MODELING WITH "SYNTHETIC" DATA: FINDINGS FROM THE FIRST TWO MPO MODEL VALIDATIONS FOR 2020









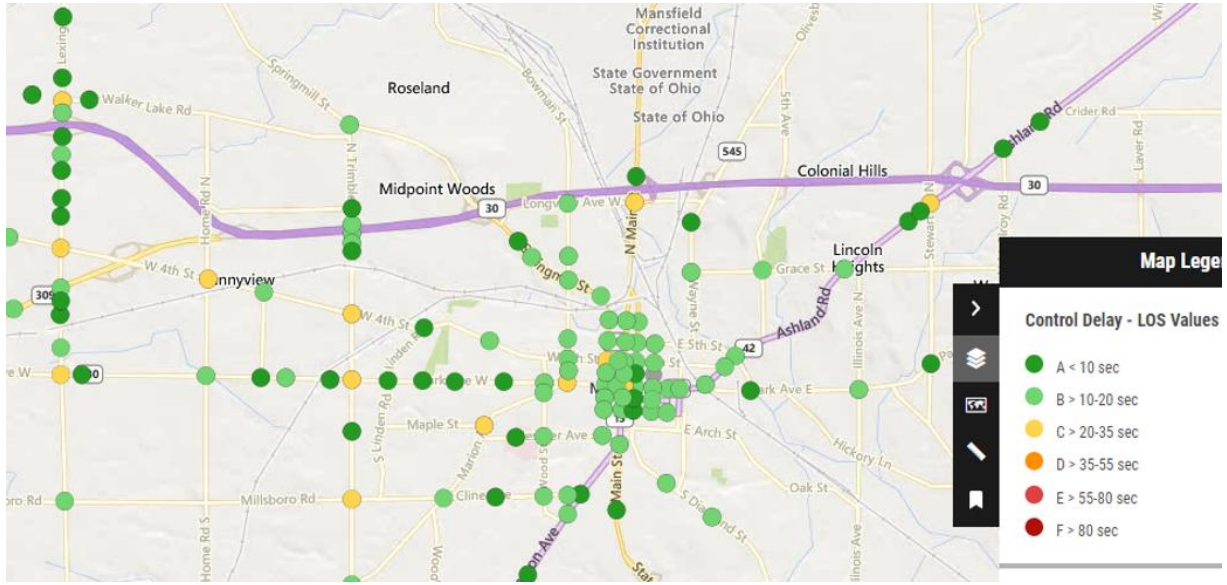


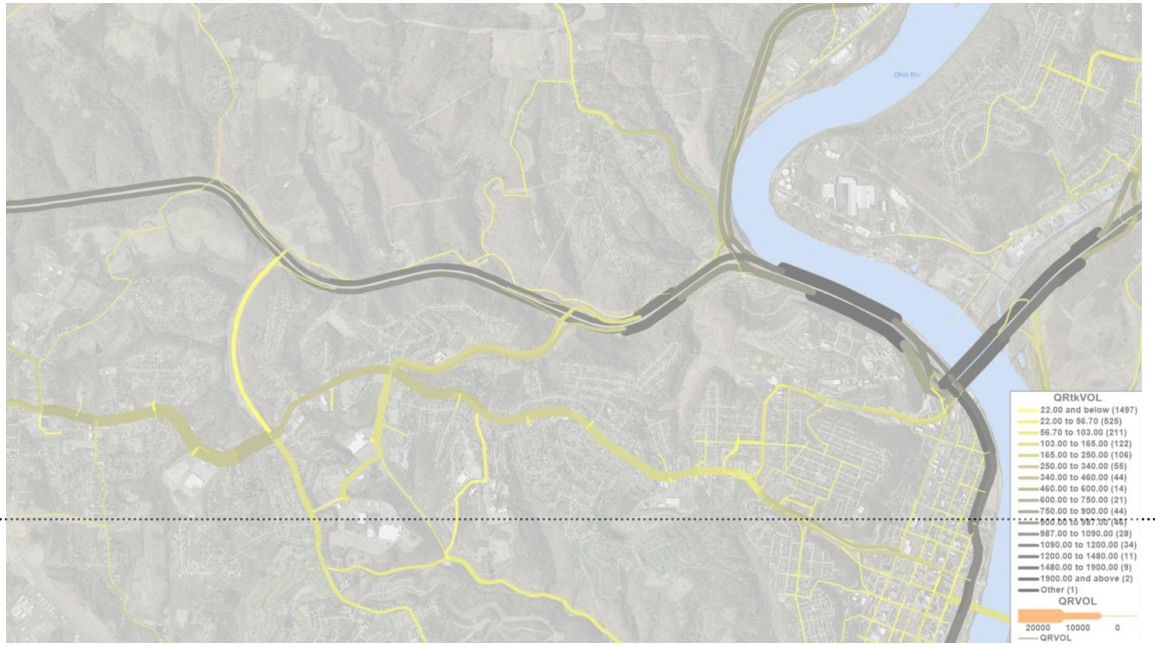


dot

THE SETTINGS (RCRPC & BHJ):

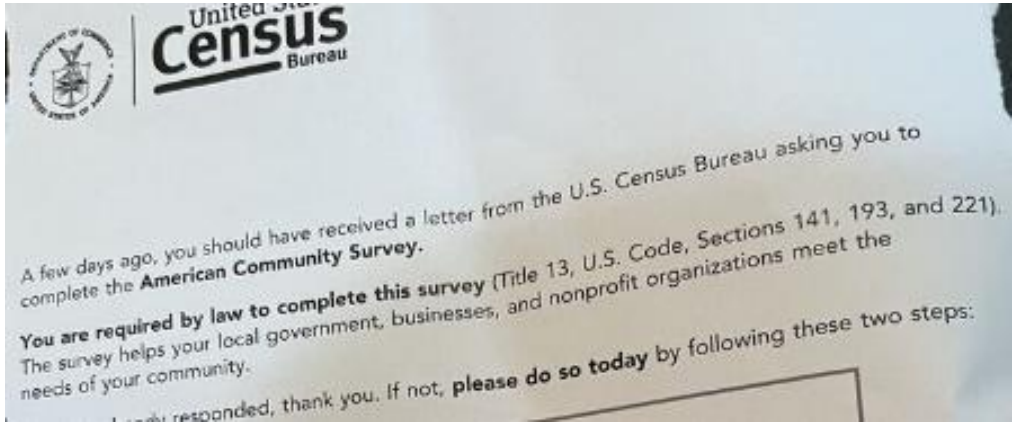
SCG 9-6-2024





WHAT SEEMS TO BE THE PROBLEM?

- Census data (fewer blocks (25% fewer statewide), Differential Privacy, and are we even responding (accurately)?)
- Employment data (find us if you can!)
- School enrollment (except Lima?….)



- New CTPP file (2017-21) coming soon…….
- (But no C-TAZs or even Block Groups anymore, will be all “perturbed” data even at Tract level, so still make some use of the older CTPP?)

