Reverse Commuting and Job Access in the United States

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Paper prepared for
International Seminar on
Day-to-Day Mobility and Social Exclusion
Institut Pour La Ville En Mouvement
University of Marne-la-Vallée
December 2002

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In America, one of the primary forms of social exclusion with significant transportation ramifications is spatial mismatch. The physical isolation of low-skilled, inner-city residents from burgeoning employment opportunities in the suburbs have been associated with rising unemployment and social-class segregation. Reverse-commute and specialized job access programs, many focused on mass transit systems and some on increased access to private automobiles, have been mounted across the United States in recent years to redress spatial mismatch problems. This paper examines the market-demand characteristics of reverse-commuting, drawing upon experiences in urbanized California, and reviews experiences with specialized transportation programs that aim to bridge spatial mismatches.

POLICY CONTEXT: REVERSE COMMUTING IN THE U.S.

Reverse commuting first arose as a policy concern in the wake of America's urban riots in the late 1960s. The McCone Commission, formed to advise the Johnson Administration on the cause of race riots, identified inadequate public transportation as one of several contributors to high unemployment rates amongst central-city blacks. Various reverse-commute demonstration bus services were introduced in the late 1960s and early 1970s, however, because of disappointing ridership results, policy support for specialized transit runs waned. The 1980s were marked by a period of transit subsidy cuts and campaigns to privatize services. By the early 1990s, interest in reverse commuting re-gained momentum, in part due to expanding welfare rolls, continuing inner-city unrest, and worsening suburban traffic congestion. Heightened interest was also spawned by public policy directives that sought to introduce work incentives and set limits on welfare dependence, notably the Federal government's setting of a five-year lifetime limit on cash assistance. "Workfare" programs, like the Federal government's *Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA)* and California's CalWORKs, fully embraced the notion that access to suburban jobs, and in particular, improved public transportation services, are crucial toward reducing inner-city joblessness. Federal programs like *Access to Jobs* under the Transportation Equity Act (TEA-21) and multi-agency *Bridges to Work* provided tens of millions of dollars for expanding transit connections between inner-city areas and suburban jobs.

During the 1990s, 84 percent of total population growth in America's fifty largest metropolitan areas took place outside of central cities. Suburbanization has been far from uniform – minorities and low-income individuals have migrated to the suburbs at a far slower rate than whites. Today, some 70 percent of all U.S. jobs in manufacturing and trade, sectors employing large numbers of entry-level workers, are in the suburbs. The spatial gap between where many low-income Americans live (inner-city) and where more and more jobs are being created (the suburbs), many contend, explains high inner-city unemployment. Today, more than half of U.S. households receiving financial assistance live in central cities.

To date, public transport has done a poor job of bridging this spatial mismatch. One estimate places the share of suburban entry-level jobs in the United States that are not on public transit routes at 40 percent (Orski, 1999). Another in Cleveland, Ohio found a 40-minute commute by transit would bring only 8 to 15 percent of metropolitan jobs within reach of low-income neighborhoods (Coughlin, 1998). Where specialized reverse-commute services have been mounted in the U.S.,

ridership levels have often fallen sharply over time as workers withdrew from the labor force or purchased cars and began solo-commuting. There have been some notable successes, however, such as suburban New York and San Diego where buses on radial routes are more full in the reverse than inbound direction during morning peak hours.

From a broader public-policy perspective, the aim is not so much to fill buses as to move the unemployed off of welfare rolls and into gainful employment. Accordingly, recent research has focused on employment outcomes rather than transit ridership levels. Studies have attached varying degrees of importance to public transit in successfully spurring inner-city employment (Cervero et al., 2002B; Sanchez, 1999; Blumenberg and Ong, 1998).

REVERSE COMMUTES IN CALIFORNIA

Recent research revealed that around 10 percent of commutes in California's four largest metropolitan areas (Los Angeles, San Francisco-Oakland, San Diego, and Sacramento) occur in the reverse direction (e.g., central city to suburbs in the mornings) (Cervero, et al., 2002A). Among low-income workers, the share is closer to 20 percent. Some reverse-commute trips are no doubt suppressed because poor or non-existent public transit connections prevent needy inner-city residents from securing suburban jobs in the first place. With the exception of the Bay Area, 19 out of 20 reverse-commute trips are estimated to be by private car. In fact, more reverse commutes in California are by carpools than mass transit.

Around one out of five reverse-commuters in California's large metropolitan areas are from low-income households. Many are minorities, in particular Hispanic women. More than one out of five low-income reverse-commuters are from households with one or no cars. Almost all of these individuals are transit dependent. From an estimated mode-choice model, the odds of a low-income reverse commuter taking transit was found to be five times greater than that of a middle-income person traveling in the opposite-flow direction. Appreciable numbers of California's reverse commuters match the stereotype often portrayed – many are low-income, car-less, minority workers who have no choice but to take transit to reach outlying job sites.

