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Han, Simon

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The Concrete Solution

Rethinking Parking Garages

for {Urban Vehicle Residency}

Student: Simon Han

Faculty Advisor: Michael Manville

Client: National Vehicle Residency Collective

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16. Abstract This report examines the growing yet understudied phenomenon of urban vehicle residency, wherein economically active individuals, including professionals, retirees, and students—reside in personal vehicles due to housing constraints and shifting employment norms. Despite their stable engagement in urban economies, these residents are systematically excluded from infrastructure access through restrictive parking policies and service models misaligned with their needs. Using ethnographic interviews and spatial analysis, the study identifies three distinct resident typologies: Strategic Budgeters, Lifestyle Optimizers, and Self-Sufficient Nomads. While their motivations vary, all emphasize the need for legal, safe parking and basic infrastructure, while expressing resistance to institutionalized or service-heavy programs. The report reframes vehicle residency as a form of housing innovation and proposes the adaptive reuse of underutilized municipal parking garages as a scalable, infrastructure-based intervention. Garages provide environmental protection, utility access, and operational advantages over street parking or crisis-response models. A user-informed, three-tiered service model is introduced, alongside a spatially driven site selection strategy. A policy framework, drawing from carshare parking regulation, outlines steps for regulatory integration, stakeholder engagement, and interagency coordination. This model offers a cost-effective, inclusive alternative to enforcement-centric approaches. By leveraging existing infrastructure to accommodate diverse housing strategies, the findings contribute to urban planning literature on informal housing, mobility, and infrastructure adaptation.			
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“

The American Dream is changing, and more and more people are looking for ways to live **freely**.



Photograph by Foster Huntington / VICE

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Executive Summary

This report proposes an innovative, infrastructure-based response to the growing but underrecognized phenomenon of urban vehicle residency. With rising housing costs and shifting employment models, increasing numbers of individuals, including working professionals, retirees, and students, are choosing to live in vehicles. Though economically active, these residents face exclusion from urban infrastructure due to restrictive parking policies and inadequate support systems.

Current policy frameworks, which treat vehicle residency as either a transient crisis or a nuisance to be eliminated, have proven ineffective. Exclusionary laws displace rather than reduce vehicle residency, while service-heavy safe parking programs lack the scalability and design alignment to meet the diverse needs of this population.

This project reframes vehicle residency as a form of housing innovation and proposes the adaptive reuse of underutilized urban parking garages as supportive infrastructure. Garages offer several advantages over current approaches, including weather protection, integrated utilities, reduced neighborhood conflict, and scalable economic viability.

Research identified three core user profiles: Strategic Budgeters, Lifestyle Optimizers, and Self-Sufficient Nomads through interviews and spatial analysis. Despite their differences, all vehicle residents expressed a need for safe and legal parking, while resisting institutional service models. Insights from these profiles shaped a user-informed design framework and a three-tiered service model. A detailed policy framework, informed by successful carshare parking precedents, outlines stakeholder engagement, regulatory integration, and operational management strategies.

Garage adaptive reuse offers cities a cost-effective, inclusive alternative to enforcement and crisis-relief programming. By aligning infrastructure with contemporary housing strategies, this model has the potential to transform how cities support diverse living arrangements.

Key Findings

- **Vehicle Residency Is Diverse and Strategic:** Many residents use vehicle living to manage costs, maintain job flexibility, or seek autonomy, extending beyond those in crisis.
- **Policy Approaches Are Mismatched and Ineffective:** Parking bans displace residents but don't address needs. They create costly enforcement cycles and amplify public tension.
- **Safe Parking Programs Lack Scale and Fit:** Fewer than 2,500 vehicle residents are served nationally. Intake processes and strict eligibility exclude those who seek flexibility.
- **Municipal Garages Are Underused Assets:** Especially in downtown and industrial zones, garages offer controlled environments that can support secure and adaptable residency.
- **Residents Are Willing to Pay:** Interviews show strong interest in services like electricity and restrooms at \$5–15/day, or up to \$200/month for stability and community.
- **Design Can Address Community Concerns:** Well-managed garage programs reduce street visibility and offer sanitation infrastructure, mitigating common objections.

1.0 Introduction

1.1 Problem Statement

At 7:30 AM on a Tuesday morning in Phoenix, Arizona, Eric starts his workday by opening his laptop in a Starbucks parking lot. His SUV sits a hundred feet away from the coffee shop: bedroom, kitchen, and storage unit combined into 35 square feet of mobile living space. He's not homeless. He's not in crisis. He's a freelance professional who chose vehicle residency as a financial and practical strategy to maintain the geographic flexibility his work requires.

"I need modern amenities: I need Wi-Fi, I need power... [Cities] usually refers to being in close proximity to something. Again, working conditions."

- Eric, gig worker and vehicle resident

Eric represents a growing demographic that challenges conventional assumptions about both housing and homelessness: working vehicle residents who live in cities but do not live in buildings, using urban infrastructure to support their alternative housing choice. This population exists in a **policy blind spot**, neither served by housing programs designed for permanent residents nor by homeless services targeting transitional populations.

Urban vehicle residency is not a new phenomenon, but its character has shifted dramatically. What planners and policymakers often frame as "vehicular homelessness" increasingly includes working professionals, retirees, and students making **strategic housing choices** rather than experiencing housing insecurity. These residents generate income, pay taxes, and contribute to local economies, yet face systematic exclusion from the urban infrastructure their economic activity supports.

The disconnect between policy assumptions and lived reality creates **spatial exclusion**: the legal and infrastructural barriers that prevent vehicle residents from accessing cities on their own terms. Municipal responses focus on criminalization through parking restrictions rather than accommodation through infrastructure provision. Meanwhile, vehicle residents develop sophisticated adaptive strategies to navigate hostile regulatory environments while seeking the urban amenities their work and lifestyle require.

This project argues that the municipal strategy of exclusion fails on both pragmatic and ethical grounds. Vehicle residents continue to use urban space regardless of restrictions, but under conditions that are set to increase rather than decrease conflicts with settled communities. The alternative, which is a set of **infrastructure provisions** that recognize vehicle residency as a **legitimate housing strategy**, remains largely unexplored in planning practice.

1.2 The Garage Opportunity

While cities install increasingly restrictive parking signage, a different urban infrastructure sits underutilized: parking garages. Built for car storage in an era of commuter-driven urban design and mandatory parking minimums, many garages now struggle with declining occupancy as work patterns shift toward remote and hybrid models. The COVID-19 pandemic accelerated these trends, leaving cities with substantial garage infrastructure serving diminished demand.

This project proposes the adaptive reuse of parking garages as supportive infrastructure for urban vehicle residents. Unlike street parking, garages offer weather protection, security infrastructure, and service integration potential while addressing community concerns about visibility and neighborhood impact. The intervention transforms spaces designed for vehicle storage into spaces that support individuals and families who live in vehicles.

The garage strategy offers several advantages over current approaches:

- **Spatial Efficiency:** Existing structures with minimal conversion requirements
- **Community Compatibility:** Off-street locations that reduce neighborhood conflicts
- **Service Integration:** Infrastructure capacity for bathrooms, utilities, and support services
- **Scalability:** Replicable model adaptable to urban contexts and supported by abundant supply
- **Economic Viability:** Revenue generation from underutilized public assets

Rather than requiring new construction or complex land acquisition, garage adaptive reuse leverages existing municipal investments while serving an underserved population. The approach reframes vehicle residency from a problem requiring elimination to a housing strategy requiring accommodation.

1.3 Research Questions

This project addresses four questions that bridge sociological analysis with design intervention:

Primary Question:

How can the adaptive reuse of parking garages serve as supportive infrastructure for urban vehicle residents while addressing community concerns about mobile sheltering?

Supporting Questions:

1. Who are urban vehicle residents and what drives their housing choices?
2. What barriers prevent vehicle residents from accessing appropriate parking in cities?
3. What program features would effectively serve working vehicle residents?
4. How can parking garage adaptive reuse provide a scalable intervention model?

1.4 Methodology and Scope

This research employs mixed methods combining ethnographic interviews with spatial data analysis to understand both the lived experience of vehicle residency and the urban infrastructure context that shapes those experiences.

Ethnographic Interviews

Primary qualitative data collection occurred through structured interviews with eight vehicle residents during the 2025 Rubber Tramp Rendezvous (RTR) in Quartzsite, Arizona, the largest annual gathering of vehicle residents in North America. Interviews focused specifically on vehicle residents with urban parking experience and current or recent employment, distinguishing the research population from recreational vehicle users and people experiencing housing crisis.

Participants represent three demographic segments: **Economic Necessity Users**, **Lifestyle Optimizers**, and **Freedom-Seeking Nomads**. Each interview examined personal vehicle residency history, urban parking challenges, service needs and willingness to pay, and priority rankings for potential program features. **The full interview participant profile list is provided in Appendix A.**

Data Analysis

Complementary quantitative analysis utilized Los Angeles County data including LAHSA homeless counts, Census American Community Survey variables, SCAG land use classifications, and public facility locations. Machine learning analysis identified spatial patterns and demographic correlates of vehicle residency, while clustering analysis revealed distinct neighborhood typologies based on vehicle resident concentrations and infrastructure availability.

This spatial analysis validates ethnographic findings while providing data on program potential, showing areas with high concentrations of both vehicle residents and parking infrastructure. Sentiment analysis of online discourse provides additional insight into vehicle resident priorities.

Scope and Limitations

This project focuses specifically on working vehicle residents who choose urban parking for employment-related reasons, excluding recreational vehicle tourism, emergency vehicle residency, and chronic vehicle residency without employment income. The geographic focus on Arizona interviews and Los Angeles data may not capture experiences in other climates or urban contexts.

The garage intervention analysis develops programmatic and operational frameworks rather than architectural design or regulatory implementation. Community engagement, detailed financial modeling, and pilot program evaluation require additional research beyond this project scope.

The project ultimately argues for recognizing vehicle residency as a legitimate housing strategy requiring appropriate infrastructure support rather than a social problem requiring elimination. This reframing opens possibilities for inclusive urban planning that transforms underutilized infrastructure into community-supporting resources.

2.0 Urban Vehicle Residents

Understanding the “Driving” Factors



Photograph by Damon Casarez / The Hollywood Reporter

“Vehicles are something that we can truly call our own. We want to know that we are capable of creating a comfortable dwelling, as well as capable of adventure, spontaneity, and creativity.”

- Joe, an Entertainment Industry Worker

This chapter presents demographic analysis that reveals three distinct segments within the urban vehicle resident population, each with different motivations, resources, and infrastructure needs. Understanding these distinctions is crucial for developing appropriate policy responses and service models that serve real rather than assumed populations.

2.1 Beyond the Homelessness Framework

When Deborah parks her van on a quiet Studio City street, she's not hiding from society. She's participating in it. By 7 AM, she's walking to her favorite coffee shop, greeting the gardeners she's befriended, and planning her day of event management work. Her van bears security magnets that neighbors appreciate, and her presence contributes to informal neighborhood surveillance. After three years of seasonal vehicle residency in Los Angeles, Deborah has built a network of local relationships that support both her housing strategy and community integration.

"This whole thing sort of was a win turned out to be a win-win choosing this lifestyle... I work events, so I come back to LA and do stage management events. Then I help people downsize."

Contrary to popular belief, many people living in vehicles aren't experiencing homelessness in any traditional sense. They're working, they're contributing to local economies, and they're making deliberate housing choices based on economic strategy rather than crisis response. Von Wachter's analysis of Los Angeles County found that 74% of people accessing homeless services had previous California earnings, with many maintaining employment connections after exiting housing. But many more vehicle residents often don't access these homeless services at all, because they don't see themselves as homeless and don't fit traditional service models designed for crisis intervention.

Recent research validates this complexity. Duff and Rankin's analysis of working vehicle residents (2020) found that many participants "viewed van dwelling as a strategic career move rather than a housing crisis response," challenging assumptions about economic distress as the sole driver. Similarly, Giamarino, Blumenberg, and Brozen's comprehensive study of Los Angeles County vehicle residents (2022) revealed that this population is more likely to include women, families with children, and older adults than the general unsheltered population, which are demographics that align with the interview findings presented here.

Deborah's experience challenges the dominant policy framework that positions vehicle residency as housing failure requiring correction, rather than housing innovation deserving support. The eight vehicle residents interviewed for this research demonstrate that urban vehicle residency encompasses diverse motivations, economic strategies, and community integration approaches that resist simple categorization as "vehicular homelessness."

2.2 Demographic Categories: Three User Profiles

Interview analysis reveals three primary demographic segments among urban vehicle residents, distinguished by age, income, employment status, and motivational factors. These segments represent different relationships to vehicle residency, from economic necessity to lifestyle optimization to philosophical choice, requiring differentiated policy and design responses.

1. Strategic Budgeters:

Eric represents the first demographic segment: young professionals using vehicle residency as a financial strategy rather than emergency housing response. At 26, Eric lives in his SUV while working in the gig economy, staying in cities to access reliable internet, attend client meetings, and stay near work opportunities.

"The job doesn't pay that much, and I still have a lot of student debt left, so I take extreme budgeting measures to stay on top of the payments; otherwise between that and rent, I'd be wiped out every month for the next ten years."

This demographic pattern reflects broader economic trends documented by von Wachter and colleagues in their analysis of Los Angeles County employment patterns of residents experiencing homelessness (2020). Their research found that among homeless service clients, 74% had previous California earnings, with average annual income in the year before homelessness at just \$9,970, which is below federal poverty levels. These aren't people who fell out of the workforce, but people for whom the workforce no longer pays enough for housing. The concentration in administrative support, healthcare, hospitality, and retail work mirrors Eric's gig economy positioning, where vehicle residency enables continued workforce participation despite inadequate wages.