- Still plenty of traffic counts and travel time data……

POPULATION/HOUSEHOLDS

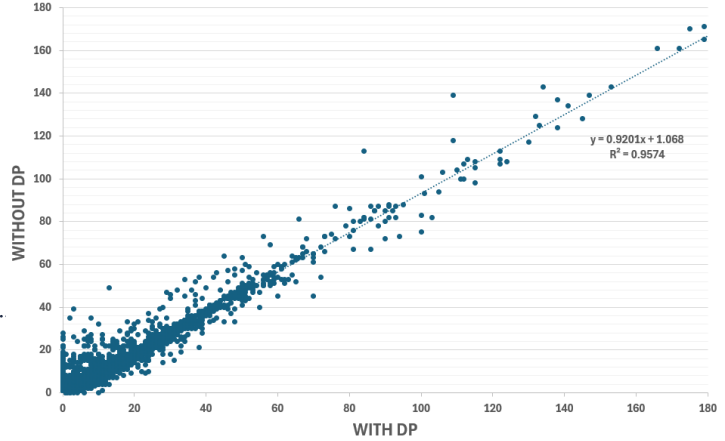
- The 2020 Census was held right at the height of COVID (much lower than usual response rate, so 1-year ACS file never released)
- Dorm/Group Quarters data surprisingly good…… presumably due to increased use of “admin records” in addition to traditional field checks
- Added impact of “Differential Privacy” (even total population at block level adjusted w/SD=3 re 2010 test file – more impact w/detailed socio-econ breakdown)

