Spatially and Temporally Resolved Energy and Environment Tool (STREET) Model
(University of California-Irvine)

Objectives
Determine the number of strategically located hydrogen fueling stations needed within a geographic area to enable the introduction of commercial volumes of fuel cell electric vehicles (FCEVs), and determine the geographic distribution of the required stations while also assessing the environmental impacts.

Key Attributes & Strengths
Optimized hydrogen fueling station locations are determined by employing an optimization routine in which the existing road infrastructure is modeled to determine driving times to hydrogen stations within the cluster. Model has the capability to analyze well-to-wheels greenhouse gas (GHG) emissions impacts, in addition to air quality impacts.

Platform, Requirements & Availability
Model is web-based and available through a license. For custom analyses (e.g., air quality), need to contact the Advanced Power and Energy Program of the University of California-Irvine.