Demographic Characteristics:

- **Age Range:** 20s to early 30s
- **Employment:** Freelance, contract work, early career professionals
- **Income:** Under \$1,500/month, highly variable
- **Education:** College graduates, often with advanced degrees
- **Duration:** 1-3 years typically, goal-oriented timeline
- **Vehicle Type:** Smaller vehicles (SUVs, converted vans), optimized for stealth and efficiency

Urban Living Motivation: Strategic budgeters choose vehicle residency as an active financial strategy rather than passive response to crisis. They view vehicle residency as temporary but a strategic way to optimize financial resources during early career phases when income remains uncertain but expenses can be controlled. They choose the city because they prioritize work opportunities, social relationships, and convenient access to amenities like water, power, internet.

Urban Parking Patterns: Eric's location decisions center on work proximity and basic infrastructure needs. His urban parking patterns prioritize stealth camping techniques to avoid fees, frequent

movement to prevent detection, and substituting gym memberships and coffee shops for missing residential services.

Willingness to Pay: Budget constraints limit Eric's service utilization capacity. Anything that costs extra probably wouldn't interest him given his tight budget. But he demonstrates willingness to pay for genuine value: a dollar a day would be reasonable, maybe ten or fifteen dollars monthly. He wouldn't expect water, electricity, or campground amenities, just legal parking, so he wouldn't expect to pay much either.

"Cost would be very challenging for me at the moment. I'm very paycheck to paycheck... anything that costs a little extra probably would not be something I'd be interested in."

2. **Lifestyle Optimizers:**

Another demographic segment comprises established professionals who use vehicle residency to optimize work-life integration rather than respond to economic crises. This segment includes couples like the working couple who maintain a San Francisco home while spending 8-9 months annually in their van, and individual professionals like Deborah who use vehicle residency to support flexible work arrangements.

Duff and Rankin's research (2020) on working vehicle residents found that many participants emphasized "freedom and flexibility" as primary motivations, with vehicle residency enabling "geographic arbitrage" that allowed workers to maintain career advancement while reducing living costs. The researchers noted that participants often possessed "high cultural and social capital" that facilitated their adaptive strategies.

Demographic Characteristics:

- **Age Range:** 40s to early 60s
- **Employment:** Established careers, remote work capability, consulting
- **Income:** \$1,500-4,000/month, relatively stable
- **Assets:** Often maintain property ownership or long-term leases
- **Duration:** 2-5+ years, open-ended timeline
- **Vehicle Type:** Well-equipped vans or small RVs with comfort amenities

Urban Living Motivation: Lifestyle Optimizers make strategic housing choices that enable geographic flexibility while maintaining professional engagement. The working couple interviewed explained their evolution. They started vehicle living to travel and live more exciting lives. The graphic designer continues work while traveling, maintaining professional identity alongside geographic freedom. She identifies with her work and has an arrangement that pays well and keeps her engaged.

"We're urban people... We're city people. We've escaped into the wildlands before and that's kind of how we imagined it at first. But really when you're full-time [vehicle resident]... that escape is no longer an escape."

Urban Parking Patterns: Lifestyle Optimizers develop sophisticated urban integration strategies that balance stealth camping with lifestyle preferences. They revealed their favorite place to park in a city to be where the intersection of a commercial zone intersects with the residential zone, where they can blend in with the vehicle around. They also appreciate urban amenities such as museums, libraries, cultural events that support their lifestyle goals beyond mere survival needs.

Willingness to Pay: Lifestyle Optimizers demonstrate both capacity and willingness to pay for appropriate services, particularly those that enhance rather than merely enable their urban experience. The couple explains: "10 to 15 bucks, I'd be willing to pay... we don't have paying for parking and everything in our budget. We have to live and park for free most of the time. But 10 to 15 bucks... we would use something like that." When asked if they'd be willing to pay for a parking service that allows them to park by day and camp by night, one partner responded:

"I personally would totally be willing to pay for it... if I could leave my vehicle there and I can bop around the city... I'd be willing to pay \$30."

3. **Self-Sufficient Nomads:**

The third segment includes retirees and semi-retired individuals who embrace vehicle residency as a lifestyle choice aligned with values of independence and community. Mac, living on \$900/month from rental property income, represents this segment's combination of economic constraint with philosophical commitment to nomadic living. For Mac, it keeps coming back to the sense of community. Being nomadic, people aren't meant to be isolated, and you feel that isolation when you meet disconnected people.

Montague's research (2022) on social factors shaping vehicle resident communities documents how vehicle residents create "information grounds," which are social spaces where they exchange practical knowledge, emotional support, and community resources. These informal networks often serve essential functions for Self-Sufficient Nomads who maintain philosophical commitments to independence while recognizing interdependence needs.

Demographic Characteristics:

- **Age Range:** 50s to 70s
- **Employment:** Retired, semi-retired, or minimal income work
- **Income:** Fixed income, pension, or investment income (\$900-2,000/month)
- **Duration:** Long-term lifestyle choice, often 5+ years
- **Vehicle Type:** Varies from simple vans to larger RVs, often well-established setups
- **Philosophy:** Nomadic lifestyle as cultural choice and community practice

Urban Living Motivation: Self-Sufficient Nomads view vehicle residency through philosophical and cultural lenses that distinguish their approach from both Strategic Budgeters and Lifestyle Optimizers. They are in it for the long-term because they've found a balance that allows them to maintain their living situation with minimal reliance from others and minimal commitment to others.

This segment often possesses extensive vehicle residency experience and knowledge. They don't wish to rely on social services to support their lifestyle. Jake, who sold his house in 2022 to embrace full-time vehicle living, represents the libertarian strand of this segment:

"I don't expect the government or the city to do anything for me. If they do, it's a bonus to my mind... That's why I try to be self-sufficient."

Urban Parking Patterns: Their parking strategy demonstrates sophisticated knowledge of urban street systems. For example, parking on streets at multifamily complexes that aren't gated, usually at B or B-minus quality apartments where no one looks twice. Mac's decision-making centers on safety and remaining unnoticed, constantly evaluating whether he can get away with parking somewhere without being called out.

Community Building and Social Networks: Self-Sufficient Nomads actively participate in vehicle residency community building, often serving as informal mentors and resource networks for other vehicle residents, sharing insights developed through years of experience navigating various systems and locations. Therefore, a sense of community is of great value for them.

"Community. I think it just keeps coming back to community for me... being nomadic, I don't think we're meant to be isolated... People are still isolated and you feel that when you meet them."

Willingness to Pay: This segment demonstrates complex relationships to service payment, balancing self-sufficiency values with recognition of infrastructure needs. Mac expresses willingness to pay significant amounts for community-oriented services: "\$200 dollars monthly for a genuine community would be a no-brainer." However, Jake represents the libertarian approach common in this segment, questioning why he'd pay when he's already self-sufficient. He only pays for water, and whatever costs him in a grocery store is what he's happy to spend elsewhere.

2.3 Cross-Cutting Themes: Shared Experiences and Contradictions

While demographic segmentation reveals important differences among urban vehicle residents, several themes emerge across all three segments that inform infrastructure and policy development.

1. The Work-Urban Connection

Regardless of demographic segment, participants demonstrate strong connections between urban parking needs and work requirements. Even retirees and semi-retired individuals often maintain income-generating activities that drive urban proximity needs. Deborah tries staying in places for

extended periods to avoid excessive gas spending, but she picks up work to maintain a financial cushion when something happens.

Madison is a healthcare worker. Her experience illustrates how employment mobility shapes urban parking patterns. When on call, she'd bring the RV into the hospital parking lot. At smaller facilities without midnight technicians, on-call meant getting up and going in when called. Vehicle residency enabled employment arrangements that required geographic flexibility incompatible with traditional housing.

2. Safety as the Primary Concern

Safety considerations dominate almost every conversation about ideal parking spaces, encompassing both physical security and freedom from legal harassment. Whaley and Abbott's research (2022) on criminal victimization among nomads found that vehicle residents face higher rates of property crime and harassment than the general population, with women and older adults particularly vulnerable.

Mac's decision-making centers on safety and remaining unnoticed—can he get away with parking somewhere without being called out? Madison emphasizes safe space as the biggest concern. Urban crime was horrible, and without her dog for security, she would never have attempted city parking.

This safety priority shapes all other decisions about location, duration, and service utilization. Participants develop sophisticated risk assessment strategies that balance visibility, vulnerability, and enforcement probability. The need for safety creates demand for infrastructure solutions that address multiple threat dimensions simultaneously.

3. The Community Paradox

The most striking contradiction emerges around community needs. Participants across all segments crave social connection while simultaneously avoiding congregated parking arrangements due to safety and demographic concerns. The working couple admits they don't want to camp with homeless populations, though other cities might have different situations and attitudes. The healthcare worker emphasizes that any arrangement would need to be safe, clean, and monitored—a bunch of people parking where social services are provided isn't necessarily safe.

Montague's research on vehicle resident information grounds helps explain this paradox (2022). Her work shows that vehicle residents actively seek community connections but prefer flexible, voluntary social arrangements rather than enforced congregate settings. The desire for community coexists with needs for autonomy and demographic compatibility.

Mac articulates the positive side of this paradox clearly. Community keeps coming back as essential—being nomadic, people aren't meant to be isolated, and you feel that isolation when you meet disconnected people. Yet the same participants who express longing for community demonstrate wariness about congregated arrangements that might compromise safety or autonomy.

This paradox suggests the need for careful demographic curation and program design that enables social connection while addressing compatibility concerns and maintaining individual security.

4. The Infrastructure Paradox

All participants develop sophisticated strategies for accessing urban services through existing infrastructure rather than purpose-built facilities. Deborah's personal connections enable shower access, and she suggests tie-ins with gyms might work well. Jake's gym membership costs twenty-eight dollars monthly for unlimited access, including daily showers with no problems.

These substitution strategies reveal both resourcefulness and the inadequacy of current urban infrastructure for vehicle resident needs. Bathrooms, water access, and waste disposal emerge as universal requirements that existing urban environments fail to provide adequately.

The economic analysis reveals a striking contradiction: participants express willingness to pay market rates for appropriate services while remaining priced out of existing options. The pricing sweet spot appears to be \$5-15 daily or \$150-200 monthly across all segments. Mac would pay \$200 monthly for genuine community. The working couple would use \$10-15 services, and even budget-constrained Eric considers \$1 daily reasonable for basic infrastructure.

5. The Government Paradox

A final contradiction emerges around public sector involvement. Participants clearly need public infrastructure support—legal parking, sanitation facilities, enforcement protection—while simultaneously resisting public oversight and regulation. Jake represents the libertarian extreme, questioning why he'd pay when he's already self-sufficient and not expecting government assistance. Yet even self-sufficient participants acknowledge infrastructure needs that only public investment can address at scale.

This tension between needing public support and maintaining autonomy shapes program design requirements. Successful interventions must provide public goods while respecting participant independence and avoiding the institutional characteristics that make traditional shelters unappealing to this population.

These cross-cutting themes and contradictions demonstrate that vehicle resident needs resist simple solutions. The community paradox, government infrastructure tension, and economic contradictions require nuanced program design that accommodates competing priorities rather than resolving them through compromise.

2.4 Motivational Analysis: Push and Pull Factors

Understanding what drives vehicle residency choices requires examining both external pressures (push factors) and positive attractions (pull factors) that shape housing decisions. Interview analysis reveals complex motivational structures that resist simple categorization as either voluntary or involuntary housing choices.

Push Factors: Structural Economic Pressures

Housing cost crisis might represent the most frequently cited push factor, but participants distinguish between unaffordability and cost inefficiency. Deborah realized that everything coming in was going out, which was not sustainable. Many could afford traditional housing but choose vehicle residency as better resource allocation. As Deborah explains:

"COVID and realizing that I had a cute place I had the thing that everybody wants. I had the house behind the house of an actress... but everything that I was coming in was going out so for me I was like huh not sustainable."

Employment instability and geographic requirements drive many decisions. Healthcare work often involves three-month contracts where temporary expendable labor faces inflated prices for everything. Corporate culture conflicts lead multiple participants to leave stable employment for freelance work that benefits from housing flexibility.

Pull Factors: Positive Lifestyle Attractions

Financial optimization extends beyond necessity into wealth building and debt elimination. Geographic and cultural access motivates urban vehicle residency for people who value cultural amenities and urban experiences. Work-life integration enables arrangements that prioritize autonomy and flexibility over income maximization. Urban environments provide resources, such as water, food, gyms, people, parks, everything a city offers. Community and social connection also draw people seeking relationships unavailable in traditional housing arrangements.

Duff and Rankin's research emphasizes these positive motivations, finding that many working vehicle residents viewed their housing choice as enabling "location independence" and "career flexibility" rather than representing economic distress. Community and social connection draw people seeking relationships that may be more available through vehicle residency networks than traditional housing arrangements.

2.5 Reframing Vehicle Residency: From Deficit to Innovation

The demographic and motivational analysis presented in this chapter challenges dominant policy frameworks that position vehicle residency as housing failure requiring correction. Instead, the evidence suggests that urban vehicle residents represent **housing innovation**—adaptive strategies responding to contemporary economic and social conditions that make traditional housing arrangements suboptimal for significant populations.