The hardships many of California's low-income reverse-commuters face in using transit are underscored by comparing travel times and costs with those of private cars. For documented reverse-commute trips made by low-income workers in three of the large metropolitan areas, peak-period travel times by bus were three to four times longer than those by private cars. While taking transit saves money, this benefit is often overshadowed by the quantum increases in travel times faced in trying to get from the inner-city to suburban job sites via conventional bus transit.

JOB-ACCESS AND REVERSE-COMMUTE INITIATIVES

As of early-2002, some 36 transportation programs aimed at serving the job-access and reverse-commute needs of CalWORKs (California Work Opportunity and Responsibilities to Kids) clients had been introduced in California. Transit agencies and county welfare departments launched the vast majority of these programs. In most instances, these initiatives were products of sustained and collaborative efforts among multiple organizations.

To date, the lion's share of CalWORKs transportation programs have focused on modifying traditional fixed-route bus services, either by adding new routes or extending the hours of operations

of existing ones (Figure 1). Nearly one out of four job-access and reverse-commute initiatives have involved some form of assistance targeted at individual beneficiaries, like child-transportation services, guaranteed-ride home allowances, or the initiation of carpool-vanpool services. Other improvements introduced throughout the state include the initiation of shuttle connections to job centers, low-interest loan assistance for purchasing or upgrading cars, and the extension of bus routes farther out to connect job centers and community college campuses. Experiences with some of these initiatives are reviewed below.

SCHEDULE EXTENSION INITIATIVES

Extending transit schedules is widely viewed as an important strategy for promoting welfare-to-work transitions due to the non-traditional, sometimes odd-ball work schedules of many low-wage, entry-level jobs. Leading the way in California has been the Alameda-Contra Costa Transit Authority (AC Transit). A series of workshops held in 1998 involving interested public agencies and major employers (including United Parcel Service, Federal Express, and the Port of Oakland) made it clear that running buses to serve late-night and weekend work shifts would be amongst the most beneficial actions AC Transit could take in helping low-skilled workers reach jobs. In response to this workshop, in late-1999 AC Transit extended the hours and days-of-week of operations for five bus routes connecting low-income, predominantly minority Oakland neighborhoods with employment centers near the Oakland International Airport and downtown. While evidence showed schedule extensions allowed some former welfare recipients to secure jobs, it came at a high transportation cost. With as few as 5 passengers per bus run, the cost of new transit trip was as high as $24, above what it would cost to hire a private taxicab to ferry the inner-city poor to and from jobs. Overall, experiences with late-night and weekend services reveals low productivity levels are unsustainable.

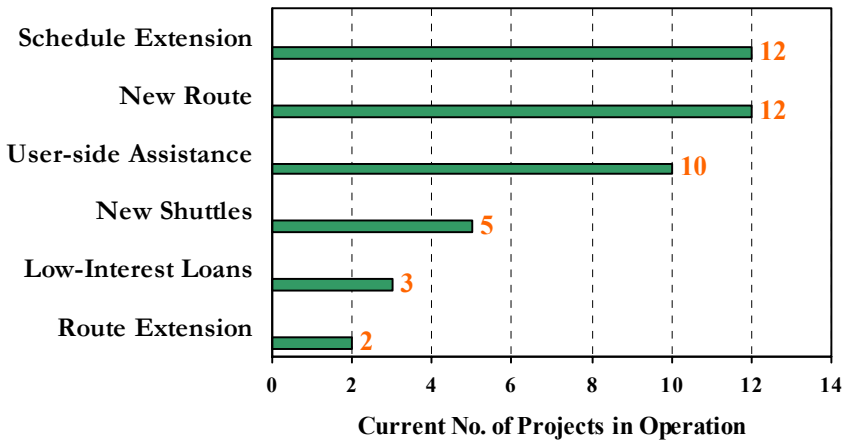

Figure 1
Relative Frequency of Job Access and Reverse Commute Introduced in California, Early-2002

NEW TARGETED ROUTES

A successful new targeted reverse-commute service is a 50-mile limited-stop bus run in suburban Los Angeles, called Route 422. During its first year, Route 422 returned more than half of operating costs through the farebox, a product of high load factors during peak-only operations and the competitive contracting of services to Coach USA. An on-board ridership survey administered for this study revealed Route 422 serves large numbers of minority and needy individuals. Three-quarters of surveyed riders lived in households with annual incomes below $15,000 per year, 84 percent were women, 85 percent were Hispanic, and 8 out of 10 had no driver's license. Attitudinal responses revealed Route 422 scored higher than seven peer routes operated by the Metropolitan Transit Authority (MTA) with regards to travel time, punctuality, and convenience (with three out of four rating services high on these criteria). Seven out of ten Route 422 customers scored overall services as good or very good.

