Living "Car-less" or Close to It: Rural Transportation, Economic Volatility, and the Need for Relevant Social Policy

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Abstract

Census (2011) data indicates that most American households possess at least one licensed vehicle, and such data illustrates, especially inside rural communities, the dependence upon automobiles to reach destinations like the workplace. Such dependence therefore integrates an additional facet which expands the cumulative disadvantage that low-income families confront. The field site, concealed as Graniteridge within the report, embodies a deindustrialized Appalachian community in which minimum wage service sector employment now comprises much of the local job market (Census 2012). Strained finances force community residents to purchase vehicles that cost less than \$1,000 and perform minor lifespan extending repairs. Respondents indicated that vehicle breakdowns often occur weekly, and limited finances mandate that mechanical issues be delayed if possible through strategies like regularly replacing leaking fluids. Additional alternative transportation strategies to substitute an operable car include locating rides as well as accessing the local rural public transit system, yet such tactics must be implemented as an assemblage. The lack of social policy initiatives forces Graniteridge's low income families to rely on community service networks comprised of individuals of similar socioeconomic status to quell transportation troubles. Moral capital regulated by socially perceived work ethic and past reciprocity dictates one's options to bridge a transit disruption, leaving many families without transportation capable of supporting upward social mobility.

Introduction

Roll down your windows at any intersection, and you will likely hear squealing brakes, a rattling exhaust system, or smell burning automatic transmission fluid from a nearby automobile. Motor vehicles operating within a less- than- optimal condition represent a steadfast component of American society, as all socioeconomic groups rely upon cars for their primary source of transportation. Census (2011) data indicates that 84.7% of all American households possess a licensed vehicle with a median value of \$6,500. Such a distribution quickly delineates to 41.6% of the lowest quintile, or tenth percentile, of residences owning at least one operable vehicle with a median value of \$3,500 (Census 2011). Public transportation now operates within both rural and urban communities, yet such services serve the entire population of congested areas in comparison to the rural poor (Mattson 2012).

Rural families remain especially dependent upon personal automobiles in relation to reaching the workplace. Although transit impacts job performance as well as employee reliability, employment simultaneously transmits funds to a family which in part sustains the costs of vehicle maintenance and

operation. Unexpected costs pertaining to automobiles induce familial economic hardship- the inability to purchase adequate food, shelter, clothing, and medical care (Mirowsky and Ross 1999). Families as a result of vehicle breakdowns rely upon social contacts that formulate community support networks to access informal auto repair and rides, which temporarily replaces a reliable car. Minimal governmental or nonprofit social policy simultaneously seeks to improve communal access to functioning automobiles. The nearly exclusive reliance upon private transportation extends the frequency of intersecting barriers that correspond with rural low-income life. Unreliable rural transit signifies a multifaceted social problem that possesses the ability to disrupt an economically volatile low-income family and impedes the potential of upward social mobility away from the threshold of impoverishment.

The data and analyses that follow stems from a six month project that includes two months of ethnographic data collection within a rural field site. The project was motivated by two research questions. First, how does the state and stability of rural families' private transportation impact their employment sustainability? Second, to what degree do families rely on an informal economy and/or the exchange of goods and services for automobile repair to remedy the continuous nature of unreliable private transit? An intensive interviewing and participant observation methodology that became viable through a nonprofit organization partnership addressed a sample size of (n=15). Identifiers to both the field site as well as individual respondents represent pseudonyms that protect confidentiality, yet contextual characteristics as well as narratives remain genuine.

Background

Preexisting sociological research faintly notes the role of private transportation as a secondary variable within the study of geography, labor, welfare, as well as immigration. Transportation with an emphasis upon efficient urban systems, which relates to the discipline of city planning, primarily comprises current literature. Examining research pertaining to low-wage employment and affected families however suggests for rural low-income families that : 1) The rise in service sector employment alongside deindustrialization produces poor temporary positions that generate minimal income, 2) The rural environment integrates logistical barriers between the home and essential destinations, 3) Limited

finances require additional monetary subsistence tactics to afford transit, and 4) Community support networks regulated by moral credit (discussed in the last section) attempt to minimize damaging transportation disruptions.

Families confront and manipulate questionable private transit as they navigate the latent challenges of poor nonstandard employment. Traditional employment is normatively situated within a business 40 hours per week and includes fringe benefits, yet employment patterns indicate a rise in arrangements that include part-time work or temporary contracts (Kalleberg et al 2000: Nelson 1994). These employment structures minimize employer costs at the expense of employee experienced job stability. The associated instability of nonstandard labor sustains temporary lapses of employment, a loss of up to \$2,500, and immigration status further manipulates employment opportunity (Flippen 20012). With an income to needs ratio of less than one, meaning that insufficient funds exist to purchase essential goods, low income households cannot afford to maintain at least one automobile alongside adequate health protection without employer benefits (Mirowsky and Ross 1999; Nelson 1994). Instituted employer to employee informality eases personnel replacement and is not substituted with increased compensation, which suggests that one day of vehicle disrepair could induce a firing (Kalleberg et al 2000; Nelson 1994). Criminal histories coordinate with an unavoidable stigma that even impacts temporary employment opportunity, and Pager's (2003:956) audit study notes that "... criminal records close doors in employment situations". Contemporary nonstandard service sector industries avoid compensating individuals to a degree that upholds a moderate standard of living.

Rural and suburban communities exist within a spatial context that increases distances to needed stores and broadens the spread of employment locations. Suburban developments since the 1950s led to the creation of sprawling municipalities that possess businesses throughout the community, yet no standard distribution exists (Cohn and Fosset 1996). Interstate highways variably transport employment to additional areas, and so unexpected geographic relocations, whether due to a new job location or emergencies like a natural disaster, rapidly manipulate transportation demands in an unpredictable manner (Lichter and Fuguitt 1980; Zissimopoulos and Karoly 2010). The spatial context which surrounds

a home is the determinant of private transportation's role in maintaining employment and influences the danger involved with operating a troublesome vehicle (Hao 2003; Sherman 2009).