Beyond the Crisis Narrative

Current policy discourse often frames vehicle residency through crisis narratives that emphasize emergency response and transitional services. The demographics revealed through this research demonstrate that working vehicle residents typically:

- **Maintain employment** and generate taxable income
- **Contribute to local economies** through spending and service utilization
- **Build social networks** and community connections in the areas where they park
- **Develop expertise** in resource access and urban navigation
- **Make strategic choices** rather than respond to immediate crises

The Innovation Framework

Reframing vehicle residency as housing innovation rather than housing failure opens different policy possibilities. This perspective recognizes that:

- **Economic Innovation:** Vehicle residency enables financial strategies (debt reduction, geographic arbitrage, reduced overhead) that may be economically rational responses to current housing market conditions.
- **Social Innovation:** Vehicle residency communities create social networks and mutual support systems that may provide greater connection than traditional housing arrangements for some individuals.
- **Spatial Innovation:** Vehicle residents develop sophisticated knowledge about urban space utilization, resource access, and community integration that demonstrates adaptive capacity rather than social dysfunction.
- **Work Innovation:** Vehicle residency enables employment arrangements (remote work, contract work, geographic flexibility) that align with contemporary economic trends toward gig economy and location independence.

Policy Implications of Reframing

Understanding vehicle residency as innovation rather than deficit suggests policy approaches focused on **enablement** rather than **correction**: infrastructure provision rather than service programming, accommodation rather than transition, choice protection rather than behavior modification, community integration rather than social service intervention. Bibi articulates this well:

"It's about space making. It's about design. It's about giving people a feeling of being civilized and happy... you're not creating the next Taj Mahal. It just means that you're civilizing a situation."

Considerations for Supportive Programs

The demographic analysis and motivational understanding developed in this chapter inform key considerations for supportive programs.

Tiered Service Models: Different demographic segments require different service levels and pricing structures. Basic tier provides the essentials (safety, sanitation, legal certainty) at minimal cost for Strategic Budgeters. Standard tier offers enhanced amenities and work-enabling infrastructure for Lifestyle Optimizers. Premium tier includes community features for Self-Sufficient Nomads.

Flexible Duration Policies: All segments demonstrate variable urban parking needs that resist rigid time limit structures. Eric would most likely use services for a few days when work required it, then get away. This suggests the need for flexible access policies rather than fixed residency terms.

Community Integration Strategies: The community paradox identified across all segments requires attention to demographic compatibility and gradual trust-building rather than forced social interaction.

Work-Enabling Infrastructure: The strong connection between urban parking needs and employment requirements suggests the importance of digital infrastructure, proximity to business districts, and flexible access hours.

The next chapter examines the current barriers that prevent vehicle residents from accessing appropriate urban parking, setting the stage for the following chapter on understanding how garage adaptive reuse can address systemic exclusion while serving the diverse population characterized in this demographic analysis.

3.0 Planning and Policy Barriers

Identifying Gaps in Current Approaches



Modified camper van interior (left) and minimalist home interior (right)

When cities encounter people living in vehicles, they face a choice: accommodate or exclude. Over the past two decades, American municipalities have overwhelmingly chosen exclusion, creating an elaborate legal architecture designed to make vehicle residency impossible rather than sustainable.

The story that emerges challenges conventional wisdom about both homelessness policy and transportation planning. Cities have deployed increasingly sophisticated exclusion strategies while vehicle residency has grown 55% in Los Angeles County alone (Giamarino et al., 2022). The harder cities push against vehicle residents, the more visible the issue becomes—creating a policy feedback loop that generates community resistance, enforcement costs, and human suffering without reducing the underlying phenomenon.

3.1 The Legal Architecture of Exclusion

Vehicle residency occupies a unique legal position because it sits at the intersection of multiple frameworks that were never designed to interact. Unlike traditional homelessness in public spaces, vehicle residency occurs within private property—vehicles—that happen to be parked in public spaces governed by traffic regulations.

The Evolution of Vehicle-Specific Prohibitions

So and colleagues' legal analysis reveals how this complexity created opportunities for municipalities to criminalize vehicle residency without explicitly targeting housing status (So et al., 2016).

Traditional anti-sleeping ordinances faced constitutional challenges, but vehicle dwelling restrictions could be framed as neutral parking regulations targeting behaviors rather than status.

The legal pathway typically began with time-limited parking restrictions in residential areas. But municipalities quickly discovered they could achieve exclusion more effectively by targeting vehicle characteristics rather than duration:

- **Height restrictions** eliminated RVs and converted vans
- **Size restrictions** removed vehicles longer than standard cars
- **"No oversized vehicle" ordinances** pushed larger vehicles to industrial areas

By 2016, 50% of surveyed cities had at least one law restricting vehicle dwelling, with 35% using parking regulations to effectively prohibit the practice (So et al., 2016).

The Constitutional Workaround

Wakin's research documented how vehicle residents used their legal status as vehicle operators to challenge traditional anti-sleeping ordinances (Wakin, 2008). Vehicle residents could argue they were

legitimately parked and not violating anti-camping laws because they were inside private property. This legal ambiguity forced municipalities to develop new approaches that specifically targeted the intersection of vehicle occupancy and public parking.

The constitutional implications proved significant. Courts had established that criminalizing homelessness violated Eighth Amendment protections when no alternative shelter was available. But vehicle dwelling presented a different question: were people with vehicles "homeless" in the legal sense, or housed individuals making unconventional parking choices?

This distinction allowed municipalities to frame restrictions as parking management rather than homelessness policy, avoiding constitutional constraints while achieving exclusionary goals.

3.2 **The Displacement Machine: Current Municipal Strategies**

Systematic Exclusion as Regional Policy

Giamarino and colleagues' analysis reveals a 213% increase in laws restricting vehicle dwelling since 2006, with restrictions spreading from coastal areas to suburban communities as vehicle residency disperses under pressure (Giamarino et al., 2022).

The exclusion toolkit has become increasingly sophisticated:

- **Simple overnight parking bans** proved insufficient because they allowed daytime parking
- **24-hour prohibitions** in residential areas required daily movement without elimination
- **Comprehensive vehicle dwelling bans** prohibited sleeping in vehicles anywhere in city limits
- **Coordinated enforcement** using dedicated teams and systematic sweeps

The Great Displacement

Giamarino and colleagues found that restrictive ordinances don't reduce vehicle residency, only redistribute it (Giamarino et al., 2022). When one municipality adopts comprehensive restrictions, vehicle residents move to adjacent jurisdictions with less restrictive policies. This creates pressure for surrounding cities to adopt similar restrictions, leading to regional races to the bottom.

The displacement pattern creates perverse outcomes. It fragments vehicle resident communities, disrupting support systems that enable stability. It increases vehicle miles traveled as people must drive farther to find legal parking. Most problematically, displacement interrupts any progress toward stability—someone who has found employment or accessed healthcare must abandon these connections when enforcement forces them to move.

Safe Parking Programs: The Accommodation Alternative

Lewis and colleagues' analysis identifies 70 active safe parking programs nationwide, serving approximately 2,500 individuals—a small fraction of estimated need (Lewis et al., 2024). Safe parking programs typically provide designated overnight parking with basic amenities like restrooms and security, often operated by nonprofits with municipal support.

But significant limitations constrain current models:

- **Most programs serve fewer than 50 vehicles**
- **Extensive intake processes** require housing-focused case management
- **Operational restrictions** prohibit alcohol and require daytime departure
- **Time limits** treat vehicle residency as temporary crisis rather than legitimate choice

Lewis and colleagues' research finds that program participants value legal certainty, bathroom access, and freedom from harassment more than extensive social services (Lewis et al., 2024).

3.3 Infrastructure Contradictions: When Transportation Meets Housing

The Rest Area Paradox

Wasserman and colleagues' analysis reveals a fundamental contradiction in how transportation systems relate to homelessness (Wasserman et al., 2023). Transportation infrastructure creates conditions that both enable and criminalize vehicle residency, while transportation planning emphasizes mobility as essential for economic participation.

State rest areas exemplify this contradiction. Originally designed for driver safety and short-term stops, rest areas have become de facto housing infrastructure for vehicle residents who cannot access urban parking. But rest areas are explicitly prohibited from serving residential functions, creating legal and practical impasse.

Urban Parking Infrastructure Failures

Cities mandate parking minimums that require massive oversupply relative to actual demand, then prohibit overnight activity that would utilize unused capacity. **Parking garages sit empty after business hours while vehicle residents circle around looking for stealth parking.**

The infrastructure contradiction extends beyond capacity. Parking facilities designed solely for vehicle storage lack basic human amenities (restrooms, water, waste disposal) necessary for habitation. Adding these amenities requires acknowledging that parking infrastructure can serve residential functions, challenging planning assumptions about land use separation.

3.4 The Stigma-Policy Feedback Loop

The NIMBY Response Pattern

Belcher and DeForge's analysis reveals how community attitudes toward visible poverty create political pressure for policies that prioritize appearance management over problem solving (Belcher & DeForge, 2012).

Vehicle residency faces particular stigma challenges because it violates multiple social norms simultaneously. It represents visible poverty in areas designed for consumption. It suggests

transience in spaces associated with stability. It involves unconventional living arrangements that challenge assumptions about proper housing.

The visibility factor proves especially important. Unlike other forms of homelessness that occur in designated service zones, vehicle residency can appear anywhere there is parking. This ubiquity forces communities to confront housing insecurity in spaces where it violates aesthetic and social expectations.

Community resistance follows predictable patterns:

- **Initial tolerance** gives way to complaints about specific behaviors
- **Complaints escalate** to demands for enforcement action
- **Enforcement proves insufficient**, leading to demands for comprehensive restrictions
- **Each restriction failure** justifies the next escalation

Media and Public Discourse

Media coverage typically reinforces stigma through problem-focused framing that emphasizes community impacts rather than resident experiences. Stories about "RV encampments" frame vehicle residency as a disorder requiring elimination rather than housing strategy requiring support.

The discourse emphasizes extreme cases of broken-down vehicles, waste accumulation, business conflicts, all while ignoring the working vehicle residents documented in Chapter 2. This selection bias creates public understanding of vehicle residency as inherently problematic, making accommodation policies appear to reward antisocial behavior.

3.5 Policy Failure Analysis: Why Current Approaches Don't Work

The Exclusion Effectiveness Problem

Giamarino and colleagues provide clear evidence that exclusion policies fail to achieve stated goals (Giamarino et al., 2022). Cities that adopt comprehensive restrictions don't experience reductions in vehicle residency—they experience displacement to areas with fewer restrictions. The regional pattern shows vehicle residency increasing county-wide while individual cities report "success" by pushing residents elsewhere.

Economic analysis shows exclusion policies impose significant costs while achieving minimal benefits. Enforcement requires dedicated personnel and court processing. Citations generate revenue but often go unpaid. Towing procedures can cost more to operate than they recover in fees.

Most importantly, exclusion policies can increase the behaviors they aim to reduce. Vehicle residents forced to move frequently cannot establish community connections that promote stability. Constant enforcement creates stress that makes employment more difficult, potentially prolonging vehicle residency rather than ending it.

Safe Parking Limitations

Current safe parking programs serve approximately 2,500 people nationwide while estimates suggest hundreds of thousands of Americans live in vehicles (Lewis et al., 2024). The gap between need and capacity is so large that programs function more as prototypes than systematic responses.

Program design limitations explain much of the capacity gap:

- **Extensive intake processes** screen out many potential participants
- **Sobriety requirements** exclude people who could benefit from basic infrastructure
- **Housing-first emphasis** cannot serve people making long-term vehicle residency choices
- **Operational constraints** often place programs in areas inconvenient for employment

The Service Mismatch Problem

Current approaches assume vehicle residency represents a housing crisis requiring social service intervention. But Chapter 2's research shows working vehicle residents often need **infrastructure more than services**. Service-heavy programming creates barriers rather than solutions for people who need legal parking, bathroom access, and safety but not case management.

3.6 Toward Infrastructure Solutions: The Missing Framework

The Demographic-Policy Mismatch

The policy failure analysis reveals fundamental mismatch between available approaches and demographic realities documented in Chapter 2. Exclusion policies treat vehicle residency as inappropriate behavior requiring elimination. Safe parking programs treat it as a housing crisis requiring resolution. **Neither approach acknowledges vehicle residency as legitimate housing choice requiring accommodation.**

The Strategic Budgeters that use vehicle residency for financial optimization don't fit crisis intervention models. They need infrastructure that enables workforce participation, not services designed to change their housing choices.

The Infrastructure Alternative

The analysis points toward an infrastructure-focused alternative that treats vehicle residency as legitimate housing choice requiring appropriate support. This approach would prioritize providing basic amenities, including legal parking, bathrooms, safety, utility access, without requiring participation in housing-focused programming.

An infrastructure approach would acknowledge that current transportation and parking systems fail to serve vehicle residents' needs, requiring purposeful adaptation rather than incidental accommodation. It would treat vehicle residency as a **mobility justice issue**: ensuring that people who must live in vehicles can access infrastructure necessary for economic and social participation.

Implications for Garage Adaptive Reuse

The policy failure analysis establishes clear rationale for the garage adaptive reuse approach developed in Chapter 4. Current policies create artificial scarcity of appropriate infrastructure while leaving existing infrastructure underutilized. **Parking garages represent transportation infrastructure specifically designed for vehicle access that could be adapted to serve vehicle residency needs.**

The garage model addresses key limitations identified in current approaches:

- Unlike street parking, garages provide weather protection and security infrastructure
- Unlike safe parking programs, garages can accommodate different user types simultaneously
- Unlike exclusion policies, garage adaptive reuse creates additional infrastructure

Most importantly, garage adaptive reuse treats vehicle residency as an infrastructure planning challenge rather than a social service or law enforcement problem. This reframing opens possibilities for addressing the demographic diversity and infrastructure needs documented in Chapter 2 while avoiding political and operational constraints that limit current accommodation approaches.

