## Graphic Detail

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# Early Interstate Policy and Its Effects on Central Cities

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Interstate highways caused significant population declines in central cities. In a recent working paper (Brinkman and Lin, 2019), we argued that highways' adverse effects on local quality of life versus their regional accessibility benefits were a significant factor in U.S. central city decline. Those declines were presaged by initial policies that did not anticipate the disamenity effects of urban highways and slow responses to the protests against early urban interstate construction.

The Federal-Aid Highway Act of 1956 authorized and financed the Interstate Highway System to complete 41,000 miles of interstates by 1969. Commensurate with the ambitious scale and timeline, early construction was fast: planners faced few constraints and little opposition. Initial national design standards called cities to feature several radial interstate routes intersecting near the central business district and one or more circumferential beltways (AASHTO, 1957; U.S. Congress, 1944).

Interstate boosters emphasized highways' accessibility benefits but neglected negative quality-oflife effects. Central city mayors and downtown business groups argued that highways were "the most effective way to relieve traffic congestion ... and enhance access to the business district" (Fogelson, 2001: 262). Few anticipated negative side effects. A plan for Detroit showed highways with a "parkway' ambience ... reinforced by groups of pedestrians ambling along only a few feet from the freeway, as though it were a Parisian boulevard" (DiMento and Ellis, 2013: 19). Even Lewis Mumford, later an important critic of urban highways, initially "viewed the automobile as a beneficent liberator of urban dwellers from the cramped confines of the industrial city" (DiMento and Ellis, 2013: 38).

Concerns about land taking, noise, pollution, and other negative quality-of-life effects, however, led to widespread protests known as the freeway revolts. Initially, protestors had little power to stop freeway planners. State and federal highway engineers "had complete control over freeway route locations" (Mohl, 2004). Slowly, policy shifted. For example, subsequent federal legislation required public hearings, economic impact analysis, environmental protection, and historical preservation. By 1967, "the freeway debates and protests [began] to erode formerly uncritical acceptance of urban freeways" (DiMento and Ellis, 2013: 140). By then, however, it was too late to alter many freeway plans: More than three-fourths of the originally designated mileage was already under construction or open to traffic by the end of 1967 (FHWA, 1967).

The negative quality-of-life effects on central neighborhoods were an important factor in central city decline. A key piece of evidence from our working paper (Brinkman and Lin, 2019) is the evolution since 1950 of central neighborhoods near and far from newly constructed highways. Unlike suburban locations, central neighborhoods already had superior accessibility circa 1950 (they were near the central business district); therefore, the effect of new interstates on central neighborhoods was mostly a reduction in local quality of life, leading to lower population and prices. Larger declines in neighborhoods near central highways indicate strong negative quality-of-life effects.

#### Exhibit 1

Change in Consistent-Boundary Census Tract Population in Chicago, 1950–1990



Notes: This map shows percentage changes in population for consistent-boundary census tracts in the Chicago metropolitan areas from 1950 to 1990. The geographic extent is determined by census tract data availability in 1950.

Sources: Census tract data and boundaries—Lee and Lin (2018) and Manson et al. (2019); limited-access highway routes the U.S. Federal Highway Administration (2014)



#### Exhibit 2

Notes: This map shows percentage changes in population for consistent-boundary census tracts in the Seattle metropolitan areas from 1950 to 1990. The geographic extent is determined by census tract data availability in 1950. Sources: Census tract data and boundaries—Lee and Lin (2018) and Manson et al. (2019); limited-access highway routes the U.S. Federal Highway Administration (2014)

Those patterns are evident in the data. For example, exhibits 1 and 2 display changes in population between 1950 and 1990 for consistent-boundary census tracts in Chicago and Seattle (using data from Lee and Lin, 2018). In central areas, declines appear larger in neighborhoods closer to highways compared with neighborhoods slightly farther away. In central Seattle, this pattern appears as a visible north-south axis of decline paralleling the route of Interstate 5. In central Chicago, this leads to noticeable corridors of decline along the Eisenhower and Dan Ryan expressways. These patterns support our conclusion (Brinkman and Lin, 2019) that a significant part of the decline of U.S. central cities was due to lower quality-of-life in central neighborhoods following the construction of urban interstates. Our account contrasts with earlier work (Baum-

Snow, 2007) that emphasizes only the improved accessibility of suburban areas in understanding why highways led to suburbanization. In other words, an unintended cost of early interstate policies was to push people out of central neighborhoods, as opposed to pulling people toward newly accessible suburbs. Policymakers in the 1950s did not anticipate the negative quality of life of highways. The result was steep declines in central city populations.

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