Traveler Information and Changes in Transportation Data

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New technologies are changing transportation data
We can use these changes to meet travelers’ needs
Existing practices—and inertia—make it difficult to see opportunities
There are creative and safe ways to explore the possibilities:

Private Sector → Licenses to → Public Sector
Focus on needs and match the data source to those needs
Transportation data collection is based on available technologies.
Traffic counts were first done manually, and then with tubes.
Inductive loops represented a significant leap forward
New technologies—GPS, cell phones, and more—expand the options
Uses of data have been driven by the available data, not by needs.
Traffic Management Systems are built to use what loops provide.
By extension, traveler information systems were built to use that data.

\[ p = \frac{\left( x_{k+N_k+1} + \sum_{j=k}^{k+N_k} x_j \right)}{x_{k+N_k+1}} - d \]  \hspace{1cm} (5)

Finally, travel time is estimated as:

\[ T_k = p \cdot \tau_{k+N_k+1} + \sum_{j=k}^{k+N_k} \tau_j \]  \hspace{1cm} (6)
Or, radio reports used helicopters (another form of “technology”)

[Image of a helicopter flying in the sky]
We can now start to provide what people really want and need
Most people want to know "How long will it take to get there?"
It is now conceivable that information can come from cars.
Creative partnerships, rights, and institutional structures are needed
How can agencies take advantage of these opportunities?

Ownership not needed
Travelers want better information than they have been getting.
Focus on needs and match the data source to those needs

- Private Sector
- Traveling Public
- Local Agencies
- State DOT
Traveler Information—when and where travelers want it