Without adequate income, fringe benefits, or government initiatives, low-income families engage private support networks to minimize transportation disruptions. Edin and Lein's (1996) study towards urban minority mothers' monthly expenditures serves as the precedent of this field, and illustrated the alternative supplemental income needed to afford \$100 of transit costs. Such research expanded to investigate the fiscal challenges surrounding single mothers reliant upon public assistance, and Lein et al (2007:116) contends that "Thus, what we found was a policy that moved people off welfare very effectively but did little to alleviate poverty". Familial and community assistance entails ". . . an amalgam of who you know, what they have to offer, the ability to access their assistance, and norms governing transfers or reciprocal exchanges of assistance", which as a result, signifies a discrete nonprofit economy (Harknet 2006:173). Transportation represents a resource that assists in earning income and therefore family well-being, so residences must locate alternative transit sources to substitute an immobile vehicle. The National Survey of Families and Households indicates that about 38% and 45% of white and black families respectively consume as well as return informal transportation aid to alleviate disruption (Harknet 2006; Sarkisian and Gerstel 2004). Families contact households of similar socioeconomic standing for transit assistance, which suggests that aid sometimes does not exist (Hao 2003; Harknet 2006).

Both Jennifer Sherman's (2009) and David Harvey's (1993) ethnographic research addressing the morality of employment and the culture of poverty respectively capture the regulated alternative transit strategies that a community support network provide. Golden Valley, a northern California logging town, once prospered as a single industry community, yet environmental policy now limits year-long employment to the feminine service sector. Family hardship due to earnings of less than \$30,000 encapsulates over two-thirds of the population and produces countless homes dependent upon one car that is difficult to share (Sherman 2009). Harvey (1993) during the initial phase of the War on Poverty entered Potter's Addition- the most marginal portion of a Midwestern community. Such isolation enhanced the

importance of transit to the workplace, and so "many men were excellent auto repairmen and there was hardly a man in the community who could not perform an impressive range of auto repair and maintenance activities" (Harvey 1993:81). Males' involvement with informal automobile repair alongside the distribution of rides signify alternative transit strategies which attempt to bridge vehicle breakdowns for the sake of maintaining a family's employment status. Moral community standing primarily founded upon individual work ethic and avoiding unearned government welfare determines access to such subsistence related resources, which ultimately isolates families with historically poor moral credit from acquiring needed social assistance (Sherman 2009). Residents in Potter's Addition therefore wished to become employed at the local growing public university to escape unskilled temporary labor and acquire a stable income capable of upgrading weathered homes as well as automobiles (Harvey 1993).

Rural ethnography while addressing the relationship between private transit and family employment documents rural stratification that upholds an impermeable status quo. Public ideology often attributes individual inferiority to the persistent "culture of poverty" that encapsulates low-income localities, yet structural arrangements stratify a hierarchal lumpenproletariat population that must adaptively respond to the variable environment sustained by inadequate family incomes. Residences isolated from intra-community affluence therefore represent a necessary aggregate of surplus labor that moderates nonstandard temporary employment opportunities while perpetuating the status quo (Harvey 1993). Socioeconomic polarization dichotomizes the issue of unreliable personal automobiles, and Duncan's (1999:9) three field site study of varying rural areas emphasizes that "Those with good jobs often use the pronoun 'they' and speak with disdain about the dependent poor". The inability to individually maintain reliable transit and barriers to community social support networks solidifies a lowincome family's poor economic position, removing all hope from future upward social mobility (Duncan1999; Sherman 2009)

Low-income family research located mainly within urban communities applies to the relationship between private transportation, employment, and family hardship within a rural context. Nonstandard employment located across geographically diverse rural landscapes fails to generate sufficient revenue to

sustain reliable automobiles, which demands community networks attempt to provide needed transit for members. Such background content enables research that specifically addresses the complexities of rural transit to ensue.

Data and Methods

Data collection across Graniteridge consisted of a research strategy that intermixed semistructured intensive interviewing and participant observation to examine private transportation's role
within the community. Intensive interviewing enables a researcher to converse with a select group of
individuals separately and obtain pertinent information. This tactic maximized finite time and monetary
resources in comparison to random surveying. Interview protocols questioned respondents in matters
ranging from their state of transportation access to community support networks, yet flexibility existed to
engage relevant but previously unidentified matters. The exact content of each semi-structured protocol
differentiated upon the respondent's status as either a low-income adult or social service provider. Social
service providers for this study are defined as an employee in either a government or nonprofit agency
that makes personal contact with low-income families. I also received invitations to attend and participate
in the local monthly nonprofit directors meeting as well as a homeless services planning committee that
intends to acquire state service funds within the next three years. Each opportunity is a product of a
research alliance that welcomed an external researcher and provided unfiltered access to Graniteridge's
political atmosphere.

Research Field Site

Graniteridge exists as a county of about 38,000 residents alongside scenic mountains, yet the local economy survives through coexisting ventures that operate beyond tourism. Multiple state roads interconnect the five community localities- three of which function as incorporated municipalities that extend access to government services. Census (2012) data estimates that about 15,000 adults earn income within the community, and educational/health services, manufacturing, construction, retail, professional services, as well as food services signify 80% of the job market in descending order. A significant

economic elite population, including retirees, sustains a dispersed local income continuum with a median household value of \$46,000 and mean of \$58,000. Racial homogeneity, 95% white and 4% black, and a 12% poverty rate illuminate rurality across Graniteridge while failing to distinguish the cyclical hardship the working poor confronts (U.S Census Bureau 2012). These socio-demographic figures depict the community's increasing economic dependence upon the four local post-secondary education institutions found within the two most advanced municipalities. An active volunteer for the last 25 years proclaimed that "... jobs around here entail service", which suggests that "bad" jobs that perpetuate minimum wages without complementary benefits further the fiscal proportion transportation must accommodate parallel to socioeconomic status (Kalleberg et al 2000; Nelson 1994).

Located within the southeast, Graniteridge is characterized by the 600 square mile area within Applachia about 60 miles from a regional urban area. Such natural characteristics coincide with the intersection of a north-south and west-east interstate highway as well as major railroads that once facilitated a primarily industrial local economy. The modest blue-collar lifestyle alongside employer benefits enabled families to sustain sufficient transportation to remain employed, yet nationwide trends of deindustrialization continue to dismantle positions in exchange for further developing the service sector's domain (Nelson 1994; Sherman 2009). Shrinking demand for textiles, timber, and commercial vehicles modulates an extremely polarized as well as dichotomized job market, as a past town librarian emphasized that "I think people are over or under qualified for jobs around here. They needed a manager down at town hall. There aren't too many people with degrees around here that could go down and work" while sitting on a decaying front porch. Graniteridge's geographical spread and limited social services contribute to the interactive relationship between automobiles, employment, and family hardship.