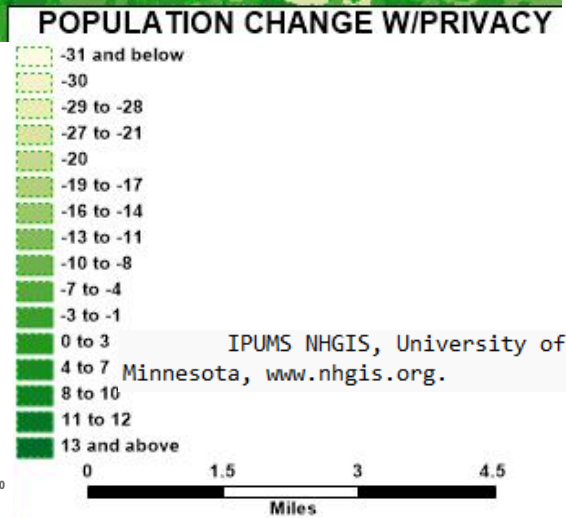
How to identify a census taker

In July, census takers began interviewing households around the country that have not yet respon. online, by phone, or by mail to the 2020 Census. The U.S. Census Bureau is working to complete d collection as quickly and safely as possible, while ensuring a complete and accurate count as it str to comply with the law and statutory deadlines.

Check their badge

If you are unsure, you can contact the U.S. Census Bureau:





EMPLOYMENT DATA

- Used 2019 instead of 2020 (to avoid the big blip below, also timing of LEHD data availability and could map back to 2010 block boundaries).
- Why LEHD? And why a need to make adjustments to it? (for some industries)

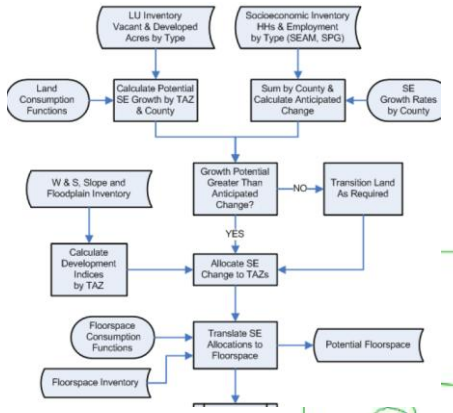
FORECASTING ZONE-LEVEL LAND USE CHANGE IN A DECLINING REGION

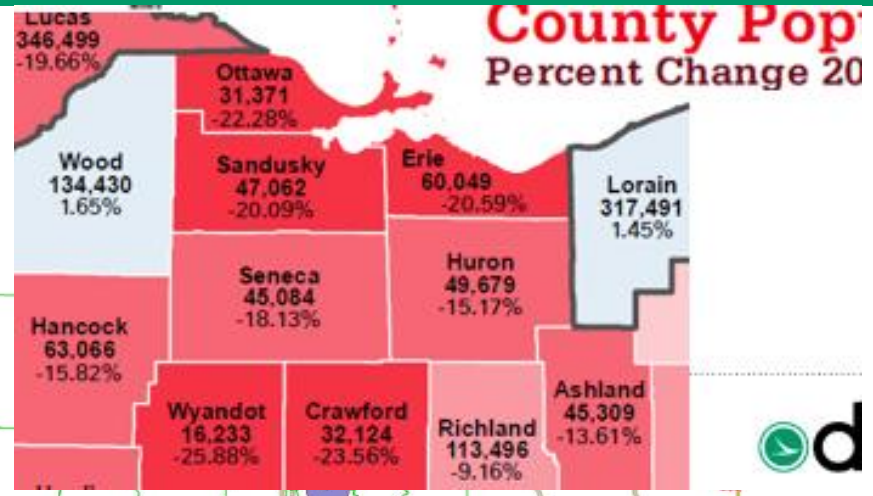
Blame DSA and make use of the statewide modeling figures!! (Beats getting board members to agree on level of decline….)

