

Andrew Ludasi: The BIG question is: is e-commerce travel actually going to REDUCE overall VMT as it shifts shopping trips into consolidated local delivery. Part 2: are distribution trips by large trucks just shifting from delivery to retail, to delivery to distribution centers.

M. Stinson: Andrew, Argonne Nat. Lab studied that exact (Part 1) question & presented findings in a Talking Freight Webinar:

https://www.fhwa.dot.gov/Planning/freight_planning/talking_freight/december_2019/ To see more, you can also attend DOE's 12/3 webinar:

<https://gcc01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.energy.gov%2Fenergy%2Fdownloads%2Ffeems-smart-mobility-capstone-reports-and-webinar-series&data=04%7C01%7Csarah.sun%40dot.gov%7Ce20902d7e8df48f76ef208d87c199633%7Cc4cd245b44f04395a1aa3848d258f78b%7C0%7C0%7C637395796619445098%7CUnknown%7CTWFpbGZsb3d8eyJWljoic4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C1000&sdata=2Bj18r6U1rP3jOOI6YvrTHrHrl%2B2GXj1CfHH8rpMbM%3D&reserved=0> ...I'm excited to see the other approaches today.

Krishnan Viswanathan: Speaking of the NHTS, this is might be useful -

<https://gcc01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftravelbehavior.us%2Fdocuments%2F186.pdf&data=04%7C01%7Csarah.sun%40dot.gov%7Ce20902d7e8df48f76ef208d87c199633%7Cc4cd245b44f04395a1aa3848d258f78b%7C0%7C0%7C637395796619445098%7CUnknown%7CTWFpbGZsb3d8eyJWljoic4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C1000&sdata=0%2Bkt%2F7U7rZaGATu9Nw1cAFiiMH34J9V2ni%2FIfaE9M5A%3D&reserved=0>

Vince Bernardin: What were your assumptions about basket size that led to your VMT impacts?

Becky Knudson (Oregon DOT): Using SimMobility, how much was overall VMT impacted when assuming higher telework activity?

André Romano Alho: Hi Becky, we are still refining our results before we can share more. To detail a bit more we are quantifying changes to individuals activities/modal preferences as well as the associated change to freight movements due to increases in e-commerce demand and potential reduction of demand to retail outlets.

André Romano Alho: *more

Krishnan Viswanathan: Can you share the Transportation Research Part E paper on SimMobility Freight here as I do not have institutional access to the journal? Thanks

Rebekah Straub Anderson: For your freight generation - Is this by SCTG codes or something else? Does it have any relationships with NAICS codes? What data are you using for your make/use tables/rates?

André Romano Alho: @Krishnan, I don't have it on this device but whoever wants it please e-mail me at andre.romano@smart.mit.edu

R Tapia: How are counted the passenger vehicles that are used for buying goods? Is there a substitution with the ecommerce (as suggested by the 1st presentation)?

André Romano Alho: @Krishnan, we have leveraged the Tokyo Metropolitan Freight Survey. Equivalencies for commodity and industry categories were of course considered as well as calibration to local factors.

GUEST 2: Does this Freight on Demand Model apply to ATS - autonomous Trucks System?

Arun: Was the supply simulation mesoscopic or microscopic in this case study?

Monique Stinson: Question for Andre, what vehicle types & powertrain configurations are modeled?

André Romano Alho: @R Tapia, as we mentioned the interplay between online/offline shopping is research we are formalizing at the moment. So in the research we have ongoing we explore it through scenarios.

André Romano Alho: @Guest 2, we can model autonomous truck systems but have not yet done so.

André Romano Alho: @Arun, this supply simulation was mesoscopic, given that we did the experiment for the full city state of Singapore. The microsimulation is not yet so scalable (computationally) to that large of an area.

André Romano Alho: @Monique, we have multiple powertrain configurations and vehicle types. These have an impact on the energy consumption (and emission) estimates. We have also implemented electric vehicles and charging behavior, e.g. for AMOD.

jack: for your shipper/deliveries, we know that USPS sometimes ships for other carriers, does this have any affect on the simulation and forecasting design?

Monique Stinson: can you elaborate on how truck tour patterns were accounted for?

Kyungsoo Jeong: What data did you use to develop carrier-specific load factors?

Brent Selby: We also checked the number of packages per truck by creating an estimate from a survey.

Michiel de Bok (TUD): The vehicles for parcel deliveries fall in different length categories in vehicle counts: light or heavy commercial vehicles (at east in the EU context; I guess it is the same in the US). How do you deal with this in traffic assignment?