## **Introduced by Senator Hill**

March 11, 2015

Senate Concurrent Resolution No. 30—Relative to the Frederick E. Terman Memorial Highway.

## LEGISLATIVE COUNSEL'S DIGEST

SCR 30, as amended, Hill. Frederick E. Terman Memorial Highway. This measure would designate a specified portion of State Highway Route 101 in the County of Santa Clara as the Frederick E. Terman Memorial Highway. The measure would also request the Department of Transportation to determine the cost of appropriate signs showing this special designation and, upon receiving donations from nonstate sources covering that cost, to erect those signs.

Fiscal committee: yes.

- 1 WHEREAS, Frederick E. Terman was one of the most successful
- 2 American administrators of science, engineering, and higher
- 3 education in the 20th century; and
- 4 WHEREAS, Terman was born on June 7, 1900, in English,
- 5 Indiana. Terman attended Stanford University, where he completed
- 6 his undergraduate degree in chemistry and his master's degree in
- 7 electrical engineering; and
- 8 WHEREAS, Terman returned to Stanford *University* in 1925
- 9 as a member of the engineering faculty and for his first 12 years
- 10 he was the only faculty member teaching electronics (or radio
- 11 engineering, as it was called at the time). In 1932, Terman wrote
- 12 and published a textbook on Radio Engineering, which was one

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of the most important books on electrical and radio engineering and remains a good reference on these subjects; and

WHEREAS, Terman worked hard to bolster electrical engineering and technology in California at a time when most engineering job opportunities were on the East Coast. Terman was elected president of the Institute of Radio Engineers in 1940, the first person ever, west of Pittsburgh, to be elected; and

WHEREAS, During World War II, Terman directed a staff of more than 850 at the Radio Research Laboratory at Harvard University, an organization that was the source of various technologies used to counter enemy radar during the war. These countermeasures significantly reduced the effectiveness of radar-directed anti-aircraft fire; and

WHEREAS, After the war, Terman returned to Stanford *University* and was appointed Dean of the School of Engineering. Terman made the Stanford School of Engineering one of the best in the country. By 1950, Stanford *University* awarded as many electrical engineering Ph.D. degrees as—MIT, the Massachusetts Institute of Technology, with a much smaller faculty. Terman laid the foundations that would make Stanford *University* one of the world's preeminent research universities from which many major Silicon Valley corporations have been formed, including-Hewlett Packard, Hewlett-Packard, Cisco, Yahoo!, Rambus, Google, and VMWare; and

WHEREAS, Terman single-handedly created the university, government, and private industry partnership model that still characterizes Silicon Valley in the 21st century by creating the Stanford Industrial Park, a revolutionary idea at the time, to associate industry more closely with the university. Companies such as Varian Associates, Hewlett Packard, Hewlett-Packard, Eastman Kodak, General Electric, and Lockheed Corporation moved into Stanford Industrial Park and turned the mid-Peninsula area into a hotbed of innovation, which eventually became known as Silicon Valley. Terman encouraged the licensing of Stanford *University* inventions and the establishing of faculty-consulting relations as a means of getting Stanford *University* ideas into the core of industry; and

WHEREAS, Bill Hewlett and Dave Packard were two of Terman's favorite engineering students, and certainly his most successful protégés. Following his encouragement, they formed -3- SCR 30

Hewlett Packard. Hewlett-Packard. Years later, they left behind a Global Fortune 50 Fortune Global 500 company that sells products around the world and multiple multibillion dollar charitable foundations; and

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WHEREAS, Frederick E. Terman passed away on December 19, 1982, in Palo Alto, California, at 82 years of age. In his declining years, Terman reflected, "When we set out to create a community of technical scholars in Silicon Valley, there wasn't much here and the rest of the world looked awfully big. Now a lot of the rest of the world is here"; now, therefore, be it

Resolved by the Senate of the State of California, the Assembly thereof concurring, That the Legislature hereby designates the portion of State Highway Route 101 from post mile 48.596, at Shoreline Boulevard, to post mile 52.550, at the San Mateo County line, in the County of Santa Clara, as the Frederick E. Terman Memorial Highway; and be it further

Resolved, That the Department of Transportation is requested to determine the cost of appropriate signs consistent with the signing requirements for the state highway system showing this special designation and, upon receiving donations from nonstate sources sufficient to cover that cost, to erect those signs; and be it further

*Resolved,* That the Secretary of the Senate transmit copies of this resolution to the Director of Transportation and to the author for appropriate distribution.