Skycomp and INRIX join forces to bring greater breadth and depth for traffic and origin destination analysis

With more than 300 million connected vehicles and devices providing real-time information on more than five million miles of road around the globe, INRIX has never offered a more detailed or accurate picture of traffic. With that said, some municipalities and transportation agencies are choosing to combine Time-Lapse Aerial Photography (TLAP) along with INRIX Trips to visually validate surveys as well as perform very granular, site-specific analysis that big data might not capture on its own.

More than 40 years ago, Skycomp pioneered aerial traffic surveys using helicopters and planes which led to Skycomp’s TLAP technologies. Today, Skycomp leads the industry in traffic planning surveys and data analysis, including objectively verifiable traffic surveillance, monitoring, and analysis for use in origin-destination surveys, performance monitoring planning studies, and model calibration. One unique benefit of TLAP is that all collected metrics, including origin-destination, volumes, turning-movement counts, travel times/speeds and queue lengths are organically balanced as a result of their concurrent collection.

“While Skycomp is best known for TLAP, we are embracing other technologies to select the survey methodology best suited for our clients based upon their specific project requirements.”

C. Alan Sharp, Director of Operations at Skycomp
However, some municipalities, especially those who don’t reside near larger cosmopolitan areas, might wonder if INRIX Trips data has enough penetration to be truly representative of their survey area and populations. Skycomp provides the validation they need.

“We have found that overall market penetration rate for INRIX has been pretty consistent, and we measure that in a couple of different ways with hourly volume counts, with 24-hour volume counts, with monthly volume counts,” said Billie Barnett, director of technical operations at Skycomp. “We have a few ways to look at the penetration rate, and we can view it from regional volume counts down to intersection turning-movement counts.”

Supportive validation for both INRIX and Skycomp.

Rhode Island studies heavy truck traffic

Skycomp, in association with Louis Berger Group, conducted a study to measure and estimate the movements of heavy truck traffic throughout the state of Rhode Island and surrounding areas. Heavy trucks were studied at select-link sites at potential tolling locations, and within a client-provided Traffic Area Zone (TAZ) map. INRIX Trips data was used to cover the large area and time frame of the study, with Time-Lapse Aerial Photography (TLAP) used for validation purposes at selected sites. Additionally, classified vehicle counts were obtained from ground cameras so that origin-destination percentages from the INRIX data could be reliably expanded to volumes.
Go Granular

Skycomp TLAP surveys really shine at the level of granularity for specific locations. Yes, as the saying goes, “A picture is worth a thousand words” but in this case, exchange words for data points. For example, say you wanted to know how many vehicles are parking on the North side of a parking lot versus the West side? A TLAP survey could measure that very accurately and provide exact counts on specific vehicles, whereas INRIX Trips would just give you a number of vehicles entering and exiting, but couldn’t tell you where they were parking. Here’s another example: Imagine wanting to survey traffic on two ramp lanes that ran side by side. TLAP could identify where exactly those merging issues or chokepoints were originating, which due to the close proximity of the lanes, would be nearly impossible to measure from data pings alone.

Is TLAP and INRIX Trips right for you?

Do you have a traffic issue where time-lapse aerial photography and INRIX Trips data would that would give you the validity, granularity or broad geographic reach you need for your study?

Learn more about Skycomp at www.skycomp.com
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Learn More about INRIX Trips at INRIX.com/products/trips
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Connecticut Department of Transportation origin and destination survey.

Skycomp, in association with CDM Smith, worked with the Connecticut Department of Transportation to study origin-destination patterns along sections of I-84. The study acquired data from INRIX Trips and Skycomp’s Time-Lapse Aerial Photography (TLAP) for validation purposes. Aerial photography cover two test periods of 120 minutes each (Friday morning and evening peak periods). From these surveys, data was extracted for peak directions and zones only, and origin-destination percentages were compared to INRIX origin-destination percentages.

Since the O-D percentages for the sampled areas/time periods/directions compared favorably, CDM Smith had the confidence to proceed with phase two of the study, which involved fully exploiting the INRIX Trips database to acquire O-D percentages for the entire desired survey area, for three hours in the morning and evening, in both directions. In some instances, aerial photography was used to assist in granular areas where it was difficult to determine vehicle behavior with INRIX data alone.