The next chapter develops these possibilities into specific program models that translate barrier analysis into intervention strategies designed to enable rather than constrain the housing innovations vehicle residents represent.

4.0 The Garage Intervention

Adaptive Reuse for Vehicle Residency



Photograph by author

Previous chapters established a clear challenge: cities exclude vehicle residents through policies that fail to reduce vehicle residency while simultaneously failing to provide infrastructure that serves the diverse demographic segments actually living in vehicles. Current safe parking approaches serve less than 5% of need while operating under service-heavy models misaligned with user preferences and geographic realities.

This chapter proposes garage adaptive reuse as a lightweight, scalable infrastructure intervention that addresses policy shortcomings while serving the three demographic segments identified in Chapter 2. Rather than creating new facilities or programs, the approach leverages existing underutilized transportation infrastructure to provide accommodations.

4.1 **The Garage Opportunity: From Underutilization to Accommodation**

Parking garages represent the intersection of three converging trends: declining utilization due to remote work and changing transportation patterns, substantial infrastructure investment seeking higher returns, and growing demand for vehicle residency accommodation in urban areas where enforcement concentrates residents in industrial zones with limited services.

Why Garages Work Better Than Existing Alternatives

Infrastructure Advantages: Garages provide weather protection, security infrastructure, and vehicle access by design. Unlike street parking, they offer controllable environments that can accommodate basic human needs without triggering the visibility concerns that fuel community resistance. Unlike safe parking programs requiring new construction or site development, garages represent existing capacity that can be adapted rather than created.

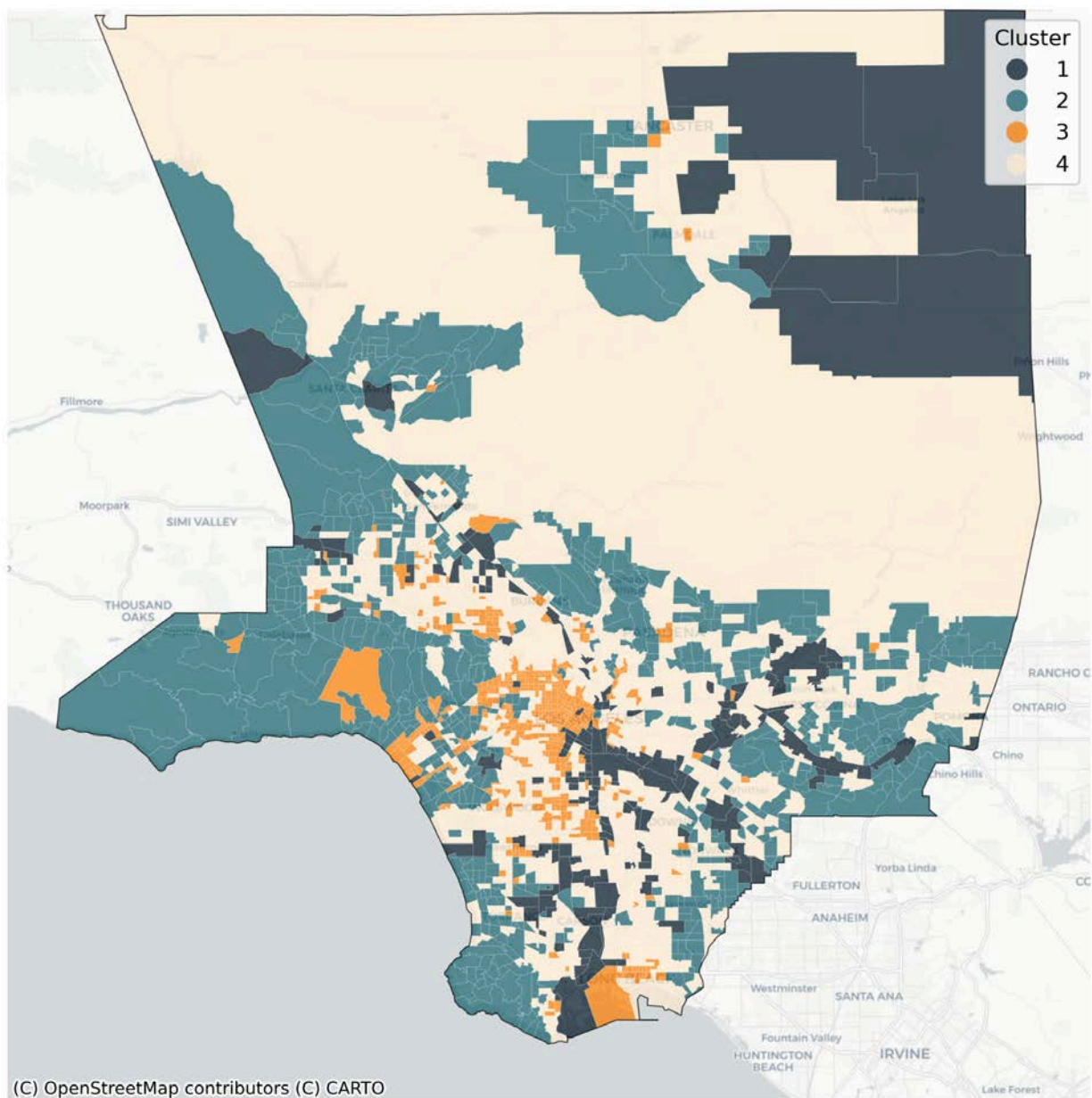
Garage programming addresses the fundamental mismatch identified in Chapter 3 between transportation infrastructure designed for vehicle storage and actual use patterns involving extended occupancy. Rather than forcing vehicle residents to seek services elsewhere—creating the very visibility and conflicts that drive exclusion policies—garage adaptation integrates basic amenities within infrastructure specifically designed for vehicle access.

The economic case for adaptation over alternatives becomes compelling when enforcement costs, new construction expenses, and operational inefficiencies of current approaches are compared to retrofit investments that generate revenue while serving unmet demand. Millard-Ball's analysis of street-to-housing conversions demonstrates how transportation infrastructure adaptive reuse can generate positive economic returns through increased property values, reduced maintenance costs, and community development benefits (2021). Thigpen's analysis of parking utilization patterns shows substantial overnight vacancy in urban parking facilities, indicating unused capacity that garage programming can monetize while addressing documented social needs (Thigpen, 2018).

4.2 Spatial Analysis Framework: Data-Driven Site Selection

Geographic analysis provides systematic methodology for identifying where garage interventions can achieve maximum impact while minimizing community conflicts. Machine learning analysis of vehicle resident clustering patterns reveals strong correlations with industrial land use, proximity to services, and areas with lighter enforcement. **Full documentation on data sources and spatial analysis processing can be found in Appendix B.**

Vehicle Residency Cluster Typology Los Angeles County (2023)

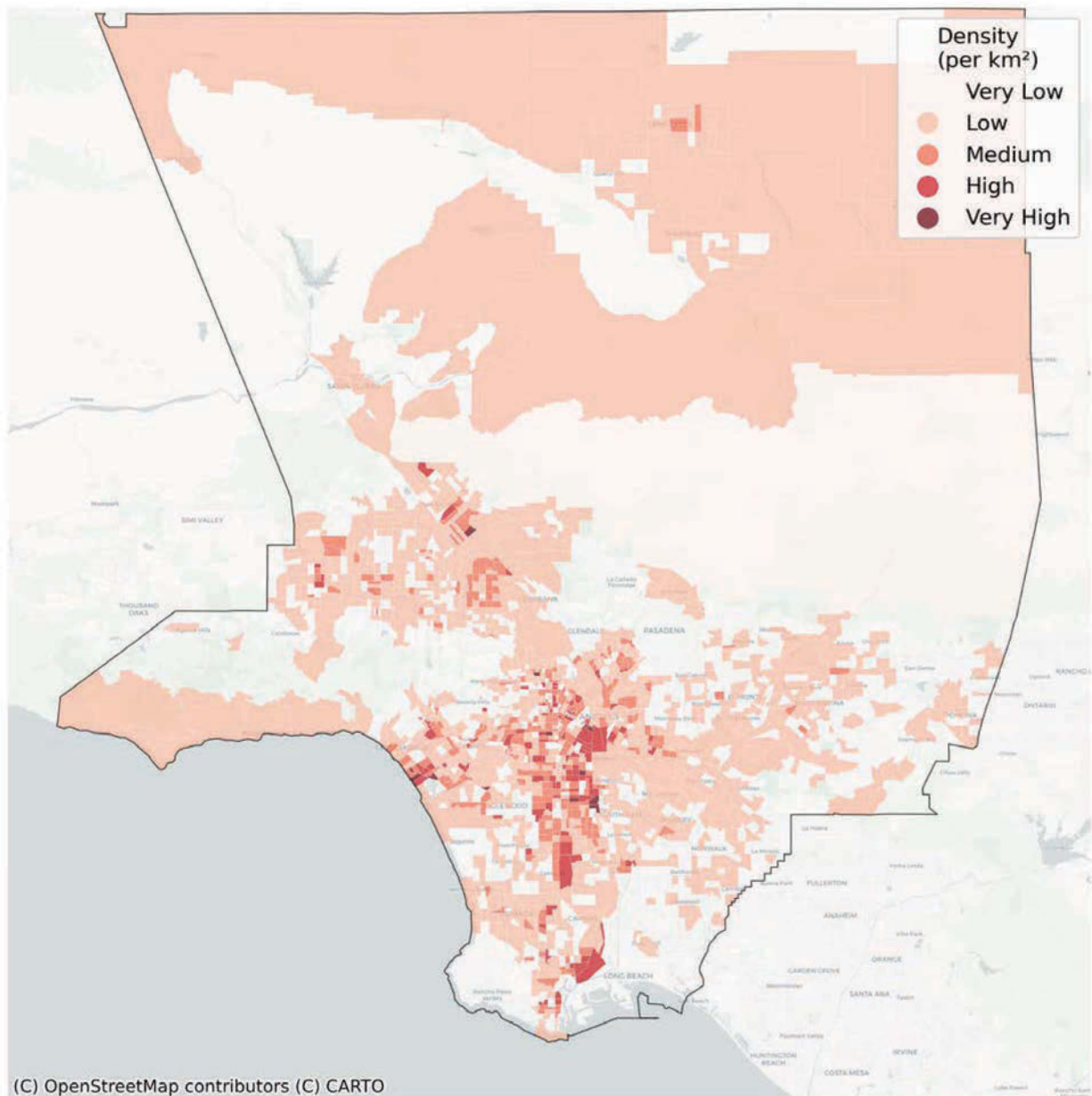


Map showing overlay of vehicle residency cluster typologies

Understanding Demand Patterns

Demand Mapping: Vehicle residents cluster predictably in industrial corridors, transportation networks, and service-adjacent areas where parking supply exceeds residential demand and enforcement remains limited. These patterns reflect rational location choices based on safety, service access, and enforcement avoidance rather than random distribution, indicating that infrastructure provision in high-concentration areas can serve existing hotspots rather than creating ones.

Vehicle Residency Density Los Angeles County (2023)

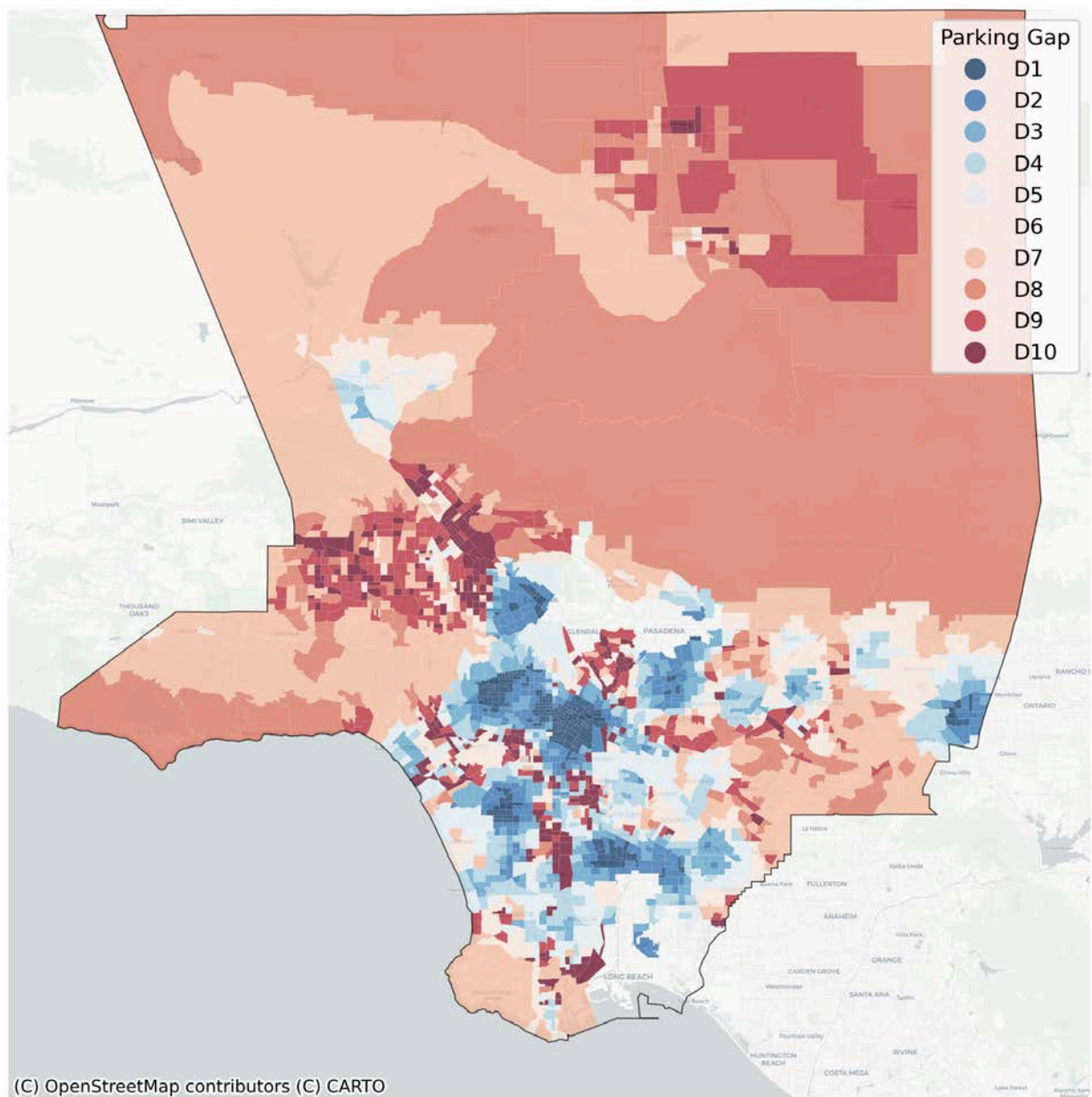


Map showing overlay of vehicle residency density hotspots

Identifying Available Infrastructure

Supply Assessment: Public parking facility inventory reveals substantial overnight capacity in areas experiencing vehicle resident concentrations. Gap analysis methodology identifies specific locations where high vehicle resident density converges with abundant parking infrastructure, providing targets for garage programming rather than speculative site development.

