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**LEGISLATIVE EDUCATION STUDY COMMITTEE**  
**BILL ANALYSIS**  
**54th Legislature, 1st Session, 2019**

<b>Bill Number</b>	<u>HB475</u>	<b>Sponsor</b>	<u>Trujillo, C./Bash/Ferrary/Lara</u>
<b>Tracking Number</b>	<u>.213079.1</u>	<b>Committee Referrals</b>	<u>HEC/HAFC</u>
<b>Short Title</b>	<u>Portable Planetarium Learning Experience</u>		
<b>Analyst</b>	<u>Terrazas</u>	<b>Original Date</b>	<u>2/8/19</u>
		<b>Last Updated</b>	<u>3/4/19</u>

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**BILL SUMMARY**

Synopsis of Bill

House Bill 475 (HB475) appropriates \$138,250 to the Public Education Department (PED) for a bilingual science, technology, engineering and mathematics learning experience within a portable planetarium.

**FISCAL IMPACT**

The bill appropriates \$138,250 from the general fund to PED for expenditure in FY20. Any unexpended or unencumbered balance remaining at the end of FY20 shall revert to the general fund.

The House Appropriations and Finance Committee Substitute for House Bill 2 includes \$5 million for a science, technology, engineering, arts and math (STEAM) initiative to support this type of programming.

According to the Cultural Affairs Department (DCA), new portable planetariums cost between \$30 thousand and \$40 thousand. Costs beyond that would be for personnel and travel expenses.

**SUBSTANTIVE ISSUES**

Portable planetariums are igloo-like fabric domes that stay upright with the help of a high-powered fan. Operators use a convex mirror to reflect images from an online telescope program onto the dome to approximate the boundlessness of space. Portable planetariums can be easily set up in most school gymnasiums or rooms with a high ceiling.

The Santa Fe Children's Museum has a planetarium, the Stargazer Portable Planetarium, that offers bilingual programming to individuals of all ages and features cultural tales, star talks, and interplanetary travel. The museum can hold up to five one-hour-long shows in a day for up to 30 people at a time, including two chaperones. Due to a grant, any Title I school within a 100-mile

radius of the museum can get the programming for free. The Santa Fe Children’s Museum current program expenditures total \$69,750 (see Table 1).

**Table 1: Current and Potential Program Costs for the Santa Fe Children’s Museum**

<b>Stargazer Program</b>	<b>Current Program</b>	<b>Potential Expansion: Northern New Mexico</b>	<b>Potential Expansion: Statewide</b>
Students served	7,000	12,000	20,000
Program FTE	1.0	2.0	3.0
<b>Expenditures</b>			
Instruction	\$50,000	\$100,000	\$150,000
Administration	\$10,000	\$20,000	\$30,000
Travel and Lodging	\$5,000	\$10,500	\$25,000
Insurance	\$750	\$1,250	\$2,000
Supplies	\$1,000	\$1,500	\$2,500
Maintenance	\$3,000	\$5,000	\$10,000
<b>Total expenditures</b>	<b>\$69,750</b>	<b>\$138,250</b>	<b>\$219,500</b>

Source: Santa Fe Children’s Museum

DCA notes, depending on the area the portable planetarium would cover, the program would augment core programs at the New Mexico Museum of Natural History and Science and the portable planetarium program at the Space History Museum in Alamogordo, bringing additional astronomy programs to rural areas of the state. The planetarium located at the New Mexico Museum of Natural History and Science saw over 8,000 students and over 25 thousand attendees overall in the last 12 months. The Space History Museum’s planetarium located in Alamogordo saw over 22 thousand visitors over the last 12 months. The program served 654 communities, including Roswell, Lordsburg, Santa Rosa, Tucumcari, Las Vegas, and Grants in the last 12 months.

**SOURCES OF INFORMATION**

- LESC Files
- Legislative Finance Committee (LFC)
- Cultural Affairs Department (DCA)

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