The Taipei Metro: Don't Hold Your Breath

Yihsu Chen and Alexander Whalley of UC Merced think they know. They have analyzed some useful data from the opening of Taipei's new subway, in a recent article in the *American Economic Journal: Economic Policy*:

> The transportation sector is a major source of air pollution worldwide, yet little is known about the effects of transportation infrastructure on air quality. This paper quantifies the effects of one major type of transportation infrastructure—urban rail transit—on air quality using the sharp discontinuity in ridership on opening day of a new rail transit system in Taipei. We find that the opening of the Metro reduced air pollution from one key tailpipe pollutant, carbon monoxide, by 5 to 15 percent. Little evidence that the opening of the Metro affected ground level ozone pollution is found however.

The paper doesn't tell us why transportation infrastructure would have such different impacts on different pollutants. Perhaps it has something to do with congestion rather than VMT: my understanding is that a lot of Carbon Monoxide comes from idling. Although the health benefits of the carbon monoxide reduction are large — about 85 million dollars a year — Chen and Whalley do not find substantial travel pattern changes. Building rail lines by itself doesn't get people out of their cars: we'll need more than that.

In general, *American Economic Journal: Economic Policy* is well worth reading. The articles are not overly technical, although for innumerates like myself, they will require some careful parsing and at times, a battery of questions to more mathematically-inclined colleagues. If you are an AEA member, then you can get it for free, but it should be readily available to anyone in an academic setting. And that's important for environmental law scholars: we should get our economics from economists, not from Richard Posner.