

1 *General Response:*

2 We thank the reviewers for their comments and look forward to improving our work from their suggestions. Below we
3 identify and address questions posed by the reviewers.

4 *Completeness of Benchmarking Tasks:* We agree that the evaluation of benchmarking tasks deserves more attention as
5 R1 and R3 pointed out. We believe that having more training data and at a faster temporal sampling rate would improve
6 our ability to test STREETS with existing and state-of-the-art (SOTA) methods for traffic prediction. Fortunately, the
7 infrastructure for Lake County Passage (LCP) has been improved this summer and we were able to collect another 1.5
8 months of images at a temporal sampling rate of every five minutes as opposed to the original ten minutes. We plan to
9 give more depth to the benchmarking of STREETS in the coming months to give better context to the reader.

10 *Permanent Storage of the Dataset:* Storing our dataset on Dropbox is a temporary solution to anonymize our submission.
11 We will permanently store STREETS on a data bank associated with our university once we no longer need to remain
12 anonymous. This data bank guarantees that our data will be publicly accessible to anyone in the world, have a stable
13 DOI for citation, and be accessible for at least five years (further-extended storage is typical). In addition, the data bank
14 provides a data curation staff to ensure datasets are well-documented, readable and easily found via Google Scholar.
15 We have paraphrased these points to preserve the anonymity of the data bank’s website. Furthermore, storing on this
16 public data bank would place the dataset under a CC0 license as R2 suggested. We will also consult with the employees
17 of the data bank to decide if the name STREETS would make locating our dataset more difficult for researchers. We are
18 willing to change the name should it make the dataset more accessible as R2 noted.

19 *Code Repository:* We will also create a GitHub for STREETS to allow researchers to replicate our data generation
20 procedure and also make handling our existing data easy and intuitive. This would include our code for counting
21 vehicles, extracting image timestamps, visualizing parts of the camera network, loading individual camera streams,
22 and more. These codes would be in Python; however, we will convert any existing Python-specific file types to a
23 language-agnostic format like hdf5.

24 *Quality of Hand Annotated Vehicles:* We hand-reviewed every hand annotation of the cars from the workers on Amazon
25 Mechanical Turk (MTurk). Workers were expected to tightly outline every individually identifiable vehicle. For example,
26 highly overlapping vehicles at an intersection are individually labeled if they are distinguishable from one another.
27 Conversely, small vehicles in the distance are only labeled if they are clearly one vehicle, e.g. distinct headlights,
28 bumper. Blobs or low detail masses are not labeled since they may be more than one car. Furthermore, workers were
29 told to only label vehicles on the “main roadway” for the given camera view. This excludes vehicles that are entirely
30 inside the intersection, background vehicles in parking lots, and vehicles on other legs of the intersection. For example,
31 if any cars are visible on the North leg while looking at the East leg, we ignore those “North” vehicles since they should
32 be captured by the camera when it looks North. These constraints prevent overcounting and guarantee we know the
33 source or destination road for each vehicle. We do not have a precise number on the labeling accuracy; however, we
34 can say with high confidence that at least 90% of eligible vehicles are appropriately labeled. Figure 1 gives a couple
examples of labeled images.

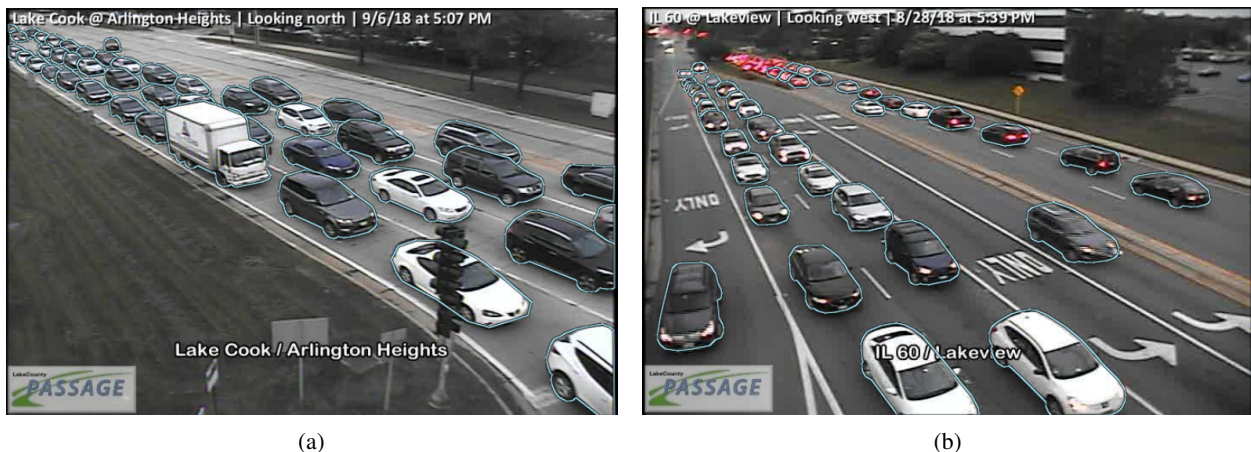


Figure 1: Example vehicle annotations from workers on MTurk. Each individual and distinguishable vehicles receives its own outline. In (a), every vehicle is identifiable and outlined while in (b) some distant vehicles and taillights make separating vehicles too difficult, thus these vehicles are left alone. Also note that background vehicles in parking lots are properly excluded from (b).