Vehicle Residency and Parking Supply Gap Index Los Angeles County (2023)

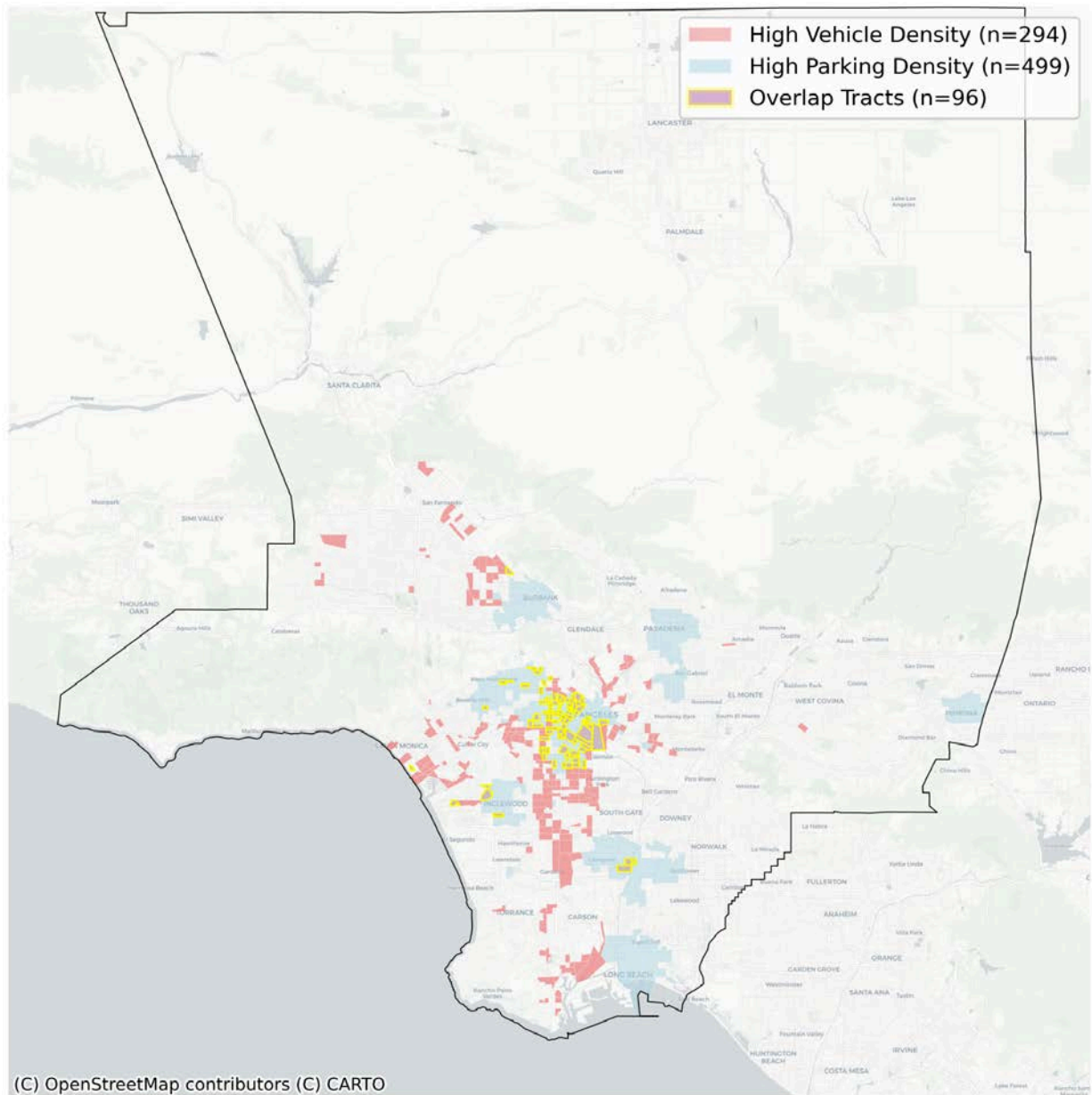


Map showing overlay of vehicle residency and parking supply gap index

Locking in Interventions Areas

The spatial framework enables systematic rather than opportunistic site selection. Instead of responding to individual property owner interest or political pressure, municipalities can target interventions where need and capacity align, building evidence base for successful programming that can inform broader policy development and scaling strategies.

Vehicle Residency Hotspots with High Parking Supply Los Angeles County (2023)

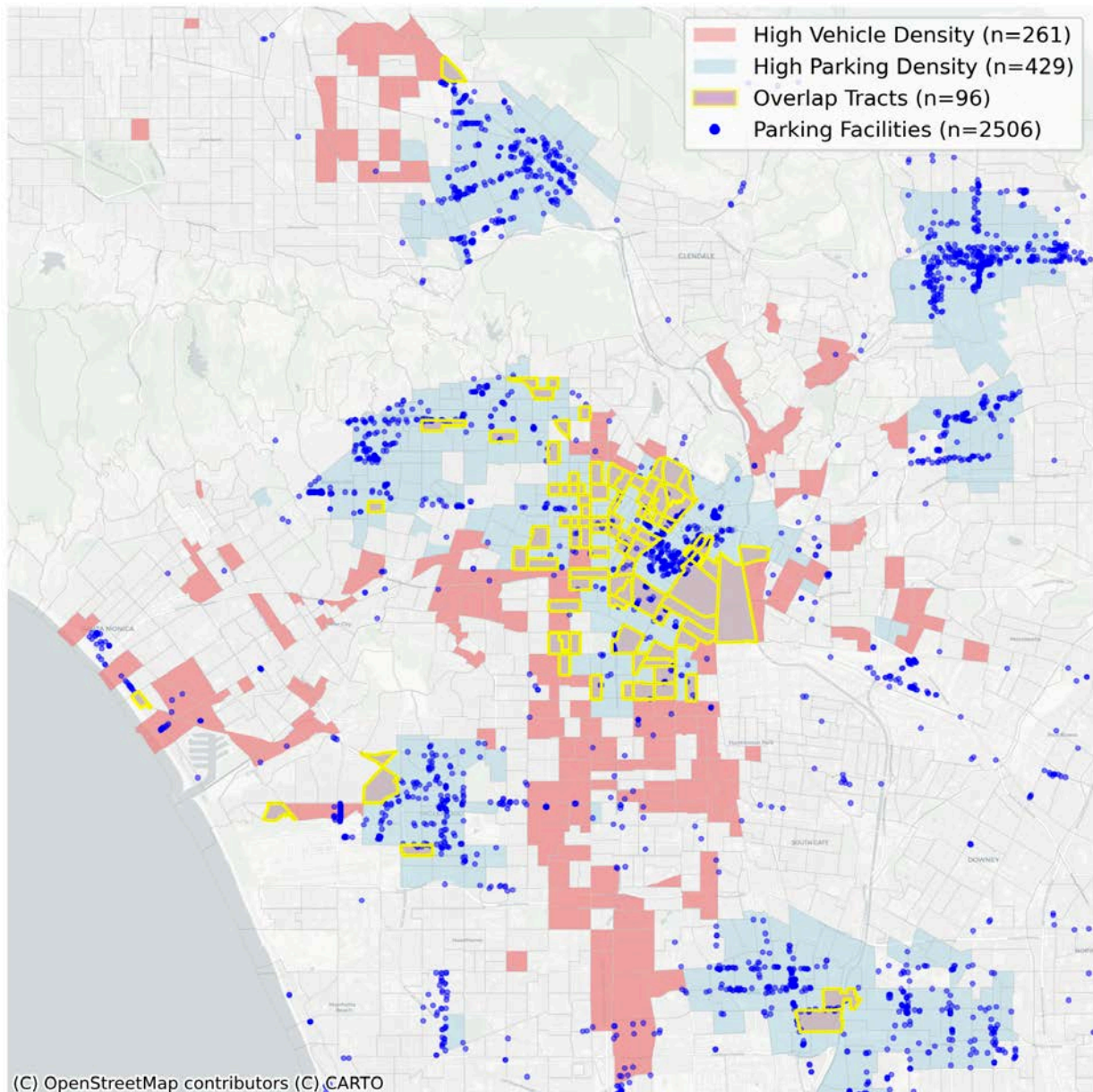


Map showing overlap of the top 20% census tracts for vehicle resident density and parking facility density

A Replicable Process

The methodology can be replicated across different metropolitan areas, providing a scalable framework for regional approaches to vehicle residency that move beyond jurisdictional exclusion policies toward coordinated accommodation strategies.

Vehicle Residency Hotspots with High Parking Supply Los Angeles Urban Core (2023)

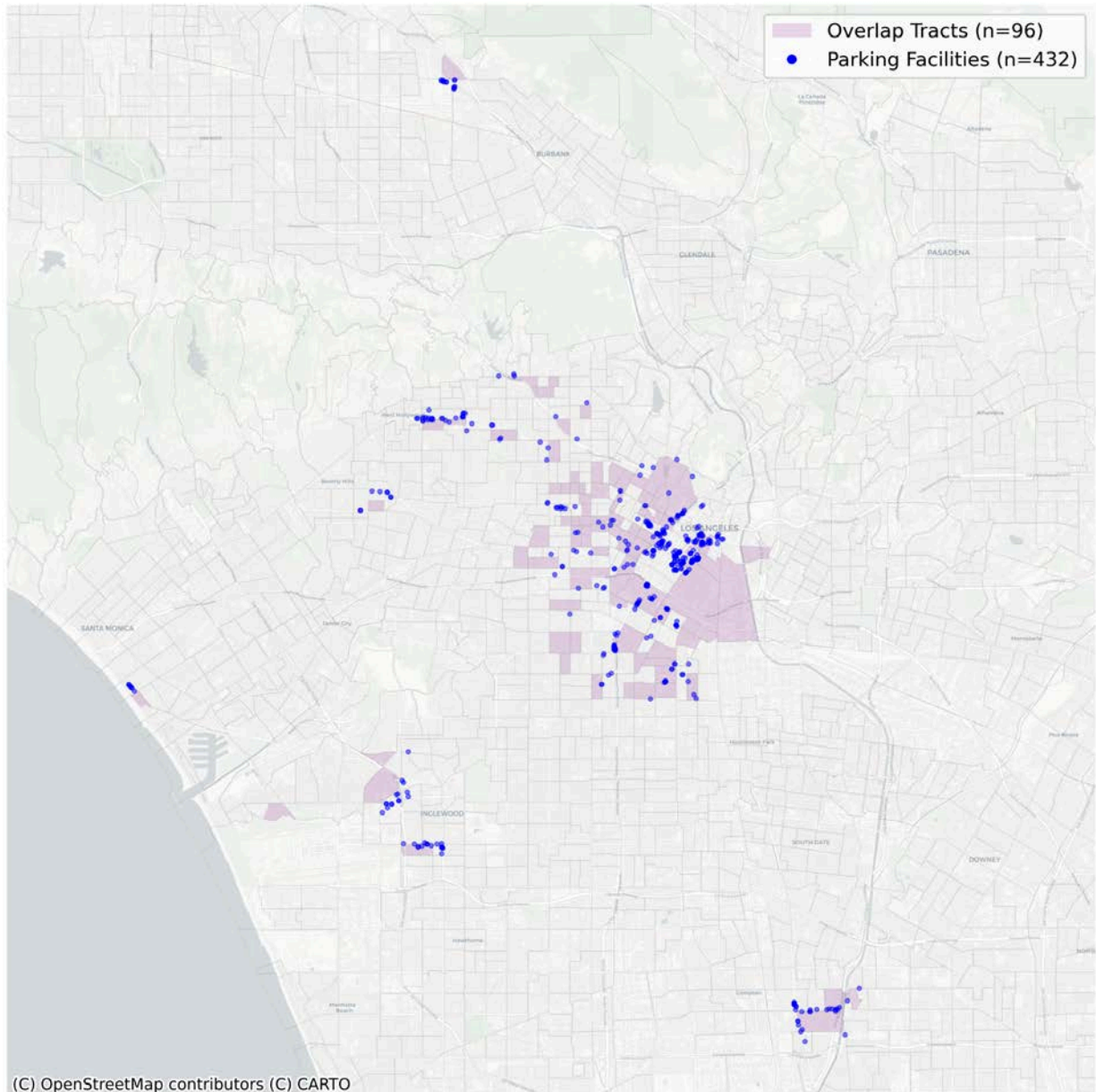


Map showing overlay of vehicle resident density hotspots with parking facility locations

The Final Selection

This assessment shows that vehicle residents wouldn't need to travel far from their current settlement areas to access garage-based safe parking. This proximity analysis addresses the critical concern that safe parking programs often fail when they're located too far from where people actually live and work, making sure interventions remain within existing community networks.