Additional socio-demographic statistics pertaining to transportation patterns frame Graniteridge as a generalizable field-site to rural localities. Nationwide, about 80% of adults commute alone to work through their personal vehicle, and the median household owns two automobiles (U.S Census Bureau 2011). The employed within Graniteridge reach their workplace in a similar fashion, as 82% travel alone for an average of 21 minutes via a vehicle and the 50th percentile possesses two cars. The median renter

occupied home holds access to only one vehicle, which represents 25% of all homes and is unequally correlated to residents of lower socio-economic status (Lein et al 2007; U.S Census Bureau 2012). Owner occupied residences however possess a median of two vehicles that enables families to reach necessary destinations with increased flexibility. Vehicle availability also generally increases with additional household income earners, yet no statistic recognizes the mechanical state of any vehicle (U.S Census Bureau 2012).

Sampling Strategy

Access to a diverse convenience sample set became available as a result of my research partner The Horizon Project and its high frequency of local rapport. The Horizon Project represents a 501(c)(3) organization which serves victims of domestic and sexual violence through services that include an emergency shelter and family counseling. Volunteer involvement for the past five years developed a strong relationship with the Director of Community Outreach, Leonard. Preliminary discussions indicated that abuse victims often lose their automobile and financial resources upon exiting an oppressive relationship, which correlates to the volatile physical circumstances of a low-income family. Contacts related to 20 years within local law enforcement and his current position allowed Leonard to create a sample of ten unrelated low-income adults residing within each of Graniteridge's five main areas and five social service professionals. Traveling to interview locations weekly enabled us to visit "notorious" sectors that continue to contain shack-like homes and abandoned trailers, leading Leonard to reiterate "Clearly, for someone in outlying areas, transportation is number one. That unlocks all of their possibilities." Periods of fiscal chaos forces families to frequently move upon eviction, and so respondents possessed first-hand knowledge towards multiple portions of Graniteridge. Leonard and his social network arcs transferred insider credentials to me before individuals that I had never met before, which allowed this study to progress.

Respondents' socio-demographic characteristics identify width in experiences yet correspond to trends indicated above. Calculations that follow align with the low-income adult dataset, for minimal value rests with the traits of interviewed social service professionals. Vehicle ownership is typical within Graniteridge, as eight individuals own at least one automobile and two individuals explain their lack of a vehicle as a product of criminal history as well as health issues. Such cars assist five adults in maintaining their fulltime employment, while one remains unemployed, one fulfills the role of a stay-at-home mom, and three receive fixed income pensions. One-half of the population owns their single residency home while the remainder either rents or is in a period of transitioning between properties, which equates to a family distribution of five being married, one moderating a cohabiting relationship, and four living singly. Such household structure correlates to five families containing children inside the home, four possessing grown kids, and one unknown parental background. Most contributors, eight, represented women, and overall, six and four individuals identified as white and black respectively.

Theoretical Approach

Sociological theory remains indirectly linked to unreliable rural transportation, which distorts the fit of both an ethnographic grounded theory (GT) approach and the extended case method (ECM) theoretical orientation. Founded in Comte's notion of positivism, GT strives to inductively develop original social theory through a researcher that attempts to remain detached from published research as well as the social environment (Tavory and Timmermans 2009). Participant observers therefore specialize in detecting social symbols that construct reality, which aligns with the symbolic interaction sociological paradigm (Burawoy 1998). Burawoy (1998:7) however promotes the impracticality of GT by arguing "We can either live with the gap between positive principles and practice, all the while trying to close it, OR formulate an alternative model of science that takes context as its point of departure, that thematizes our presence in the world we study", and in so doing, prioritizes the deductive nature of ECM that develops structural ideas upon preexisting literature.

A modified GT theoretical perspective best suits the study of rural transit because of the exclusivity both GT and ECM advocate. Our research methodology is designed to generate original social theory pertaining to personal automobiles' relationship to rural family hardship as well as employment by extracting macro structural themes from micro individual experiences. Although this study begins with data collection and therefore establish the study as an inductive project, past research influenced the

structuring of interview protocols along with the selection of Graniteridge as a generalizable field site (Burawoy 1998; Tavery and Timmermans 2009). Preliminary efforts identified access to reliable transportation, geographic location, as well as employment status as variables that together contribute to the steadfast nature of family hardship, but insufficient knowledge constrained the framing of a more specific hypothesized model.

Results

Graniteridge Automobiles

Personal automobiles serve as vital logistical resource that enables families to exit their homes and efficiently reach necessary destinations such as the workplace. Vehicles represent the sole option for most to travel more than a considerable distance, which led a recently remarried white female salon to reflect and state that "Really, if you think about it, you are in big trouble without transportation around here because the distances are spread apart." A small bank representative indicated that her family's sole vehicle must transport three different individuals to their job along three different shifts. Operating on a 24 hour basis mandates this high mileage Dodge Caravan function like a commercial vehicle. Another recently retired white man who for many years occupied the most isolated community in Graniteridge contended that "A vehicle is a big part of my life, and I live a mile and a half outside [the county seat]. Over here [in the distant area], a vehicle is everything". Envisioning Graniteridge without vehicles running at all hours is an impossible venture due to the irreplaceable role which cars fulfill.

Vehicles possessed by Graniteridge's low-income workforce often represent an aggregate of inexpensive and poor performing automobiles that resemble disposable assets. Strained finances force community residents to purchase vehicles which cost less than \$1,000 and perform minor lifespan extending repairs that delay a terminal failure. Dependency upon the seemingly mythical "\$200 clunker" sustains what one respondent labeled as the "ride till it dies" perspective, where individuals recognize that their vehicle can only provide transportation for an extremely finite time span and will likely require substantial repairs to legally register. This young white single parent continued to validate her argument by referencing her previous Chevrolet S-10 that was purchased for \$200 and needed an exhaust system as

well as brake pads/shoes replaced to pass inspection. Engine failure soon thereafter transformed the truck into scrap metal. Junk pricing could not recuperate a significant proportion of the initial investment and so the breakdown isolated the individual from her job. Individuals would prefer their automobiles provide ample mileage without burdensome repairs, for The Horizon Project's executive director sadly noted that "Folks have cars running on their last leg, what I call one flat tire from no car or no transportation at all". Depending upon an unreliable vehicle represents a high risk activity that cannot be avoided.

