

Title: Chicago Traffic Tracker – Congestion Estimates by Traffic Regions

Description: The Chicago Traffic Tracker estimates traffic congestion on Chicago's arterial streets (non-freeway streets) in real-time by continuously monitoring and analyzing GPS traces received from Chicago Transit Authority (CTA) buses. Two types of congestion estimates are produced every 10 minutes: 1) by Traffic Segments and 2) by Traffic Regions or Zones. Congestion estimates by traffic segments gives observed speed typically for one-half mile of a street in one direction of traffic. Traffic Segment level congestion is available for about 300 miles of principal arterials. Congestion by Traffic Region gives the average traffic condition for all arterial street segments within a region. A traffic region is comprised of two or three community areas with comparable traffic patterns. 29 regions are created to cover the entire city (except O'Hare airport area).

This dataset contains the current estimated congestion for the 29 traffic regions.

There is much volatility in traffic segment speed. However, the congestion estimates for the traffic regions remain consistent for a relatively longer period. Most volatility in arterial speed comes from the very nature of the arterials themselves. Due to a myriad of factors, including but not limited to frequent intersections, traffic signals, transit movements, availability of alternative routes, crashes, short length of the segments, etc. Speed on individual arterial segments can fluctuate from heavily congested to no congestion and back in a few minutes. The segment speed and traffic region congestion estimates together may give a better understanding of the actual traffic conditions.

REGION: Name of the region – made up of the names of community areas within the region

REGION_ID: Unique arbitrary number to represent each region

WEST: Lowest longitude values on the regions boundary

EAST: Highest longitude values on the regions boundary

NORTH: Highest latitude value on the regions boundary

SOUTH: Lowest latitude value on the regions boundary
(These four values together delimit the boundary of the traffic region)

DESCRIPTION: Describes the streets that demark the region's boundary

CURRENT_SPEED: Real-time estimated congestion level. Although expressed in miles per hour, this value is more a reflection of the congestion level in the region than it is indicative of the average raw speed vehicles are travelling within the region. For congestion advisory and traffic maps this value is compared to a 0-9, 10-14, 15-19, 20-24, and 25 & over scale to display heavy, medium-heavy, medium, light and free flow conditions for the traffic region. Note that except for a very few segments, speed on city arterials is limited to 30 mph by ordinance. Occasionally, during the wee hours at night, an adequate number of GPS traces are not available for some traffic regions; and, hence, the traffic conditions for such regions are defaulted to 0 to reflect data unavailability.

LAST_UPDATE: Time stamp for the latest congestion estimation run. If this is older than 20 minutes the data is not current.

Additional information and the Chicago Traffic Tracker map may be accessed at:
<http://www.ChicagoTrafficTracker.com>.

This document accompanies the real time congestion data by Traffic Regions on the City of Chicago Data Portal at <http://data.cityofchicago.org/dataset/Traffic-Regions/t2qc-9pid>; for further assistance, contact ChicagoTrafficTracker@CityOfChicago.org.

For traffic congestion estimates by Traffic Segments, go to <http://data.cityofchicago.org/dataset/Traffic-Segments/n4j6-wkkf>.

Disclaimers: By using the Chicago Traffic Tracker data, you are accepting that any and all maps/data and information you may receive (the "data") "as is" and without any warranty or representation whatsoever, express or implied, whether for accuracy, timeliness, completeness, fitness for a particular purpose or otherwise. The data is provided here for reference purpose only. While every effort is employed to provide as much accurate information as possible, City of Chicago, any of its departments, or any of its employees cannot be held liable for the accuracy and completeness of this information. Speed and congestion estimates are probabilistic and are not actual speed. Occasionally outlier data or unexpected behavior of a probe vehicle can skew the segment speed to be higher or lower than the ground truth.

Data Owner: Chicago Department of Transportation

Time Period: Real-time / reflects the last 10 minutes of traffic

Frequency: Data is updated every 5 minutes