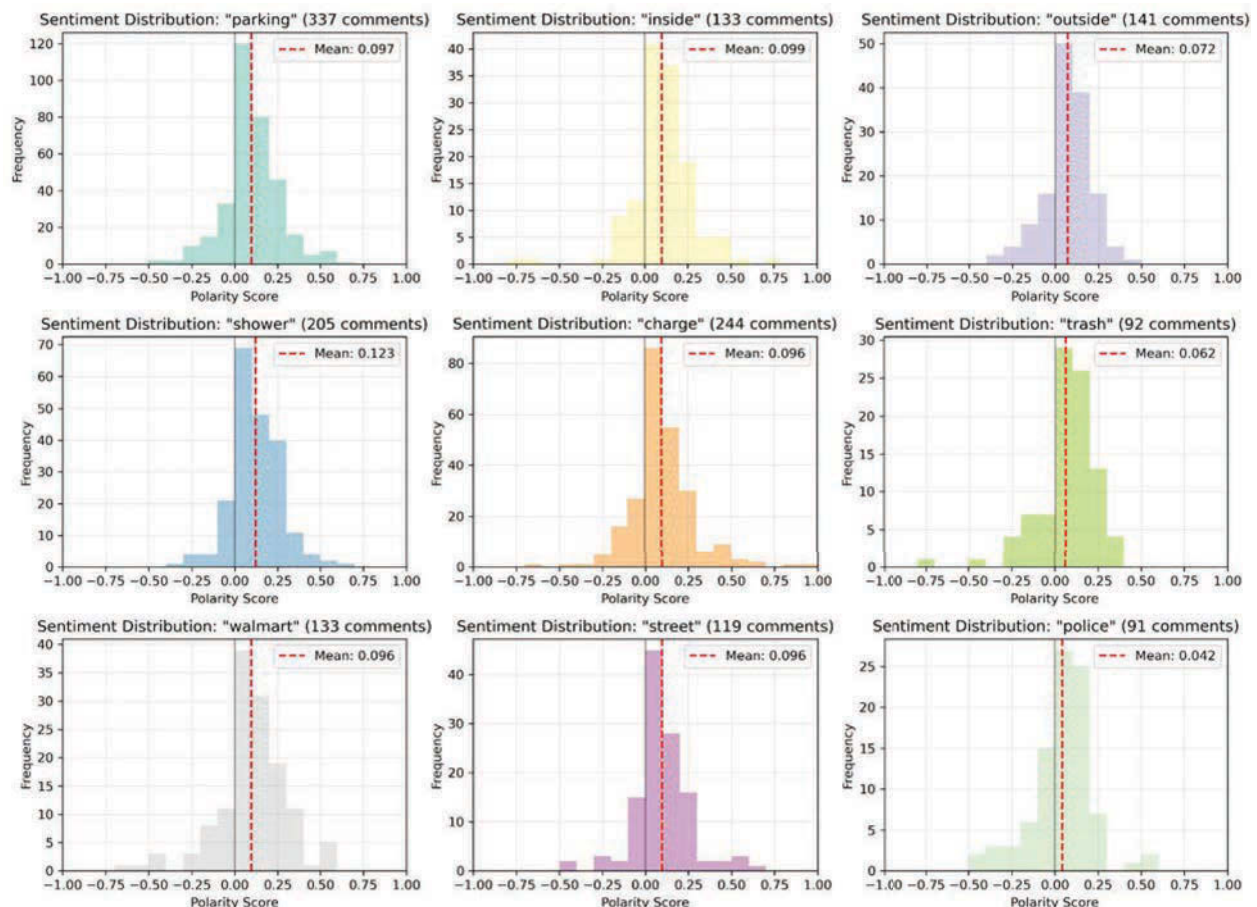
Public Parking Facilities Near Vehicle Residency Hotspots Los Angeles Urban Core (2023)



Map showing overlay of parking facility locations near vehicle resident hotspots (0.5km buffer)

4.3 User-Informed Design Framework

Natural language processing of vehicle resident online discourse shows specific infrastructure preferences that translate to garage design specifications. Analysis of thousands of comments shows positive sentiment around covered spaces, utility access, and waste management, while demonstrating resistance to heavy security presence, forced programming, and institutional features.



Sentiment analysis word cloud showing positive terms (covered, charging, shower) in green and negative terms (guards, outside, trash) in red

These findings validate infrastructure-focused rather than service-heavy approaches. Vehicle residents express appreciation for practical amenities that enable self-sufficiency while showing skepticism toward programming that requires participation or oversight. Garage design can respond to these preferences by providing essential infrastructure: **legal parking**, **weather protection**, **utility access**, and **waste disposal** without requiring participation in services or case management.

Core Model Components

The garage intervention model centers on seven fundamental components that distinguish it from both exclusion policies and traditional safe parking approaches:

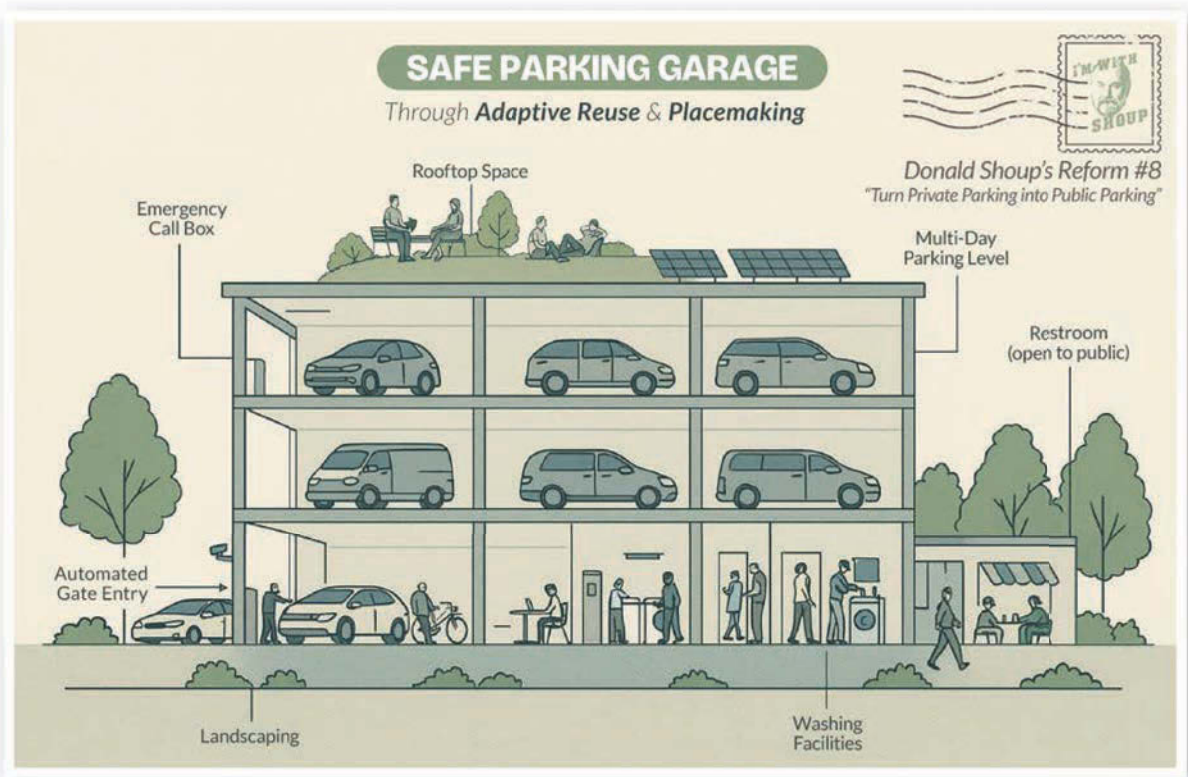
- **Low-barrier entry** eliminates extensive intake processes, screening requirements, and service participation mandates that limit current program accessibility. Digital access systems enable transparent allocation while maintaining user privacy and autonomy.
- **Self-managed operations** reduce staffing overhead while empowering users to regulate their own space utilization and community dynamics. Technology-enabled monitoring provides security and usage data without requiring on-site supervision.
- **Use of existing infrastructure** leverages transportation assets already designed for vehicle access rather than requiring new construction or site development. Adaptation costs focus on basic amenities rather than comprehensive reconstruction.
- **Proximity to employment** ensures garage locations serve work-integration needs that drive urban parking demand across all demographic segments. Site selection prioritizes access to transportation networks and business districts.
- **Fee structures** provide tiered pricing that matches service levels to user capacity while generating revenue supporting operational sustainability. Transparent pricing eliminates the uncertainty and variability that characterizes street parking enforcement.
- **Guard-less security** relies on environmental design, lighting, technology monitoring, and community self-regulation rather than security personnel that create an institutional atmosphere that is against user autonomy preferences.
- **Basic amenities** focus on essential human needs: semi-permanent bathroom, waste disposal with frequent collection, power access from the wall, rather than comprehensive programming that may exceed user preferences.

Architectural Programming Principles

Nekoba's architectural framework for garage adaptive reuse provides tested methodology for translating user preferences into spatial programming (Nekoba, 2022). The **four-lens approach** enables phased implementation that starts with basic infrastructure and evolves based on utilization patterns and user feedback rather than predetermined programming assumptions.

The four-lens model is described by Nekoba as such:

- **Circulation design** accommodates different vehicle types and user mobility patterns without requiring standardized layouts that may not serve diverse resident needs.
- **Community engagement** elements enable voluntary social interaction without forced congregation that triggers the community paradox identified across demographic segments.
- **Environmental comfort** addresses weather protection and basic human needs within existing structural frameworks.
- **Material flexibility** supports adaptable programming that can respond to changing demographics and utilization patterns.



Conceptual diagram showing garage programming as part of broader transportation/housing system

The design framework prioritizes dignity and choice over efficiency and surveillance. Rather than maximizing vehicle capacity or enabling intensive monitoring, garage programming creates environments that support the strategic choices vehicle residents make about housing, work, and community while providing infrastructure that makes those choices more viable and less visible to surrounding communities.

4.4 Policy Framework for Stakeholder Support

Successful garage programming requires systematic stakeholder engagement that builds community support before pursuing political implementation. Carsharing precedent demonstrates how early community engagement can transform initial skepticism into program support through transparent communication and demonstrated benefits, providing a template for garage programming.

Shaheen's analysis of carsharing program implementation across the country provides a successful framework for creating policy around vehicle residency (Shaheen et al., 2010). The research shows how cities manage shared parking allocation, similar to the challenges facing garage model adoption.

Community Engagement as Foundation

Pre-Implementation Engagement Strategy: Carsharing programs succeeded by presenting clear program boundaries, demonstrating community benefits, and providing ongoing communication

channels. Bay Area surveys showed 93% community support for converting parking to shared use, but only after residents understood program operations and limitations. The key insight: early engagement prevented the escalation of initial concerns into organized opposition.

Benefit Demonstration: Successful carsharing programs emphasized how shared parking advanced community goals—reduced traffic congestion, increased parking availability for residents, environmental benefits—rather than simply requesting accommodation for new users. Garage programming can adopt similar framing by emphasizing infrastructure optimization, economic development, and safety improvements through activation of underutilized spaces.

Evidence-Based Community Engagement: Spatial analysis demonstrates strategic site selection reducing neighborhood conflicts by targeting industrial areas and commercial corridors rather than residential neighborhoods. Economic impact projections show positive effects for surrounding businesses through increased local spending and activation of underutilized infrastructure that can improve rather than detract from area safety and appearance.

Following carsharing's engagement model, garage programming should present clear operational parameters—capacity limits, user screening, operational hours, maintenance protocols—that provide community assurance about program scale and management. Sunset clauses and performance metrics enable community evaluation of actual impacts rather than theoretical concerns.

Political Implementation Framework

With community foundation established, garage programming can leverage proven policy architecture for managing shared parking resources. Shaheen's analysis of carsharing program implementation provides a systematic approach to programming that avoids the political and operational constraints limiting current safe parking models (Shaheen et al., 2010).

Systematic Management Framework: The seven-lever framework creates a systematic approach that builds on a community engagement foundation. They are:

- Allocation processes
- Capacity caps
- Fees
- Signage and maintenance
- Enforcement
- Impact studies
- Public involvement

Unlike safe parking programs requiring extensive intake and screening, garage programming can adopt carsharing allocation models based on transparent criteria and self-regulating access systems. Capacity caps provide community assurance about program scale while preventing the unlimited growth fears that fuel NIMBY resistance. Digital access systems enable monitoring without requiring on-site staff or institutional management.

Political Positioning Strategies: Shaheen's research documents three positioning strategies municipalities take toward shared mobility:

- **Environmental benefit positioning** (free/subsidized access)
- **Sustainable business framework** (cost-recovery fees)
- **Commercial user treatment** (market rates)

For example, the City of Berkeley treats carsharing as fleet optimization, achieving operational savings that justify below-market allocations. The City of San Francisco frames it as climate policy, providing free stalls based on emission reductions. For the garage model, the three approaches can be framed as such:

Environmental benefit positioning frames garage programming as transportation demand management that reduces vehicle miles traveled, supports mode shift goals, and maximizes utilization of existing infrastructure investments. **Sustainable business framework** helps recover municipal enforcement costs by directly providing accommodation that current approaches cannot deliver at scale. **Commercial user treatment** provides a politically neutral approach that charges market rates while offering services unavailable elsewhere.

