Argonne
NATIONAL LABORATORY

ATRAVEL

ATRAVEL helps individuals and transportation planners examine travel options' cost, travel time, and emissions

DAILY TRAVEL IS A HIGH-IMPACT ACTIVITY

Did you know that, in a normal year, the average driver spends more than 300 hours in their vehicle and, of that time, about 100 hours in traffic congestion and 17 hours looking for parking? All the time a driver spends in a vehicle contributes significantly to air pollution and greenhouse gas (GHG) emissions.

Daily travel planning is more complex than ever. Most of us want to make good environmental choices and still arrive at our destinations at a convenient time and reasonable cost. New mobility options could change how people travel within their communities. Specifically, ride-hailing is one alternative to vehicle ownership.

To help sort through and understand the options, Argonne National Laboratory's web-based ATRAVEL tool offers a convenient way to evaluate travel choices via personal vehicle, ride-hail services, and mass transit.

How Does ATRAVEL Work?

ATRAVEL offers:

□ A Trip Tool for individuals, and

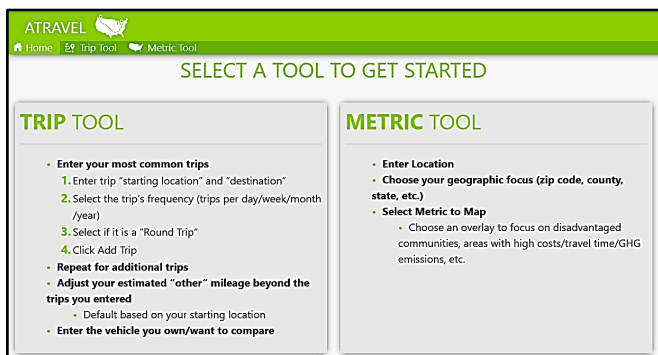□ A Metric Tool for transportation planners.

ATRAVEL helps reduce the impacts of daily vehicle travel.

Two Tools for Two Audiences

ATRAVEL's **Trip Tool** is designed for individuals. Users provide information about their most common trips, annual mileage, and vehicle type, and ATRAVEL's results compare annual cost, travel time, and GHG emissions of vehicle ownership vs. public transit vs. use of ride-hail services. The Trip Tool offers insights about what contributes to travel expenses, time spent traveling, and carbon footprint for each mode. It offers an option to try a different vehicle as well as tips for how to reduce the impact of travel.
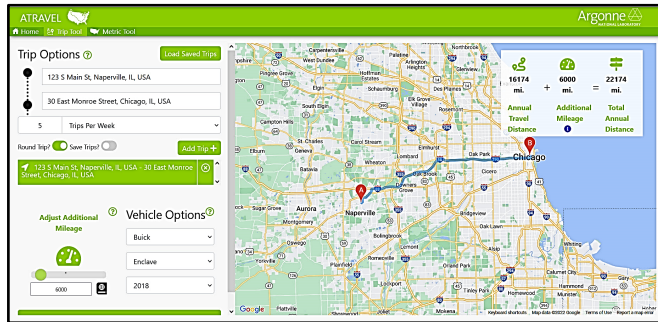
The Metric Tool is designed for transportation planners and decision-makers. It focuses on regional household vehicle travel, demographics/equity, and air quality, and allows users to select a key metric and data overlay by primary focus for their results. Maps, graphs, and tables compare results for the location analyzed against regional averages and provide sources for the methodology used to compute the metrics. Once users perform an initial analysis, they can select different parameters to evaluate and compare.


ATRAVEL

🏠 Home   Trip Tool   Metric Tool

SELECT A TOOL TO GET STARTED

TRIP TOOL

- Enter your most common trips
  1. Enter trip "starting location" and "destination"
  2. Select the trip's frequency (trips per day/week/month /year)
  3. Select if it is a "Round Trip"
  4. Click Add Trip
- Repeat for additional trips
- Adjust your estimated "other" mileage beyond the trips you entered
  - Default based on your starting location
- Enter the vehicle you own/want to compare

METRIC TOOL

- Enter Location
- Choose your geographic focus (zip code, county, state, etc.)
- Select Metric to Map
  - Choose an overlay to focus on disadvantaged communities, areas with high costs/travel time/GHG emissions, etc.

