Date of Hearing: July 8, 2019

ASSEMBLY COMMITTEE ON TRANSPORTATION

Jim Frazier, Chair SB 405 (Archuleta) – As Amended July 1, 2019

SENATE VOTE: 38-0

SUBJECT: Solid waste: reclaimed asphalt pavement: pilot project: the County of Los Angeles

SUMMARY: Describes the parameters and evaluation process of a pilot project to demonstrate the viability of paving streets, roads, and highways with hot mix asphalt composed of between 85% and 100% reclaimed asphalt pavement (RAP), if the Los Angeles County Department of Public Works (LA County) chooses to conduct such a pilot project. Specifically, **this bill**:

- 1) Authorizes LA County to create a pilot project to demonstrate the viability of paving streets, roads, and highways with high RAP hot mix asphalt, as it is already able to do without this bill.
- 2) Defines "High RAP hot mix asphalt" as hot mix asphalt that is composed of between 85% and 100% RAP.
- 3) Requires LA County, should it choose to create the pilot project, to establish an evaluation team to independently observe, document, and evaluate the pilot project.
- 4) Requires the evaluation team to prepare a single final report including a written evaluation, a greenhouse gas study, and full documentation of the finished quality of the pilot project.
- 5) Requires any pilot project undertaken by LA County to be completed by December 31, 2022.

EXISTING LAW:

- 1) Requires the California Department of Transportation (Caltrans) to use recycled materials unless it determines that the use of these materials is not cost effective.
- 2) Authorizes Caltrans to establish specifications for the use of up to, and possibly in excess of, 40% RAP for hot asphalt mixes.
- 3) Defines "recycled materials" to include, but not be limited to, recycled asphalt, crushed concrete sub-base, foundry slag, ash, glass, glassy aggregates, and paving materials utilizing crumb rubber from automobile tires.
- 4) Requires state agencies to make maximum use of recycled products.

FISCAL EFFECT: This bill is keyed non-fiscal by Legislative Counsel.

COMMENTS: Hot mix asphalt is the designation given to asphalt mixtures that are heated and poured at temperatures between 300 and 350 degrees Fahrenheit. It is the most commonly used asphalt and can be used to pave roadways, highways, and interstates. RAP is removed pavement

materials containing asphalt and aggregates. These materials are generated when asphalt pavements are removed for reconstruction, resurfacing, or to obtain access to buried utilities. When properly crushed and screened, RAP consists of high-quality, well-graded aggregates coated by asphalt cement, and can be reused in many ways.

Caltrans has allowed the use of RAP in hot mix asphalt for several years. Starting in 2009, Caltrans allowed contractors to substitute RAP aggregate as part of the virgin aggregate in hot mix asphalt in a quantity not exceeding 15% of the aggregate blend by weight. Since then, Caltrans has worked with the asphalt industry to develop specifications that allows the use of RAP as a replacement for up to 40% of hot mix asphalt.

In 2014, the Federal Highway Administration (FHWA) issued a memorandum indicating that an increasing number of state highway agencies were reporting premature cracking in relatively new asphalt pavements as the result of using a high content of recycled asphalt binder from RAP and/or recycled asphalt shingles (RAS). The asphalt industry also expressed concerns about the use of current RAP specifications and associated cracking in pavements. Caltrans is currently working with the asphalt industry to address this issue.

According to LA County, its Department of Public Works has committed to utilize RAP in its paving treatments. Cold paving techniques reutilize 100% of existing pavement materials, but is primarily used for minor repairs like filling potholes. The County uses 75% virgin (not recycled) aggregate and 25% RAP in its hot mix asphalt, but after recently reviewing streets in the City of Los Angeles that were repaved with high RAP hot mix asphalt, it wishes to test the new technology on its own streets.

This bill authorizes LA County to develop and implement a pilot program to study the implications of using high RAP hot mix asphalt, which uses anywhere between 85% and 100% RAP. The author asserts that determining the effectiveness of using high RAP hot mix asphalt will be helpful in potentially reducing the number of asphalt stockpiles throughout Southern California. By using higher levels of recycled/reclaimed asphalt, a greater amount of used asphalt can be re-used, in turn reducing the levels and/or numbers of used asphalt stockpiles and also providing a variety of environmental benefits.

According to the author, "There are currently more than 30 piles of recycled asphalt stockpiled from Orange to Ventura Counties and every county in between. These piles present an environmental nuisance, and unless a secondary market is created, more and more of these piles will accumulate. SB 405 will create a pilot project in Los Angeles County to demonstrate the viability of using these recycled grindings in road repair and maintenance."

Writing as the sponsor of the bill, the paving company Manhole Adjusting, Inc., argues that the significant increase in road maintenance funding delivered through the passage of SB 1 (Beall), Chapter 5, Statutes of 2017, will result in millions of tons of old hot mix asphalt pavement removed and stockpiled in city and county storage yards. Demonstrating that high RAP hot mix asphalt is an effective pavement surface will significantly reduce the amount of storage necessary, reduce airborne pollution, and reduce the amount of virgin aggregate mined for the production of new asphalt.

Writing in opposition, the California Asphalt Pavement Association (CAPA) raises a number of concerns with the bill. First, CAPA points out that there is nothing preventing LA County from

conducting a pilot project on high RAP and evaluating the findings - this is done routinely around the state and does not require legislation. In addition, CAPA states, "The City of Los Angeles previously attempted a high-RAP strategy utilizing up to 100 percent RAP, but for various engineering and practical reasons the City ultimately lowered the threshold to 50 percent RAP."

Previous legislation: AB 812 (Ma), Chapter 230, Statutes of 2012, authorized Caltrans to establish specifications for the use of up to, and possibly in excess of, 40% RAP for hot asphalt mixes on or before January 1, 2014.

REGISTERED SUPPORT / OPPOSITION:

Support

Manhole Adjusting, Inc. (Sponsor)
California State of Council of Laborers
County of Los Angeles Board of Supervisors
International Union of Operating Engineers, Cal-Nevada Conference
State Building and Construction Trades Council of CA

Opposition

California Asphalt Pavement Association (unless amended)

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