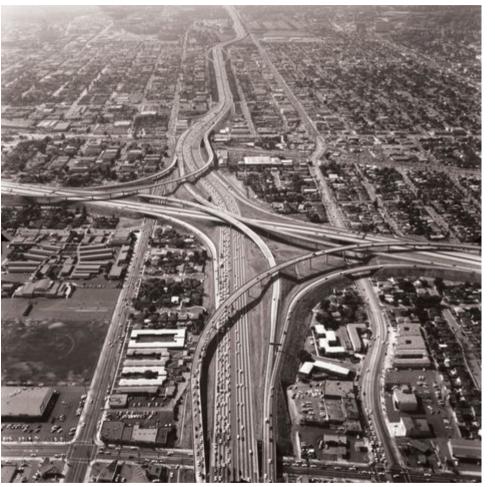


# Post-war mobility in USA: impact vs. transitions studies



- Impact studies: what is the best choice of transport for urban/rural areas, short/long distance?
- Transitions studies: how did the context, in which car is *the most* rational choice for urban/rural, short/long distance transport, emerge?

Santa Monica highway, Los Angeles, 1965

**Source:** The National Museum

of American History



# What needed to be in place first? A socio-technical view

Regulation and policies (traffic regulation, car and fuel taxation)

Repair and maintenance (service stations, dealers)

System of production and industry structure (mass production, supply chains)

Road infratructure (lighting, road signs)

Socio-technical system of land-based mobility

Markets and users (user preferences, patterns of mobility in everyday life)

Culture and symbolic meaning (freedom, utility, status)

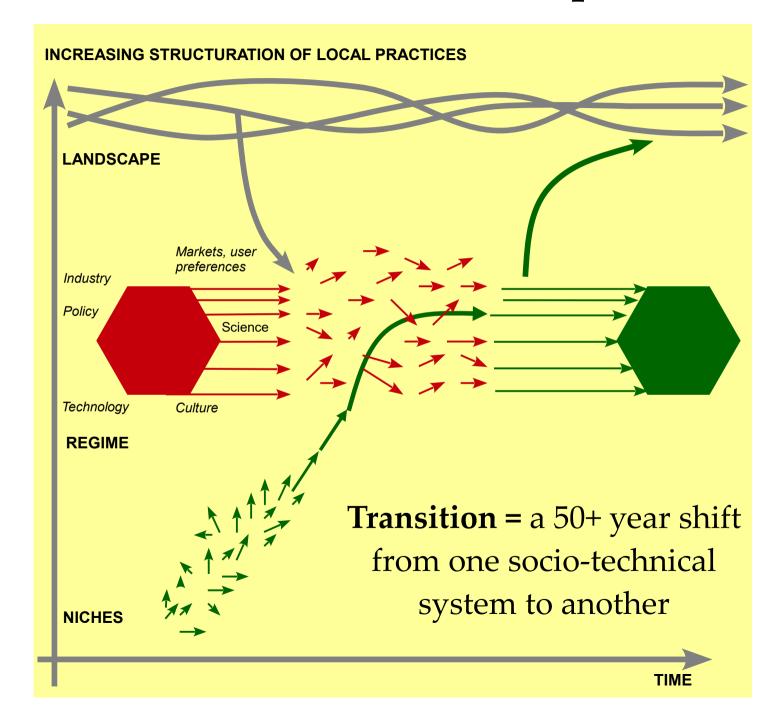
Car (dominant design of core and auxiliary components)

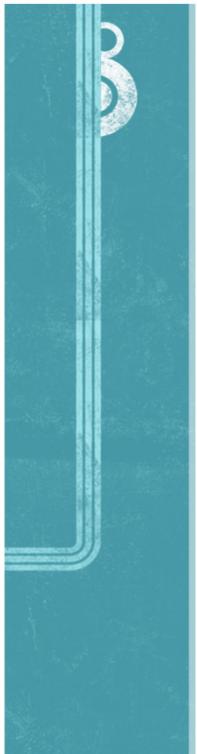
Fuel infrastructure (fuel companies, gas stations)

Source: Geels (2005)

### Source: Geels & Schot (2007)

## Transition as a multi-level process

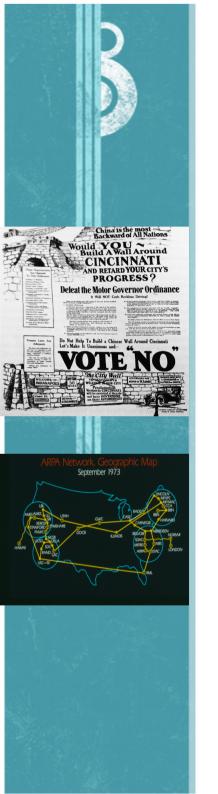




# A typology of user roles in transitions

- **User-producers** invent, experiment and tinker with radical technologies, creating new technical and organizational solutions, articulating new user preferences and enabling new routines to emerge
- **User-legitimators** shape the values and worldview of niche actors, providing meaning, purpose and rationale for their activities by narratives and visions
- **User-intermediaries** create spaces for the appropriation, shaping and alignment of the various elements of emerging socio-technical systems
- **User-citizens** engage in regime-shif politics, lobbying for a particular niche and against the regime or other niches
- **User-consumers** not only buy products but also embed them in their daily practices, thereby defining their lifestyles

**Source:** Schot, Kanger & Verbong (2016)



### Users and transition dynamics

- How much difference can users actually make in shaping the outcomes of transitions? A lot!
  - Automobile transition, USA (1890s-1960s): speed governors planned in Cincinnati (1923) -> organization of car manufacturers, dealers and car clubs -> car-based mobility system completely dominant in the postwar era
  - Internet transition, USA (1960s-present): userproducers encode counter-culture values to the basic design of the internet -> first generation of users socialized with these values -> major current problems for business and policy-makers to "tame" the internet