Breakdowns and Repairs

The poorly- maintained high mileage nature of vehicles across Graniteridge is guaranteed to continue encountering mechanical breakdowns. Consumable mechanical parts including alternators, starters, and radiators fulfill critical roles within a vehicle engine system and are readily available at the local auto parts franchise, yet they typically fail without notice while also damaging other components. In response to a probing question regarding breakdown frequency, a young black single mother currently between residencies and owner of a Chevrolet van that recently required a water pump and brakes stated "[Breakdowns occur] about every two weeks. That's what happens when you buy a piece of junk car, but it gets me from point A to point B", which depicts frustration alongside gratitude towards the fact that her car remains operational. Other mechanical issues and their repair may be delayed through strategies like regularly replacing leaking fluids, which defers monetary costs yet simultaneously increases the likelihood of a systematic failure.

A recently separated and now employed mother explained this tactic:

"Actually right now my worst concern is the power-steering pump since it's leaking, but that's the next big thing", and "I have another vehicle too. It's a Ford Explorer. Right now it has a blown head gasket. You can drive it but not very far because it could break down and need to be towed. It's not very dependable. It's not getting hot but it's losing water and fouling spark plugs out".

Independent living placed the potential of bypassing a breakdown to her 110,000 mile 1993 Ford Mustang beyond her realm of control. Vehicle reliability and breakdown frequency resembles a hierarchal

pyramid that transcribes the worst functioning automobiles upon Graniteridge's most marginal families. It remains unknown to what degree General Motors' and Delphi's extensive ignition switch recall will impact these families. One respondent alerted that five switches have failed within her 2004 Buick and no compensation is currently available.

High frequencies of vehicle breakdowns produce familial reliance upon affordable automotive repairmen, which places informal vehicle repair as the most accessible method. Professional mechanics remain centralized within the two largest municipalities of Graniteridge and a luxury that coincides with affluence. Harvey (1993) contends that automotive activities such as customization and refurbishment represent a common masculine hobby across a rural community that simultaneously provides access to "DIY" (do-it-yourself) mechanics if a self-completed repair is not possible. Adults in Graniteridge possess family, neighbor, and or work related linkages to individuals willing to complete vehicle repairs for a minimal cost and likely recognize the importance of immediately reviving a family's source of transit. Considerations including location and availability equate to different individuals resolving each breakdown, but most narratives mirror that of a husband and wife who together noted that "The catalytic converter disconnected from the [exhaust] manifold. Our son knew somebody who could fix it for us and he fixed it for nothing. Well, it was like a barter system- I gave him a quilt to fix it". The perspective of a low-income family considers the opportunity to utilize an informal vehicle repair service in exchange for providing parts and a small fee a privilege of rural life.

The Intersectionality of Transportation Volatility, Household Economies and Employment

Costs towards maintaining a personal automobile extends beyond mechanical breakdowns and accumulate to form a significant fiscal burden. Graniteridge residents must annually pay state registration, inspection, municipal property tax, as well as at least liability accident insurance by law, and such bills are fortunately dispersed across the year. The multiple municipal environment of Graniteridge makes about 37% of working adults eligible to pay vehicle property tax at both the county as well as town level (U.S Census 2012). Such basic operating costs while considering common full coverage monthly insurance payments as well as fuel, at over \$3 per gallon, requires about \$2,500 annually to sustain a

minimally driven vehicle and can escalate to \$10,000 if one vehicle supports multiple workers. These calculations result from respondent self-reports that mirror Edin and Lein's (1997) methodology. As much as one-half of a family's monthly budget may be allotted to covering the essential costs of housing and transportation, which may place scheduled vehicle maintenance beyond families' financial ability (Lein et al 2007). Basic transportation expenses diminish funds needed to confront unexpected bills.

A local pastor described this:

"I receive phone calls where people say 'Well I needed new tires on my car and then I fell behind on this payment, so could you help us out?' People earning minimum wage working full-time or close to it struggle to make ends meet or have no buffer for some kind of unusual expense".

The pastors' response also suggests that transit is prioritized before other debts. Graniteridge's Director of Rental Assistance, a public program that operates as a subsidiary of social services, corroborated this idea and in addition indicated that clients will implement every tolerable strategy, including illegal behavior for some, to sustain an automobile.

Vehicle unreliability within Graniteridge coincides with the local employment market that provides minimal opportunity for economic advancement. Although they struggle to cover monthly expenses, citizens perceived sufficient job availability and opportunity while citing the importance of a morally strong work ethic. Four of five employed respondents work within positions they acquired within the past six months, which suggests that employee fluidity exists within Graniteridge's service sector. An informal interview with a local law student exposed the fact that clients of a free tax preparation clinic often possess nine to twelve W-2 income forms from temporary employers. Those relying upon fixed-income pensions remained with their employer to qualify for longitudinal benefits, yet such an entrance occurred prior to deindustrialization and similar opportunities have since subsided. Every respondent possessed a job history contained inside Graniteridge, and job positions within outside areas often seemed irrelevant. Perceptively, personal responsibility within Graniteridge's atmosphere of low status occupations now determines monetary success, as a recently retired man promoted that "If you want to

work, you can find a job. Those who can't find a job ain't trying hard or don't want to work", and stratified adults within a single economic segment through their willingness to work. Respondents classified employee reliability as the premiere identifier of strong personal work ethic, which even for those residing within the incorporated municipalities of Graniteridge is dependent upon the state of their transit. One unemployed single mother hinted that her previous lack of a vehicle contributed to her diminished job performance that terminated her employment. While nurturing a crying baby, she answered a probing question regarding positive employee attributes by stating "The number one thing is transportation-being reliable. Basically, that's the number one thing. In order to be reliable, you need transportation. They expect you to be on time and complete your full shift", but now she must return to the workforce with diminished moral standing. Transit in Graniteridge represents a determinant of occupational success camouflaged within personal social character.