ATRAVEL offers two tool modes.

ENTERING DATA AND EXAMPLES

Trip Tool — Individuals

Trip Tool – Entering Options
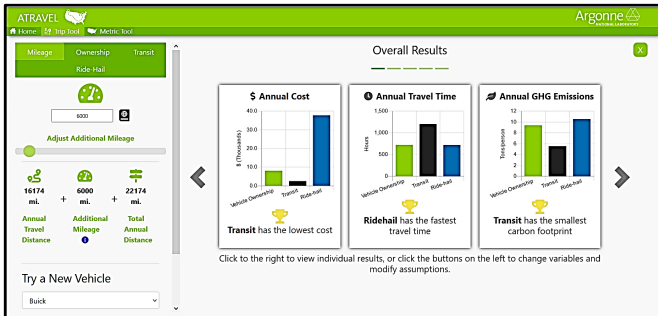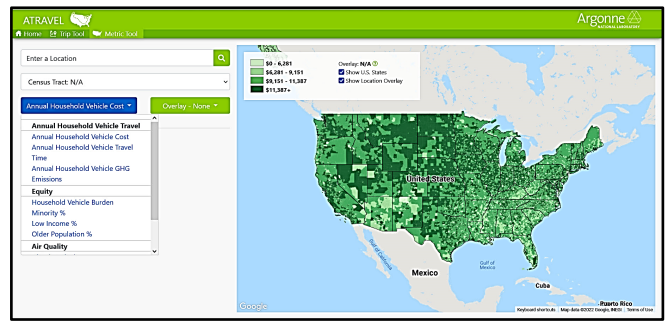

Trip Tool – Results

Consider Future Options

Private vehicle ownership provides significant benefits, allowing people to get to the places they need and want to go. In many locations, few alternatives exist, though there are still ways to reduce the impact of travel, by selecting lower-impact vehicles, combining trips, and driving in ways that reduce fuel consumption.

Looking forward, emerging mobility options could change how people travel within their communities. Specifically, ride-hailing as well as ride-, car-, bike-, and scooter-sharing services will provide greener, and often less expensive, alternatives to vehicle ownership.

To ensure that ATRAVEL remains current with traveler choices, other mobility options will be added over time to help users understand the many ways they can meet their travel needs while reducing emissions impacts.
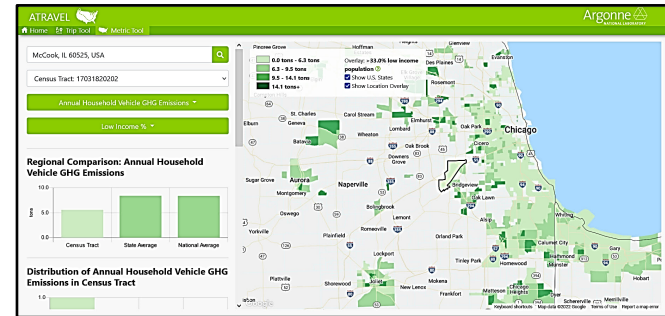
Metric Tool — Transportation Planners

Metric Tool – Entering Location and Selecting Key Metric
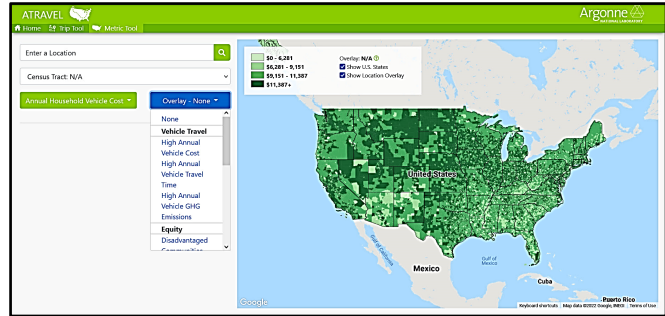
Metric Tool – Entering Location and Selecting Overlay

Metric Tool – Results

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