What is the effect of residency away from workplace on poverty/income?

Data:
- American Community Survey (ACS): 2014~
- Public Use Microdata Sample (PUMS): 1996~
- Current Population Survey (CPS): 1959~

2018 Dataset: [3M obs x 300 vars] approx.

DIVISION	SPORDER	PUMA	REGION	ST	ADJINC	PWGTP	AGEP	CIT	CITWP	COW	DDRS
4	1	400	2	29	1013097	77	27	1	NA	1	2
4	1	1001	2	29	1013097	73	42	1	NA	1	2
4	1	600	2	29	1013097	85	20	1	NA	2	2
4	1	1002	2	29	1013097	78	26	1	NA	NA	2
4	1	200	2	29	1013097	55	37	1	NA	1	2
4	1	2500	2	29	1013097	60	26	1	NA	NA	2
4	1	1805	2	29	1013097	72	76	1	NA	NA	2
4	1	500	2	29	1013097	10	75	1	NA	NA	1
4	1	1001	2	29	1013097	80	19	1	NA	1	2
4	1	1002	2	29	1013097	98	82	1	NA	NA	1

Model: OLS

$$POVPIP = \beta_0 + \beta_1 * COW + \beta_2 * JWMNP + \beta_3 * JWAP + \beta_4 * JWDP + \beta_5 * JWTR$$
$$+\beta_6 * MIG + \beta_7 * ESR + \beta_8 * POWSP + \beta_9 * HouseholdInfo$$
$$+\beta_{10} * (COW * MIG) + \beta_{11} * (JWMNP * MIG) + \beta_{12} * (JWTR * MIG)$$
$$+\vec{\beta_A} * OtherDemographicInfo + \vec{\beta_B} * OtherMSAChars + \epsilon$$

- POVPIP: income-to-poverty ratio
- COW: Class of worker
- JWMNP: travel time to work
- JWAP: time of arrival at work
- JWDP: time of departure for work
- JWTR: means of transportation to work
- MIG: mobility status
- ESR: employment status
- POWSP: place of work state or country

Other model ideas:
- LASSO (Least Absolute Shrinkage and Selection Operator)
- Decision Tree
- RNN (Random Neural Net)
- Bootstrap for Linear Regression