Alternative Transit Strategies

A minute proportion of Graniteridge citizens which occupy the county seat substitute walking to their workplace to compensate for not owning an automobile. Cost-prohibitive housing in relation to vehicle ownership locates low-income families within a class segregated hilled neighborhood but near the community hospital, restaurants, and two colleges that offer low wage positions. Forfeiting vehicle expenses to afford more expensive housing close to one's workplace represents a rational attempt to catalyze additional employee reliability, yet such a strategy isolates a family inside a radius dependent upon health and time without external assistance. For example, a waitress at a regional sports bar contended that criminal and fiscal events eliminated access to driving and transformed walking into her most accessible form of transportation. Adverse weather conditions limit the practicality of walking since food service mandates the pleasant appearance of staff and such employee constraints transfer social stigma towards adults without an automobile. The small business and government atmosphere of the downtown county seat highlights walking low-income employees as outsiders, which led a pastor who also resides within this neighborhood to state that "I've seen poor people walk to the grocery store or downtown, not for exercise or health reasons, but because they didn't have a car. There are a lot of

things that are not in reach by walking". Walking as one's primary source of transit demands that a family select overpriced, inefficient, and deteriorating housing as well as navigate a select interconnected job market that provides no access to economic advancement.

Mechanical breakdowns and the lack of additional transit necessitate Graniteridge's poor population enact community support networks to locate rides. Rides from a familial perspective entail contacting a functional automobile owner to transport them to a given location, and multiple social service professionals believed that about half of their clients relied on informal rides as their modal method of transportation. Most vehicle owning respondents displayed a willingness to provide rides for acquaintances when available along ideological grounds that promoted the goodness of helping others occupying lesser circumstances. Such behavior frequently transforms a vehicle from an intra to an interhousehold resource that lessens the presence of family hardship (Hao 2003). A single mother employed within a fast food enterprise addressed matters of community assistance by stating "I'm that kind of person- I'll help out anybody who needs, and I hope they would help me", which identifies values of reciprocity and compassion towards the hardship economic volatility induces. This same individual proceeded to indicate that she transported multiple coworkers that do not possess an automobile to their workplace during corresponding shifts. Within the past month, the functionality of a Ford Mustang manifested an operating business. Dependency upon rides as an alternative source of transportation is an arduous task and necessitates a dense collection of contacts, for individuals possess varying degrees of availability as well as trustworthiness.

In addition to informal local "ridesharing", Federal Department of Transportation grant funds enable localities such as Graniteridge to operate a limited public transit system that supports families without access to an operable vehicle. 5311 rural transit provider grants enable Graniteridge to possess both a structured bus route system between the two largest municipalities as well as a client dependent transit service identified as The River Express and Graniteridge Transportation Services respectively (Mattson 2012). Public transportation within a rural community signifies a low-income social service

rather than a comprehensively utilized initiative as in urban areas since personal automobiles remain the most efficient method of reaching destinations.

Leonard, our nonprofit research partner, applauded the entrance of public transit to Graniteridge. His thoughts also highlighted its limited coordination with outlying communities by stating "Folks have survived a long time without a public transportation option. For them, it is just as quick to catch a ride to [the county seat] than wait on a bus". The River Express and Graniteridge Transportation Services operate as complementary entities by separately serving typical families alongside the disabled as well as elderly. Only .2% of working adults rely upon the The River Express for commuting purposes though 37% of Graniteridge's workforce lives within the operational area of service, which raises concerns towards asset mismanagement and waste (U.S Census Bureau 2012). A single motel housekeeper currently between residencies utilizes The River Express to reach her workplace Monday-Friday and appreciates the affordability of the 50 cent use fee, but weekend hours require seeking alternative transit due to only limited Saturday hours existing. Operating 8am-6pm weekday and 10am-4pm Saturday hours alienates a degree of employees which may otherwise elect to utilize a consistent public transit option. Families must therefore assemble a collection of alternative transit subsistence strategies to replace a functioning vehicle and accommodate the limitations of each substitute source of transportation.

Transportation represents a vital socioeconomic asset for all Graniteridge families, which enables them to reach the workplace and other essential destinations. Low-income households' limited monetary means however requires they operate high mileage vehicles which frequently require repair, and, when combined with housing costs, capture a majority of their income. Limited automobile reliability increases the risk of injuries from accidents as well as perpetuates the presence of alternative transit strategies that attempt to moderate the challenges of breakdowns. Ridesharing, walking, nor rural public transit can singly replace a well-functioning automobile, and so together they prevent economic collapse.

Discussion

Unreliable private transportation possesses normative visibility within a rural setting, which requires additional analyses to identify its origin as well as family-based responses. Four subsections

separate the impact of: 1) the cultural contributions to automobile ownership and impoverishment, 2) morality within community support networks 3) predatory barriers to community social mobility, and 4) the current state of Graniteridge's nonprofit as well as public social service sectors. These individual entities coexist to solidify transit hardships though new efforts like rural public transit are attempting to bring about social progress.

Private Transit and American Culture

Historically limited social programming institutionalizes within communities such as Graniteridge the notion that securing private transportation represents an individual or familial venture, which isolates marginal social groups. American culture promotes automobile ownership as an autonomous task founded within the family and solidifies such through legislation, socializing the fact that automobile ownership equates to the premier method of transportation. Crafting and implementing tactics to manage transit disruptions therefore becomes an individual obligation within each community. Family well-being becomes subject to normative transit alternatives, and a retired librarian expressed sincere concern when noting "I have a cousin now who is in working in [a municipality] that has no transportation to get there. She relies on another person who works there and tries to get the same days as she has", for this relative is otherwise isolated. A stay-at-home mother reflected upon past interactions with others affected by insufficient transportation and recalled an impoverished grocery store customer, 30 years old, which indicated that she traveled beyond her municipal area twice a year. This customer always walked to the grocery store serving Graniteridge's second largest municipality, which required a multiple mile round trip that included a quarter mile steep grade. Such an anecdote dates prior to The River Express, but its limited hours force clients to utilize its service as one of many transportation strategies.

Continuous exposure to the threat of mechanical breakdowns within the lives of Graniteridge's low-income families documents that the subculture surrounding poverty represents a response against structural social stratification. Family hardship linked to unreliable automobiles is lessened through community support networks which strive to mutually support members, yet an inadequate frequency of

resources constrains a network's potential impact. The Horizon Project's executive director shared a common vocational experience by noting "We ask [clients] daily, 'Do you have gas for where you need to go'. From there, we are challenged with how they can keep a job if they cannot afford gas", which suggests support networks cannot comprehensively care for each individual. As community support networks operate within a single structural segment, they must prioritize the distribution of aid to specific families. Tracking or attempting to forecast the utility of community networks in relation to a given circumstance is useless for such entities lack stability, and Harvey (1993:24) emphasizes that "It is this unpredictability, not just a lack of resources, that generates the culture of poverty. To be poor is to lack resources; to live in poverty, however, means learning to live with variable social and economic environments". Ideological assertions that classify the impoverished as an unmotivated along with inferior social group excessively credit family failings and disregard structural conditions that assign marginal socioeconomic status.

