiling	12/1/04	\$150
Compaq		SVGA cables	LME	Helicorder Displays-ceiling	12/1/04	\$100