Multi-Stakeholder Integration

Stakeholder Alignment Strategy integrates garage programming with existing municipal priorities rather than requiring new policy commitments or budget allocations. Transportation agency integration advances parking utilization efficiency and infrastructure optimization goals. Business community engagement demonstrates economic benefits while addressing operational concerns through professional management and clear operational protocols.

Carsharing's success in building business community support provides direct lessons for garage programming. Business stakeholders initially feared competition for parking and customer access, but came to appreciate increased foot traffic, reduced employee parking demand, and neighborhood activation that carsharing provided. Garage programming can offer similar benefits through increased local spending by vehicle residents and professional management that maintains area appearance and safety.

Implementation Sequence: Carsharing precedent demonstrates successful deployment patterns that begin with small-scale pilots of 25 spaces or less, collect performance data, and scale based on demonstrated outcomes rather than initial political support. Shaheen's Bay Area survey found 93% support for converting parking to shared use, though every option drew at least 20% opposition. Residents showed more support than commuters, and half thought operators should pay for spaces. The pattern suggests well-managed programs can overcome initial skepticism through performance.

The research transforms vehicle residency from accommodation request to policy implementation challenge. Cities need adaptation of proven frameworks, and the allocation criteria, fee schedules, operational protocols, and evaluation systems already exist in successful carsharing programs. This provides political cover for supportive officials who need defensible rationale beyond compassion appeals. Environmental benefits, operational efficiency, and documented implementation models further strengthen policy arguments that social service framing alone cannot achieve.

Shaheen's framework offers garage model advocates what they've largely lacked: policy development based on documented success. The **seven-lever implementation model**, **three-tier support structure**, and **iterative scaling approach** provide a complete blueprint for jurisdictions ready to move beyond case-by-case decisions toward actionable program development.

4.5 Differentiated Program Models

Spatial analysis and demographic research support differentiated programming that matches service levels to user capacity and geographic context rather than one-size-fits-all approaches that have limited current safe parking program effectiveness.

Tiered Service Level Architecture

Comparison of Different Tier Features				
	 Basic Tier	 Standard Tier	 Premium Tier	
Cost	\$5-15/day	\$50-200/month	\$200+/month	
Amenities	Legal parking, basic sanitation	Enhanced amenities, Wi-Fi	Community spaces, social events	
Access	Digital access	Longer duration	Extended stay	
Focus	Essential infrastructure	Lifestyle optimization	Community building	

- **Basic Tier (\$5-15/day):** Legal overnight parking, basic sanitation facilities, waste disposal, minimal lighting and security. Self-service model with digital access reducing operational overhead while providing essential infrastructure enabling continued workforce participation.
- **Standard Tier (\$50-200/month):** Enhanced amenities including Wi-Fi, charging stations, longer-duration access, proximity to transit and employment centers. Work-enabling infrastructure supporting lifestyle optimization strategies without requiring housing transition programming.
- **Premium Tier (\$200+/month):** Community spaces, social integration opportunities, extended-stay arrangements, resident input in programming decisions. Addresses community building needs while maintaining autonomy and choice that distinguish this approach from institutional service models.

Location-Based Programming Strategy

Geographic Cluster-Based Programming: Vehicle resident concentrations in different locations reflect different demographic compositions and infrastructure needs:

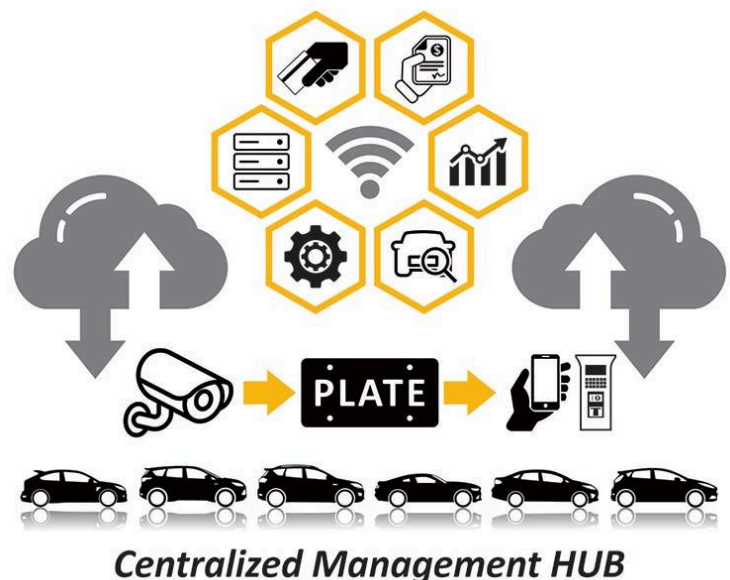
- **Industrial corridor programming** serves primarily Strategic Budgeters requiring basic infrastructure with minimal oversight.
- **Suburban transition zones** accommodate Lifestyle Optimizers seeking enhanced amenities and work integration.
- **Urban core programming** addresses Self-Sufficient Nomads valuing community features and social connection opportunities.

This geographic differentiation enables programming efficiency while avoiding demographic conflicts that emerge when different user segments with incompatible needs and expectations share facilities designed for single populations. Rather than screening users for demographic characteristics, spatial programming allows self-selection based on location preferences and service priorities.

System Integration Approach

Operational Integration: Rather than creating parallel service systems, garage programming integrates with existing municipal infrastructure management, transportation planning, and parking operations. This integration provides operational efficiency while ensuring garage programming advances rather than conflicts with broader transportation and land use goals.

Technology-enabled access and monitoring systems reduce staffing requirements while providing usage data that supports program evaluation and scaling decisions. For example, SP+, a parking service provider, leverages a fully integrated suite of technologies to streamline operations, reduce staffing needs, and generate real-time usage data that informs program evaluation and scaling. Their system connects **pay stations, mobile and fixed license plate recognition (LPR) systems, enforcement tools, electronic citation reporting, and vehicle monitoring** through a centralized API solution. Data flows seamlessly between components, from payment and permitting systems. The result is a technology-enabled system that gives access to information across all aspects of parking.



SP+ Parking Management Toolkit (<https://www.spplus.com/>)

4.6 Feasibility Analysis and Financial Modeling

Financial analysis demonstrates garage programming's economic viability compared to current enforcement approaches and alternative accommodation strategies. Market demand validation shows a massive service gap between need and current capacity, while willingness-to-pay analysis across demographic segments indicates revenue potential supporting operational sustainability.

Market Economics and Revenue Potential

Demand and Revenue Projections: Service gap analysis showing 95% unmet need sets a solid demand baseline for programming that goes beyond any realistic garage capacity, proving there's real market potential rather than speculative demand. Willingness-to-pay varies from \$5-15 daily to \$200+ monthly, allowing pricing models that cover costs while remaining affordable for target users.

Transportation Equity in Pricing Structure: The garage model's tiered approach addresses transportation equity concerns that Manville and Goldman identify as "regressive pricing effects" in pricing systems that can exclude essential users (2017). Strategic Budgeters who use vehicle residency as an economic necessity strategy can access basic tier services at low rates, while Lifestyle Optimizers and Self-Sufficient Nomads pay market rates for services they value and can afford.

Competitive analysis: Compared with current approaches, garage programming shows promising advantages. In Los Angeles, current safe parking programs, while helpful, reach only 3% of vehicle dwellers and cost nearly \$6.5 million annually (Pascoe, 2024). Yet, that annual cost estimate is still substantially less than the combined expenses of enforcement, emergency services, and homeless support services. The good news is, safe parking program costs per person significantly exceed garage programming expenses while serving a fraction of the need.

Capital Investment and Operating Efficiency

Capital and Operational Framework: Infrastructure retrofit requirements focus on basic amenities rather than comprehensive reconstruction, reducing capital costs while enabling phased implementation that responds to utilization patterns. Revenue projections from tiered pricing support operational sustainability without requiring ongoing municipal subsidies beyond initial capital investment.

Operational efficiency stems from infrastructure-focused rather than service-heavy programming. Unlike safe parking programs requiring case management, security, and transitional programming, garage adaptive reuse leverages existing parking management systems with minimal additional oversight. Technology integration enables access control, usage monitoring, and revenue collection without on-site staffing requirements.

Economic efficiency analysis comparing garage programming to new construction alternatives shows substantial capital savings while serving equivalent populations. Existing infrastructure, utility access, and structural capacity eliminate site development, foundation, and basic construction costs while providing weather protection and security features that new construction would need to add.

4.7 Limitations and Future Considerations

While the garage model provides a systematic framework for addressing vehicle residency infrastructure needs, several implementation challenges require further development and testing through pilot programs.

Regulatory Integration Complexity: Adapting existing zoning codes, building regulations, and parking ordinances to accommodate overnight residential use of parking facilities involves navigating multiple regulatory frameworks that were not designed to interact. Cities will need to develop streamlined approval processes and potentially modify existing adaptive reuse ordinances to enable garage programming without extensive case-by-case review.

Operational Model Refinement: The balance between self-managed operations and necessary oversight requires testing across different demographic contexts and urban environments. Technology-enabled access and monitoring systems show promise but need validation for effectiveness in maintaining security while preserving user autonomy. Partnership models with existing parking operators and service providers require development to integrate garage programming with established municipal systems.

Community Acceptance Variables: While carsharing precedent suggests pathways for building community support, vehicle residency carries different social and political challenges that may require adapted engagement strategies. The effectiveness of spatial analysis in identifying low-conflict sites needs verification through pilot implementation, and community benefit models require testing to ensure garage programming delivers promised economic and safety improvements.

Scaling Methodology: Systematic expansion from pilot sites to regional networks involves coordination across multiple jurisdictions with different regulatory frameworks, political priorities, and demographic contexts. Standardized protocols for site selection, design specifications, and operational management need iterative testing before broad implementation becomes feasible.

Financial Sustainability Models: Revenue projections based on willingness-to-pay analysis require validation through actual programming experience. The balance between accessibility for Strategic Budgeters and revenue generation sufficient for operational sustainability may require ongoing adjustment as programs mature and user demographics evolve.

Insurance and Liability Considerations: Garage operators may face increased insurance premiums when accommodating overnight vehicle residency compared to traditional vehicle storage. Insurance providers typically assess overnight human occupancy as higher-risk use, potentially affecting costs. Partnership models with municipalities or nonprofit operators may help address insurance barriers, but cost implications for private garage operators require further analysis and industry engagement.

These implementation challenges represent opportunities for evidence-based program development. The systematic approach outlined in this chapter provides a framework for addressing these questions through phased deployment that builds knowledge and capacity for broader application.

4.8 Navigating Around Unintended Consequences

Question:

How do you ensure that Safe Parking areas don't become makeshift encampments or lead to other unintended consequences? Some cities resist Safe Parking due to concerns about sanitation.

Answer: The garage model specifically addresses these concerns through several design strategies:

Infrastructure Design Prevents Encampment Formation

Physical Boundaries: Garages provide enclosed spaces rather than open lots where informal structures can proliferate. They prevent the sprawl that characterizes encampments while providing weather protection that reduces the need for tents or makeshift shelters.

Capacity Management: Unlike street-based safe parking that can expand organically, garages have fixed capacity limits. The physical structure prevents the "magnet effect" where additional people cluster around designated areas, creating the visibility and density that fuel community resistance.

Environmental Control: Enclosed garage spaces enable waste management, lighting, and sanitation infrastructure that open-air safe parking cannot provide. This addresses the sanitation concerns that often drive community opposition.

User Demographics Matter More Than Program Rules

The research shows that working vehicle residents, the primary demographic for garage programming, behave differently than traditional homeless service populations. Chapter 2's **demographic analysis** reveals that Strategic Budgeters, Lifestyle Optimizers, and Self-Sufficient Nomads all prioritize safety and community compatibility. Unlike populations experiencing crisis, they have incentives to maintain program rules because losing access affects their work and stability.

Self-Managed Operations vs. Institutional Programming

Traditional safe parking often fails because it uses institutional models (on-site staff, intensive programming, congregate services) that can attract populations seeking services rather than infrastructure. The garage model's **self-managed approach** with technology-enabled access attracts people who want independence, not service dependence. **Guard-less security** through environmental design, lighting, and community self-regulation avoids the institutional atmosphere that can create the "social service magnet" effect that cities fear.

Strategic Site Selection Reduces Conflicts

Spatial analysis identifies industrial corridors and commercial zones where garage programming complements rather than conflicts with surrounding land uses. Unlike safe parking in residential

areas that triggers NIMBY responses, industrial zone programming serves existing vehicle resident clusters without creating new concentrations in inappropriate locations.

Clear Operational Parameters With Community Input

Following **carsharing's success model**, garage programming should establish transparent operational standards—capacity limits, user expectations, maintenance protocols—that provide community assurance about program scale and management. Sunset clauses and performance metrics enable community evaluation of actual impacts rather than theoretical fears.

The Key Insight: Most "unintended consequences" stem from treating vehicle residency as homeless services rather than transportation infrastructure. When you design for working residents who need parking rather than service-dependent populations who need programming, you get different outcomes. The garage model succeeds because it serves people who want infrastructure to support their choices, not people seeking alternatives to making choices.

The next chapter synthesizes these findings to examine broader implications for transportation and housing policy and explores how the garage model points toward more inclusive approaches to infrastructure planning that accommodate diverse housing strategies.