Transportation Assistance and Morality

Community support networks while enabling alternative transit strategies across rural communities allot preference to certain residents by evaluating moral capital. Areas like Graniteridge stratify residents of equal poor economic means along moral grounds, and in so doing, publicly identify both "good" as well as "bad" families. Moral standing is determined from one's income acquisition strategies, which assigns positive credit for behavior such as employment and unemployment insurance in descending order while stigmatizing those with criminal and or welfare histories (Sherman 2009).

A municipality's former librarian stated that:

"Yes, in this community if people like you they will go way out to help, but I don't know. I think if they feel like you have more than what they have they don't try and offer help. If they have a particular aura about them or if they didn't help people in the community, then you know it's not going to come back to them", and "I think we are well known within the community . . . I think I would have a lot of people to call if I broke down".

Community standing within Graniteridge and its role in acquiring transit assistance significantly influences accessible resources. This respondent from her perspective perceives that she has accumulated sufficient moral capital within the past 30 years which may be enacted to solve a vehicle breakdown. It is imperative that rural low-income families possess decent moral standing during a transit disruption, which introduces a competitive social element to securing a DIY mechanic or short-term ride. Graniteridge's Director of Rental Assistance referenced a client who was forced to sell her vehicle to escape compounding debt and now must continuously seek transportation assistance to travel away from her distant home. Short-term solutions within this context may possess longitudinal consequences such as the reduction of essential moral capital that enables one to progress beyond the limitations of an undependable automobile.

Community social support networks contain members of similar socioeconomic status, which limits the availability of both rides and informal vehicle repair outlets. Most respondents indicated that their vehicles possessed similar mechanical reliability as friends along with family, and these individuals represented respondents' contacts to resolve a breakdown. Enacting a method of alternative transit must consequentially span a minimal frequency of time to limit related risks, as a self-employed female emphasized that "If I had to rely on someone, I couldn't do it for long- maybe a day or two tops. It would put me in a real bind". Community socioeconomic homogeneity physically isolates groups of higher status and instead arranges for low-income families to care for themselves- a duty they relentlessly perform.

A pastor referenced potential latent outcomes that stem from reciprocity:

"I remember someone offered to drive a friend to [the nearest city] for a doctor's appointment even though their car was not in good working order. They had a blowout on the way, so there was the expense of a tow truck and new tires. They were just trying to help but weren't in a position to do that".

Such an experience increased the fiscal and personal volatility surrounding both individuals. It is possible within this arrangement for one to oblige to providing transit support and then immediately lose the availability to perform.

Limited employment opportunity will perpetually inhibit a Graniteridge family's ability to maintain a functional automobile with employment representing the preferred well of moral capital. Employees at local colleges though earning salaries as minimal as \$15,000 annually possess a definite advantage within a community support network, as their positions contain job security. Service sector employees however coincides with the predicament of job fluidity, which elevates the importance of holding access to a community support network to serve as an economic safety net. Social cohesion within rural areas like Graniteridge consequentially transmits varying statuses to its members, and Sherman (2009:92) identifies the unequal outcomes of a stratified support network by stating "The community, which will do so much for its well-respected members in times of medical crisis often has little help to offer to those with obvious drug and alcohol addictions and seemingly poor work ethics". Submitting to social structure and pursuing the traditional employment avenue to an improved quality of life is not guaranteed to succeed, for an employed single mother sadly noted that "I'm off this week [without pay], but not by choice". Such a requirement mandated cutting already basic monthly expenses and integrated additional uncertainty towards her family's life as the month ended. Strict cultural and institutional expectations towards employment manage a barrier between individuals in need of assistance and those which are willing to help.

Transportation assistance substantiates informal economies that exchange moral capital for mobility, which regulates the future availability of alternative transit. Familial moral standing within Graniteridge represents a line of credit accepted by all affiliated with a community networks. Enacting moral capital through social interaction resolves a transit disruption, yet such a tactic attaches a debt to the user. Every low-income respondent specified that the abuse of transportation assistance terminated or defaults one's access to future rides as well as informal repair. Fear minimizes the frequency of such occurrences, as a new mother along with others noted that "I have been without a car before. It sucks

walking everywhere", but extreme marginalization remains possible within a community comprised of mechanical solidarity. Economic volatility and fiscal turbulence within rural areas equates to families lending as well as borrowing community transit assistance, which engineers the "pay-it-forward" provision. Transit assistance receivers which also provide at a later date allows community support networks to longitudinally serve without exacerbating select lenders.

Leonard emphasized such while exploring the most isolated portions of Graniteridge:

"I think decency and community awareness are the only way poor people have survived in this community . . . That spirit still exists here in the area".

A pastor mirrored such an assertion in noting that "I think people are very generous, especially when they have very little", which further visualizes the range of community support. One of solid moral record within Graniteridge can trust that assistance will exist during an upcoming transit disruption.

Barriers to Community Improvements

Distrust persists through Graniteridge towards the mechanic industry, which possesses the ability to accumulate a tremendous bill upon a vehicle that exceeds its overall value. Informal automobile repair contains a threshold of capabilities, as DIY repairmen hold a variable collection of skill as well as specialty tools. Individuals who proceed to place their vehicle within a garage initially agree to pay for all fees or forfeit their asset, which represents a highly vulnerable position for a fiscally limited one-car family. One mother contended that her previous Dodge Caravan began experiencing irregular transmission issues, and so she as well as her husband elected to seek a professional diagnosis. They clearly indicated that they wished to initially only receive a diagnosis, for the van was nearing 200,000 miles, yet a \$1,600 bill emerged pertaining to a fully refurbished transmission. Such a monetary burden influenced them to spend an additional \$1,900 within the next twelve months upon additional repairs before confronting a catastrophic failure. Vehicle dependency within an unethical garage places lowincome families within an exploitative position that demands payment to avoid job loss and economic collapse. The Horizon Project's executive director noted that "I've seen people abandon cars that they could not afford to pick up from a mechanic. Sometimes they go on to the next cheap car, like \$200, which is a financial struggle". Countless opportunities exist to profit upon the economic volatility unreliable transit ignites, yet the public priority of other social problems masks the consequences of limited consumer protections and its intersection with family hardship.

