

## Fractional Housing

Drew Austin

### Problem

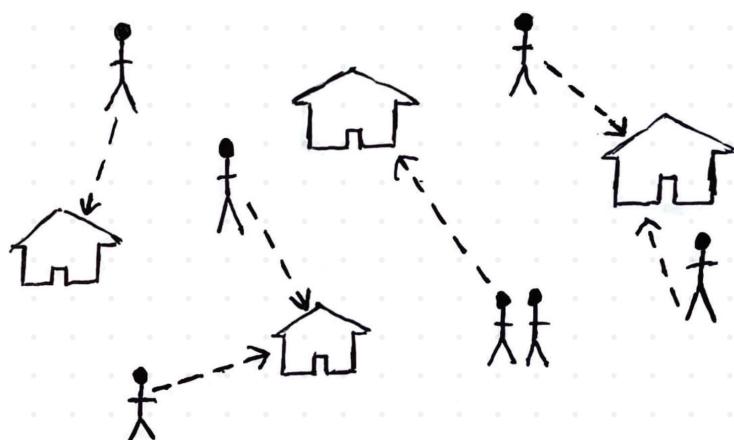
As urban housing shortages continue to worsen, pushing housing costs upward, these markets often find themselves hamstrung by the rigid nature of the built environment which adjusts slowly to changing conditions and often lags demand and other fluctuating variables. The housing market does not necessarily produce the full variety of housing that people desire either, confining its offerings to a few familiar forms that buyers and renters must accept and fit their lives into. In many markets, people thus consume more square footage of housing than they want or need, paying more to do so. Platforms like Airbnb have helped to make the housing market more liquid by enabling “fractional” occupancy of residential units, spatially as well as temporally. But Airbnb is a centralized platform that imposes its own distortions and limitations on this secondary housing market.

### Participants

Homeowners and renters who have extra space they want to make available, individuals seeking housing, local policymakers

### Pattern

Develop a protocol-based alternative to Airbnb's platform-mediated version of fractional housing, enabling shared usage of residential units for flexible durations. This service could have an interface similar to that of Airbnb but would provide a bare-bones marketplace enabling homeowners or sublessors to make their units available to prospective tenants (in compliance with local laws and regulations). This protocol would be oriented toward medium-term and long-term stays rather than short-term usage, as its purpose is to make local housing markets more efficient rather than facilitate tourism—although this outcome may be difficult to realize without certain restrictions.



### Infrastructure

Housing with extra capacity, house-sharing protocol with user-friendly interface, local housing laws

## Small Vehicle Zones

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### Problem

Automobile transportation is a necessity throughout the urban and suburban built environment, even within dense urban cores where transit and pedestrian movement are viable options. The economics of car ownership, however, encourage excessive driving in times and places in which other modes would be more appropriate and would produce fewer negative externalities. Short trips within a walkable neighborhood, for example, are typically safer, more efficient, and in many cases easier via walking, bike, scooter, or bus, but car owners frequently still choose to drive (in many other places, of course, the built environment heavily favors driving). In these zones where the presence of cars is particularly suboptimal, discourage driving.

### Participants

Neighborhood residents and visitors, local drivers, city transportation departments

### Infrastructure

Traffic calming infrastructure like bollards, narrowed rights of way, and street furniture; traffic laws; signage; public service announcements

### Pattern

Dense, walkable zones within urban areas where the majority of traffic is local should be identified and demarcated as places where car access is limited, or even fully discouraged, using physical road design and legal restrictions. These small vehicle zones create incentives that better align individual travel behavior with a socially optimal balance of transportation mode choices while supporting a substantial degree of personal agency. In the United States, many wealthy residential enclaves and tourist areas already restrict traffic in a way that naturally encourages the use of alternate travel modes for local trips—walking and biking and also smaller motor vehicles like golf carts and electric scooters. These existing zones of restricted traffic suggest that these modes are desirable and that people often choose to drive because their environment encourages them to do so.