5.0 Conclusion

5.1 From Crisis Narrative to Infrastructure Innovation

This research reveals that **vehicle residency represents housing innovation, not housing failure**. The eight vehicle residents interviewed make strategic choices requiring infrastructure support, not crisis intervention. Current approaches fail because they assume crisis rather than choice. Cities spend significant resources on enforcement that displaces rather than reduces vehicle residency. Safe parking programs serve less than 5% of need while operating under service models misaligned with user preferences. The garage model addresses these failures by treating vehicle residency as a **legitimate housing strategy requiring appropriate infrastructure support**.

Let's revisit our research questions:

How can garage adaptive reuse serve vehicle residents while addressing community concerns?

Spatial analysis supports strategic site selection by identifying industrial corridors with existing vehicle clusters, reducing neighborhood conflict. Carsharing precedents offer a policy framework that builds community trust through transparency and demonstrated benefits.

Who are urban vehicle residents? Three strategic segments making rational housing choices:

- **Strategic Budgeters** optimizing financial resources during career establishment
- **Lifestyle Optimizers** integrating work flexibility with geographic freedom
- **Self-Sufficient Nomads** pursuing independence through nomadic values

What barriers prevent appropriate parking access? Legal exclusion architecture criminalizes vehicle residency through parking regulations achieving displacement. Transportation planning creates infrastructure designed for vehicle storage but hostile to human habitation. Current approaches impose service requirements exceeding user preferences while serving insufficient populations.

What features effectively serve working vehicle residents? User-informed design prioritizing essential infrastructure, including legal parking, weather protection, sanitation, utilities, without requiring housing-focused programming. Tiered service matching amenity levels to economic capacity. Technology-enabled access reduces operational overhead while maintaining autonomy.

To translate infrastructure into policy, cities need not build anew. They must reframe existing assets like garages as adaptable housing infrastructure. This does not require a reinvention of shelter, but a modest redesign of what already exists.

The takeaways from this research are as such:

- **Reframe Vehicle Residency as a Planning Challenge, Not a Social Failure:** Recognize vehicle dwellers as part of a housing continuum. Shift from emergency responses to infrastructure strategies that meet people where they are.
- **Pilot Garage-Based Safe Parking in Strategic Locations:** Begin with municipal garages in service-rich, low-conflict zones. Start with basic retrofits, such as lighting, sanitation, and secure access, and then scale based on community feedback.
- **Design Tiered Access Models:** Offer service levels that match user needs, from basic overnight parking to premium access with community facilities.
- **Use Spatial Data to Guide Deployment:** Focus on hotspots where demand already exists. Prioritize infrastructure overlays that avoid displacement and maximize uptake.
- **Engage Stakeholders Early:** Address public concern with transparency, clear rules, and evidence of benefits.

5.2 Broader Implications for Transportation and Housing Policy

The garage model demonstrates how transportation and housing planning can integrate rather than operate separately. Vehicle residency represents legitimate transportation infrastructure use requiring accommodation rather than elimination. Parking facilities can serve residential functions with basic amenities, **transforming underutilized assets into community-supporting resources.**

Transportation equity advances when infrastructure serves diverse users rather than single-purpose functions. The garage approach enables economic participation among populations current policies displace, aligning infrastructure with mobility justice principles about equitable employment access.

Innovative housing policy recognizes alternative housing models as valid, supports diverse options through flexible infrastructure, and promotes regional coordination to address displacement and avoid restrictive service requirements.

5.3 Limitations and Future Research Directions

Implementation questions require resolution through pilot programming. Key challenges include:

- **Regulatory integration** across municipals needing streamlined approval processes
- **Insurance models** for private operators facing potential premium increases
- **Technology validation** for access control while preserving user autonomy
- **Community acceptance** testing across different urban contexts

Research opportunities include pilot evaluation methodologies, comparative analysis across metropolitan areas, long-term outcome assessment, and economic impact measurement. Policy development needs include standardized adaptive reuse ordinances, regional coordination mechanisms, and transportation demand management integration.

5.4 A Different Urban Future: Infrastructure for Diverse Housing Strategies

Think of a well-designed public library. There's a quiet study area for students preparing for exams, a children's section with story time and bright colors, computer stations for job seekers, and comfortable reading chairs for people who just want to browse magazines. Everyone gets what they need in the same building, and the different areas make the whole library work better for everyone.

The garage model works the same way. Eric could finally stop playing stealth parking roulette and focus on building his freelance business instead of worrying about tickets. Deborah could have a stable base for her LA event management work, a place to park legally while she stages events across the city. Mac would find the community he's been seeking, with other vehicle residents who share his values of independence and mutual support. The working couple wouldn't need to master the art of blending in at commercial-residential intersections. They could open their van door without being "very clandestine" and actually interact with the world around them. Jake could maintain his self-sufficiency while having access to the basic infrastructure: water, trash disposal, safe parking, that cities should provide for all residents, regardless of their housing choices.

For cities, this means moving from asking "How do we get rid of these people?" to "How do we serve all our residents well?" The garage model shows that infrastructure can work for everyone when it's designed with different needs in mind. Vehicle residents get dignity and stability. Communities get activated spaces and reduced conflicts. Cities get cost-effective solutions that aren't a lot of work.

The choice is simple: continue expensive policies that push the problem around, or try approaches that turn underused assets into community resources. The garage model provides **a concrete solution** that serves human needs while building the kind of inclusive cities that work for everyone.

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Appendix A

Interview Participant Profiles

Participant 1: Mac, the Yoga Instructor (Quartzsite Town Park Interview #1)

Vehicle Type: Van

Employment: Semi-retired with passive income (\$900/month from rental property)

Age Range: Older adult

Residency Duration: Established nomad

Parking Patterns:

- Prefers stealth camping in urban areas
- Seeks nature integration (parks, trees, medians)
- Values safety and invisibility over amenities

Key Motivations:

- Lifestyle choice enabled by housing investment
- Seeks community and human connection
- Philosophical about nomadic living as natural state

Willingness to Pay: \$5-10/day, \$200/month for community-based parking

Priority Needs: Safety, community, bathrooms, gas reduction

Quote: "Community. I think it just keeps coming back to community for me."

Participant 2: Bibi, the Landscape Architect (Quartzsite Public Library Interview #4)

Vehicle Type: 1961 Aristocrat trailer (small)

Employment: Author/speaker (book tours about Forest Service history)

Age Range: Professional adult

Residency Duration: ~2 years traveling for book promotion

Parking Patterns:

- Strategic about campground design knowledge
- Prefers federal rest areas and established facilities
- Avoids cities in summer, migrates seasonally

Key Motivations:

- Work-related travel necessitated vehicle living
- Professional expertise in space design
- Economic pragmatism (book tour budget constraints)

Willingness to Pay: \$15-25/night reasonable, with strong opinions on facility design

Priority Needs: Well-designed bathrooms, showers, European-style attendants

Quote: "It's about space making. It's about design. It's about giving people a feeling of being civilized."

Participant 3: Madison, the Healthcare Worker (Quartzsite Town Park Interview #3)

Vehicle Type: RV (switching to smaller vehicle due to costs)

Employment: Recently retired X-ray technician (traveling healthcare worker)

Age Range: 60s

Residency Duration: Full-time since 2020, had RV for 5 years

Parking Patterns:

- Avoided urban parking due to safety concerns
- Used hospital parking lots when working
- Relies heavily on BLM land and state parks

Key Motivations:

- Housing costs vs. income mismatch
- Corporate culture conflicts
- Healthcare industry burnout

Willingness to Pay: \$15/night for state parks (with amenities)

Priority Needs: Safety, security monitoring, pet accommodation

Quote: "It would only be a deal maker if it was safe."

Participant 4: Dan & Daniel, the Working Couple (Quartzsite Public Library Interview #3)

Vehicle Type: Van

Employment: Graphic designer (remote worker) + partner

Age Range: 60-61

Residency Duration: 3.5 years, 8-9 months annually

Parking Patterns:

- Split time between urban areas (libraries, cultural locations) and dispersed camping
- Sophisticated stealth camping techniques
- Strategic about commercial/residential boundary areas

Key Motivations:

- Travel and cultural access
- Work flexibility
- Financial security (maintain SF home, rent upstairs)

Willingness to Pay: \$10-15/night, up to \$150/week for premium services

Priority Needs: Ability to "interface with outside," toilets, garbage, grey water disposal

Quote: ""We're urban people... We're city people. We always escaped before into the wildlands and that's kind of how we imagined it. But really when you're full time... that escape is no longer an escape.""

Participant 5: Deborah, the Event Manager (Quartzsite Town Park Interview #2)

Vehicle Type: Van with security magnets

Employment: Event management, stage management, downsizing consultant

Age Range: Senior adult

Residency Duration: Several years, seasonal (LA area)

Parking Patterns:

- Established routes in LA neighborhoods
- Builds relationships with locals (gardeners, neighbors)
- Avoids summer heat, returns for work seasons

Key Motivations:

- COVID economic impact
- Personality fit for nomadic lifestyle
- Work flexibility and urban access

Willingness to Pay: \$5-10/day, under \$300/month

Priority Needs: Location near amenities, gym partnerships, community integration

Quote: "This whole thing sort of was a win turned out to be a win-win choosing this lifestyle."

Participant 6: Jef, the Freelance Designer (Quartzsite Public Library Interview #4)

Vehicle Type: Minivan (stealth configuration)
Employment: Freelance graphic design work (various clients)
Age Range: Young professional (28)
Residency Duration: 1.5 years

Parking Patterns:

- Works out of Phoenix, parks near coworking spaces
- Learned to avoid problem areas through experience
- Uses parks and public spaces strategically

Key Motivations:

- Work location flexibility
- Economic efficiency
- Lifestyle preference for mobility

Willingness to Pay: \$1/day ideal, \$10-15/month maximum

Priority Needs: Basic safety, bathroom access, proximity to work

Quote: "Just knowing that I'm safe, comfort... Just knowing that I wouldn't be harassed."

Participant 7: Eric, the Gig Worker (Quartzsite Public Library Interview #1)

Vehicle Type: Trailer (previously), current vehicle unspecified
Employment: Freelance (gig) work, "very paycheck to paycheck"
Age Range: Young adult
Residency Duration: Recent starter

Parking Patterns:

- Urban necessity for work proximity
- Cuts off BLM access at 20-30 minute drive time
- Weather-dependent location choices

Key Motivations:

- Work requirements (Wi-Fi, power, proximity)
- Economic constraints
- Practical necessity over lifestyle choice

Willingness to Pay: \$10-15/month maximum, prefers pay-per-use

Priority Needs: Weather protection, covered cooking areas, cost efficiency

Quote: "It's really just going to be proximity to work for me personally."

Participant 8: Jake, the Itinerant Preacher (Quartzsite Public Library Interview #2)

Vehicle Type: Sprinter van (DIY stealth configuration)

Employment: Previous corporate job, now freelance

Age Range: Adult professional

Residency Duration: Full-time since selling house in Nov 2022

Parking Patterns:

- Sophisticated urban stealth techniques (multifamily complexes)
- Alternates between urban Phoenix and dispersed camping
- Self-sufficient approach, avoids organized programs

Key Motivations:

- Sold house post-COVID
- Weekend warrior evolved to full-time
- Libertarian self-sufficiency philosophy

Willingness to Pay: Market-rate pricing only (\$1-3/day for specific services)

Priority Needs: Basic amenities (water, trash, showers), maintained facilities

Quote: "I don't expect the government or the city to do anything for me."

"I'm already self-sufficient, [because] my intent to live in a vehicle was to be self-sufficient, [so] the only thing I'm paying for is [drinking] water."

Summary of Demographic Patterns

Age Distribution

- **Young Professionals (20s-30s):** 2 participants - economic necessity, career flexibility
- **Mid-Career (40s-50s):** 2 participants - lifestyle choice, work transitions
- **Pre-Retirement/Retirement (60s+):** 4 participants - economic optimization, lifestyle preference

Employment Categories

- **Remote/Freelance Workers:** 4 participants - highest urban parking needs
- **Retired/Semi-Retired:** 3 participants - more flexibility, seasonal patterns
- **Transition/Crisis:** 1 participant - economic displacement

Vehicle Types

- **Vans:** 5 participants - most common, stealth capability
- **RVs:** 2 participants - comfort vs. visibility trade-offs
- **Small Trailers:** 1 participant - mobility + towing vehicle benefits

Geographic Patterns

- **Phoenix/Arizona Focus:** 3 participants - winter destination, urban stealth
- **California Connections:** 3 participants - housing cost refugees, seasonal patterns
- **National Travelers:** 2 participants - route-based, seasonal migration

Economic Segments

- **Budget-Constrained** (<\$1,500/month): 3 participants - necessity-driven
- **Moderate Income** (\$1,500-3,000/month): 3 participants - choice + constraint
- **Comfortable** (>\$3,000/month): 2 participants - pure lifestyle choice

Findings from Interviews

Participant Diversity Shows Three Main Segments:

1. **Economic Necessity Users** (Jef, Eric) - Young, budget-constrained, urban work requirements
2. **Lifestyle Optimizers** (Deborah, Couples) - Established careers, strategic about costs/benefits
3. **Self-Sufficient Nomads** (Jake, Mac) - Philosophical about independence, avoid institutional programs

Payment Willingness Spectrum:

- Budget tier: \$5-15/month (necessity users)
- Standard tier: \$50-200/month (choice users)
- Premium tier: \$200+/month (lifestyle optimizers)

Appendix B

The full codebook with all data, python code, and visuals is available at:
https://github.com/tomo-ujikawa/UP213_group.git