Rural communities currently coincide with poverty oriented industries including payday advance and vehicle title loans, which represent unneeded local business. Journalist Gary Rivlin (2010) indicates that the broad poverty industry in its entirety generates a \$100 billion profit annually, and Graniteridge currently contains five "cash advance" franchises. Low-income short-term loans that utilize a paystub or personal property as collateral operate along a bimonthly payment schedule that formulates a typical APR of about 400%. Pro-industry advocates assert that immediately accessible loans fill a vacancy between community assistance networks and public welfare which customers utilize intermittingly to quell perilous circumstances, yet such enterprises encapsulate families within endless debt. Average locations collect \$18,000 annually in profits, which equates to about \$90,000 removed from poor families yearly within Graniteridge since five different franchises operate within the county seat (Rivlin 2010). Select states like North Carolina, Ohio, and Georgia hold significantly constraining interest-oriented legislation, yet law requires periodic improvements. Rivlin (2010:314) now suggests that "With more competition and a lowering of the rates so that \$15 per \$100 is pretty much the standard in most states, the days of 20 percent or more profit margins are over. Yet payday is still plenty profitable". No respondents expressed use of supposedly short term loans nor did interview protocols approach the matter, but the industry's presence within the community indicates that a sizable portion of the low-income population likely utilizes its services. Two respondents rather noted that they purchased high mileage minivans from a local dealer during the previous tax season and now possess large debts upon vehicles of questionable mechanical condition.

Graniteridge's Public and Nonprofit Sector

Two documents published within the last 15 years have attempted to instigate community progress. The collaborative efforts of 200 volunteers emerged as *Imagine Graniteridge* in 2000, which organized individual data across categories and strategized tactics to influence future projects. Analyzed

brainstorming sessions and survey responses strived to contribute to a communal environment where "citizens will be able to enjoy a productive life without leaving the area in search of work" (Imagine Graniteridge 2000: 7). This approach contended that comprehensive local improvements would bring about social mobility for lower status populations. Eight years later, students at the private university within the county seat crafted a poverty assessment for local government administrators. A focus group and interview centered methodology identified insufficient transportation availability and diversity as the most prominent social problem. The assessment (31) emphasized that "a lack of transportation has left many to depend upon a broken and informal transportation system- one provided by friends and families and existing inflexible transportation . . . ", which is compounded by more affordable lodging existing far away from most employers. Researcher biases and time constraints limit the utility of both documents, yet together they assist in the contextual characteristics surrounding Graniteridge.

Graniteridge possesses a well-developed public and nonprofit social service sector that confronts multiple intersectional aspects of family hardship, yet unreliable private transportation remains minimally addressed. Social programming enters the community through the county seat, which enables local government as well as law enforcement agencies to conveniently collaborate upon community improvements. Distance between the county seat and other portions of Graniteridge require administrators such as the director of rental assistance to travel to clients in order to avoid the punitive aspects of reformed public assistance. Such an office must moderate three-strike policies which contradictorily facilitate work mandates that grant transportation limited clients' minimal opportunity to fulfill their bureaucratic responsibilities (Lein et al 2007, Lobao and Hooks 2003).

Public and political pressures are currently influencing the social service community to respond to the county seat specific social problem of transient homelessness. Nearby interstates attract nomadic individuals and entangle them within forest as well as riverfront camps stereotypically known for criminal activity. Professionals associate importance to improving access to transit across Graniteridge, but such priorities do not strongly correlate to donors and the general public.

The Horizon Project's executive director contended:

"I think it is very important, for the rest of the community- not so much. People are more concerned about homelessness because those are people you can see, and therefore quite frankly it looks bad... The issue of limited transportation is not that visible",

This dynamic fuels underlying tensions mainly experienced by the social service sector as it questions the true interest of the local charitable elite. Conflict pertaining to which organization should begin outlining homeless programming in preparation for state funds now exists, for mission-specific successes manifest rigidity and no organization is aligned with serving the transient. Social service respondents acknowledge the products of inequitable transportation upon working families, and as a result, space to pilot relevant social policy should exist.

Transit within Graniteridge displays a dire need for improvement, and the local political as well as social climate illuminates restrictions towards change. Industrial manufacturing employers which relied upon the full attendance of a large workforce responded to the extensive presence of unreliable automobiles by providing bus services. Recollections of the past lead aging residents to articulate that "I wish there was more transportation down here. There is . . . nothing. All of it has diminished. It's not getting better, it's getting worse", which represents a plea for future improvements. Respondents expressed an interest towards participating in new transportation programming rather than conforming to historical trends of self-subsistence. Normative mores that punish welfare reliance have therefore shifted to acknowledge contemporary job markets and promote an expanded use of alternative transit strategies to better extend a limited income. While discussing the potential of new social programming entering Graniteridge, Leonard clarified a question regarding the need for organizational initiative by stating "No, it is a matter of politics for who is going to assume the burden and pay for it". Graniteridge's social service sector validly opposes a laissez-faire approach to additional social programming, as resources such as staff are currently at capacity. Such limitations further stress the importance of formalizing socially constructed alternative transit strategies.

Policy Recommendations

Expanding Rural Transit

Rural transit providers such as The River Express function as independent entities nationwide, yet it is imperative for every agency to coordinate its operating hours with the needs of the local low-income employee population. The River Express' current traditional schedule reflects an attempt to minimize personnel, which fails to meet the needs of the service population as well as diminishes demand. Although The River Express should directly seek feedback from riders, our research suggests that daily routes which enlarge nighttime hours will optimize the service as an alternative transit source. Such expansion requires additional certified drivers along with funds to accommodate additional vehicle expenditures, but Mattson (2013) exhibits that about \$456 million of federal operational assistance existed in 2011, and 84% of bus services acquire their funding through this source. Acquiring a broader customer base alongside elevating fares should enable the organization to sustain \$2.83 per mile average operating costs. The multiple municipality environment of Graniteridge facilitates the logistical environment to manage a fixed route rural transit service, which enables individuals to acquire transportation within one hour. Respondents repeatedly reported that employee reliability founded upon reliable access to transportation that volatile community support networks cannot always provide initiated job sustainability, which aligns with the 1.8 million fixed route rides provided within the state encompassing Graniteridge. Only 464 of 1,392 agencies nationwide arrange fixed route services, yet low-income families utilize the guaranteed transit such programs provide (Mattson 2013).