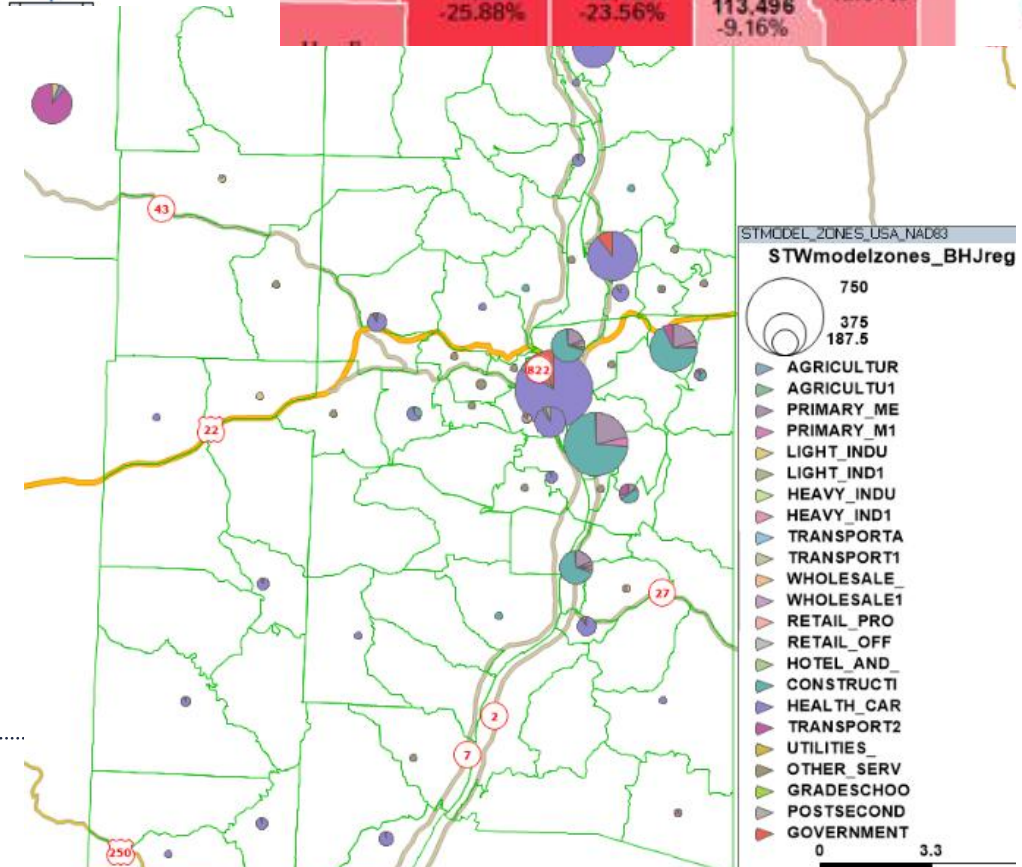
Tredis-based employment figures provide some hope of at least “background growth” for traffic on some corridors (even if it’s just constructing hospitals for the Baby Boomers to die in….)

How to resolve population decline in the region with employment growth? (Slight reallocation of trip generation by purpose and direction, esp. at external stations)

