

## Motion

To date, end-of-life management of plastic products has not kept pace with the rapid increase in production. Plastic production is expected to increase four-fold by 2050 and only nine percent of plastic produced globally since 1980 has ever been recycled. China, which was once the world's largest importer of plastic waste, recently banned these imports, displacing as much as 111 million metric tons of plastic waste by 2030.

In response to this, countries and businesses are developing and investing in technology that processes plastic into useful materials, including public infrastructure. For example, India, Australia, and the United Kingdom are constructing "plastic roads" by converting plastic waste into pellets that are then melted into an aggregate binder that is used to produce a stable surface mixture.

The Los Angeles Bureau of Street Services (StreetsLA), in conjunction with the General Services Department, has been working on piloting the use of a recycled plastic material for use in Los Angeles street paving. This polymeric binder can be mixed with 100% recycled aggregate, further reducing the need for virgin material in street construction.

StreetsLA recently completed successful testing of this plastic material and is now developing a demonstration to determine the materials workability, lay-down process, and City equipment needs. Initial tests have shown the material to be significantly more durable than traditional asphalt, and streets can be opened in as little as 12 hours upon completion of construction. StreetsLA notes that the recycled plastic material could replace asphalt oil, a petroleum by-product, altogether.

Development of this technology provides many public benefits including diverting plastic from LA's waste stream, reducing the demand for fossil fuels, reducing greenhouse gas emissions, reducing road maintenance costs, and reducing traffic impacts caused by road construction. Given the closing of Asian markets, the lack of in-state recycling infrastructure, and the significant amount of resources the City spends each year on crumbling road infrastructure, it is necessary that the Council review and support the development of this promising technology.

I THEREFORE MOVE that the Bureau of Street Services (StreetsLA) report to the Council with testing results and recommendations for the establishment of a pilot road construction program using plastic from Los Angeles' waste stream as a polymeric binder.

Presented by:



PAUL KREKORIAN  
Councilmember, 2<sup>nd</sup> District

Seconded by:



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