Pursuing Formalized Ride-Sharing

Community support networks extensively implement rides to moderate transit interruptions, which grant potential to formalizing an affordable ride-sharing system within Graniteridge. Data indicates that low-income residents of Graniteridge primarily engage in what Deloach and Tiemann (2012) define as "fam-pooling", or traveling through relatives as well as fictive kin, yet limited contacts require one to locate a substitute ride through whatever means possible. Dynamic ride-sharing entails a one-time commitment to carpooling with individuals beyond kin, and such programming elevates each participant's access to operable automobiles (Hall and Amer 1997). Ride-sharing rationally suffices as a mode of rural transit because gained mobility exceeds the detriments of lost independence and time.

Citizens willing to interact with additional and otherwise distant families while participating in ride-sharing develop moral credit as well as social capital, for "the inference from this literature is that commuters who can journey with others like them and are more socializable should be more likely to carpool or use transit then would be predicted by models that rely solely on monetary costs and benefits to explain commuter choice" (Deloach and Tiemann 2012:522). Calling The River Express to enter the more isolated regions of Graniteridge is impractical due to the limited utility Leonard notes above, and Graniteridge Transportation Services offers route-dependent services for the most extremely marginalized. Rural transit improvements remain reliant upon personal vehicles, which require an optimized use of vehicles.

Cloud computer technology and the commonality of internet accessible cell-phones now enable a community oriented electronic ride-sharing system to exist. Numerous corporations offer online resources to generate cell-phone applications without computer programming experience for around \$30 per month. Such a subscription simultaneously provides technical support and personnel to integrate the app into the Android, Amazon, as well as Apple market as a free download. This technology allows an application like "Ride-Share Graniteridge" to exist, which sustains a medium for individuals to seek transportation, post their availability, and barter without computer server overhead existing. "Ride-Share Graniteridge" would catalyze additional density upon the overall community support network of Graniteridge and therefore diminish the isolation certain low-income families currently navigate. Hall and Amer (1997:309) contend that "Most importantly, for the system to be useful it must ensure that the database contains a critical mass of registrants, so as to give the user a reasonable likelihood of finding a match", which ultimately generates additional expenses pertaining to community promotion through local events as well as advertising. Two million adults nationwide utilize park-n-pool ridesharing parking lots that centralize safe meeting locations, and the County of Graniteridge can develop a small gravel lot within every region to encourage participation. Rural communities desperately need to optimize the potential of roadworthy automobiles, and an electronic application can stimulate both individual dynamic or

longitudinal partnerships. Every social service organization within Graniteridge possesses the flexible capital to administer this transit initiative.

Creating Community Involvement

Future social policy initiatives investigate the potential of providing affordable vehicle repair and promoting vehicle donation. Frequent maintenance as slotted by the manufacturer prolongs the mechanical lifespan of an automobile and minimizes breakdowns, yet the financial environment lowincome families occupy barely permits a reactive approach that affords patches upon transit disruptions. Minimizing Graniteridge's rate of vehicle disposal because of vehicle repairs that exceed its value requires a proactive perspective that replaces components prior to failing. Establishing a nonprofit vehicle repair organization will at least demand creating an affiliate of a non-related organization which must seek its own funding. Vehicle donations however resemble a policy any 501(c)(3) organization can utilize to better the mobility of clients, and The Horizon Project's executive director exemplified the practice by stating "While it is small and individual, I have seen it make a world of difference in people's lives". Federal IRS tax code indicates that one may deduct a fair market value towards their donated car, which may exceed the trade-in value of a vehicle depending on the tax bracket in question. As organizations within rural localities like Graniteridge further community bonds, they will increasingly gain the opportunity to motivate an affluent subgroup to exercise charitable behavior through car donations. Formal rural transit improvements must address the dysfunction of stratification with a collection of strategies like community support networks, for vehicle breakdowns reflect an unavoidable outcome that will otherwise continue to conflict low-income families.

Conclusion

Graniteridge during past decades housed a broad and consistent industrial economy, yet the contemporary workforce now entails fluid service sector employment. Transportation remains a vital contributor to employee reliability, and the bidirectional relationship between transportation and employment remains constantly in jeopardy for most low-income families. One respondent stated near the end of her interview that "It took five years and \$18,000 to own a somewhat decent car", which represents

an anomaly in relation to vehicle purchase price compared to other respondents. Home equity enabled this individual to qualify for such financing, but this vehicle now sadly operates with nearly 200,000 miles shortly after the high-interest debt became fulfilled. Data confirms that vehicle availability, residence location, and employment status as variables sustain economic volatility that generates family hardship. Respondents also illuminate that moral status and resulting community support network status contribute to the availability of alternate transit strategies while barriers constrain the benefits of such efforts. Each interview generated additional appreciation towards the fiscal uncertainty that coincides with low socioeconomic family status as well as the subsistence strategies that harbor the threat of complete familial economic collapse. Transportation ultimately represents an intersecting factor that contributes to the maintaining of familial hardship while hindering the potential for upward social mobility.

Generalizability towards similar deindustrialized rural communities exposes the vitality of personal automobiles in sustaining employment as well as the assemblage of methods that compensate against vehicle breakdowns. Low-income families rely upon vehicles often valued at less than \$1,000, yet related operational costs may approach up to \$10,000 when supporting multiple working adults. Such vehicle conditions perpetuate frequent vehicle breakdowns of varying severity, and minimal short-term repairs performed by informal DIY repairmen extend a deteriorating automobile's limited lifespan. This informal community support economy represents a subsistence strategy regulated through moral capital which must operate alongside poverty industries such as high interest vehicle financiers that remove countless funds from the community. Alternative transit strategies that attempt to moderate the consequences of transit disruptions range from walking within developed municipalities to seeking rides located within community support networks, but families remain isolated from transportation reliability that stimulates employee reliability. The multifaceted complexities of undependable rural transit illuminate the dysfunction of American stratification that locks families upon the threshold of impoverishment. Social policies that expand public rural transit systems and facilitate formalized ridesharing possess the potential to initiate immediate social change and stabilize the interrelated dynamic between housing, employment, as well as transportation critical to lessening economic volatility.

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