Forecasted VMT slightly higher for 2050



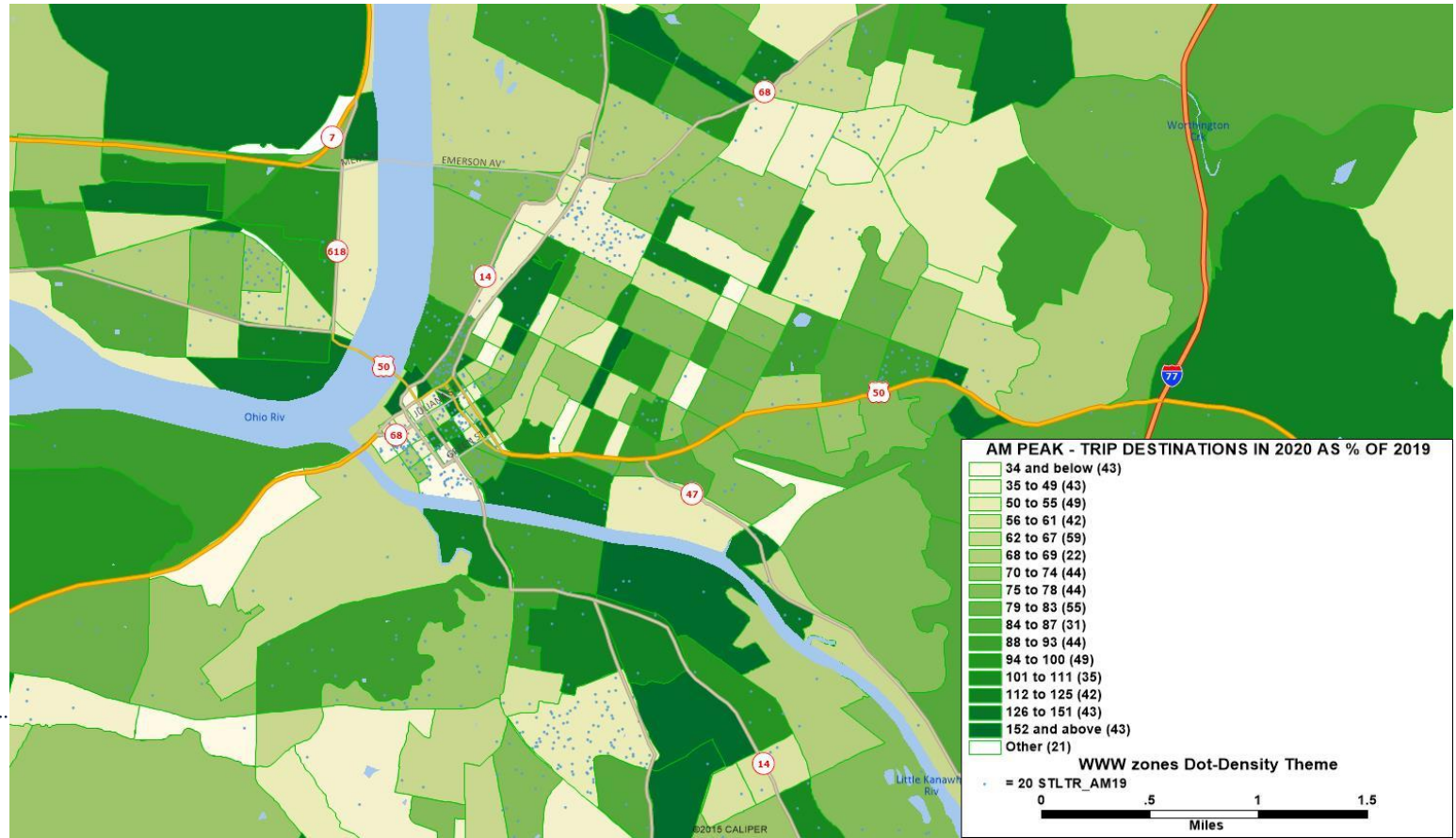




ANY OTHER CHANGES OVER TIME?

- Any “new normal” out there? Maybe not for the smaller regions (unless they are a trendy spot for telecommuting to the country’s largest urban areas) – so I made no future changes to trip generation rates just for that…

RATIOS OF CY 2020 TRAVEL TO CY 2019 BY METRO AREA (FROM STREETLIGH				
PARKERSBURG REGION				
	HBW	HBO	NHB	TOTAL
AM 6-9A	82.8%	76.1%	71.0%	**77.1%**
MD 9-3P	93.4%	91.1%	74.5%	**82.8%**
PM 3-6P	87.5%	86.6%	73.5%	**81.8%**
EV 6-6A	96.0%	79.2%	71.3%	**79.3%**
ALL DAY TOTAL	**89.2%**	**84.3%**	**73.3%**	**80.8%**



SOMEHOW GOT GOOD MODEL VALIDATIONS ANYWAY - SO FAR…

- Not much new for 2020's re procedures, mostly more refinement on CV equation coefficients for reliability in path building
- Regret not starting from scratch (at least yet) on the old model networks, as inconsistent topology creates several problems