Also successful has been a newly mounted reverse-commute service that serves an Indian gaming casino (Cache Creek) in a semi-rural part of Yolo County, California. Over 300 former welfare recipients ride the service each day, plying 23 miles from the township of Woodlands to the outlying casino. The service hints at factors that contribute to the success of a reverse-commute service in a small-county, substantially rural setting:

- *Large Employment Hub.* The Cache Creek Indian Casino is Yolo County's second largest employer, currently with over 1,000 workers, providing a concentrated workplace destination. The "many-to-one" travel patterns mean most passengers are delivered to the front door of their workplace. A single main destination also creates routing efficiencies – buses have a single "target" to reach.

- *Shift Schedules*: It has been not only the spatial concentration of trips that has aided Yolobus's special shuttle service but the temporal concentration as well. The casino operates on a schedule of three eight-hour shifts – 7 A.M. to 3 P.M., 3 P.M. to 11 P.M., and 11 P.M. to 7 A.M. With the workforce exceeding 1,000 employees, several hundred workers are heading to and leaving the casino at shift changes from which Route 215 can draw.

- *Private Finance.* The casino owners currently fund over 30 percent of the service's cost. Of course, the casino-owners would not be contributing such large sums if they did not perceive they were receiving benefits at least as large. Having workers arrive on time aboard a safe and comfortable bus, and without the stress of having to fight the 30-45 minutes of two-lane traffic between Woodland and the casino, has made it in the casino's interest to help underwrite the service.

- *Private Marketing.* The Cache Creek Casino also actively markets the 215 service to its employees and customers. An announcement is made on the casino's intercom about each bus's arrival and soon-to-occur departure. Bus schedules are prominently displayed at a number of locations in the casino, including the entrances to all restaurants. Buses pick up and drop off employees and customers at the front door, not at out-of-sight locations.

- *Long Route*. Route 215's long mainline segment, spanning 23 miles from terminus-to-terminus through a landscape of mainly fruit groves and farmsteads, means there are few stops along the corridor. This not only results in high average speeds but also better schedule adherence since there are fewer unanticipated delays at stops.

SHUTTLE PROGRAMS

California's most ambitious shuttle program so far has been launched in Santa Cruz County. A high-quality door-to-door van service, called Connections Shuttle, provides much-valued mobility to many CalWORKs clients living in unincorporated areas. It is considered an option of last resort, however, because of high costs. Funded by Federal welfare-to-work grants as well as county contributions, the Connections Shuttle not only *connects* needy people to jobs, but also *creates* jobs. Notably, CalWORKs participants are trained and hired to drive vans, enabling them to obtain their Class B drivers' licenses and gain firsthand experience in the van business. Thus it "kills two birds with the one stone" — it both provides needed transportation services to clients and trains people to themselves become transportation service providers. Training to become a driver or dispatcher is not considered an end-state job; once training is completed, individuals are expected to find a job in the transportation field on their own, freeing up driver job openings for new enrollees.

A year-2000 on-board ridership survey revealed the majority of shuttle trips were taken by children -- 54 percent of trips were to day-care facilities and 3 percent to schools. Other trip purposes were: work (27 percent), training (12 percent), job interviews and searches (1 percent), and supportive activities (3 percent). The program has been credited with creating over 100 jobs to date. Once becoming credentialed, 33 percent of trainees obtained employment with Lift Line (the ADA paratransit operator), 21 percent obtained work in other transportation-related jobs (e.g., airport van shuttle operators) and 9 percent obtained work in jobs unrelated to transportation.

On-the-job training has not escaped criticism. The United Transportation Union opposed Connection Shuttle on the grounds that trainee drivers and dispatchers would displace long-time union workers. To address this concern, the Connections Shuttle job-training period was limited to seven months (though Connections Shuttle management reserves the right to extend an individual trainee's training period if there is a shortage of drivers). By enabling CalWORKs participants to obtain bus driver credentials, the Connections Shuttle is providing a benefit to transit agencies and commercial paratransit vendors by expanding the pool of trained individuals from which to recruit.

LOW-INTEREST CAR LOANS

Given problems in mounting transit services that meet job-access needs of the poor, some California Counties have shifted their focus to enhancing automobility. Thr inner-city poor trying to reach suburban jobs often need cars for the same reason as the non-poor do – to overcome the limitations of sparse and irregular fixed-route public transport services. Car-based strategies, however, have not escaped controversy. The retention of older vehicles, environmentalists point out, exacerbates air quality problems. Others warn that the cost of insuring a car in high-crime, central-city settings can be prohibitively expensive. Some also worry that those depending on the private car to reach jobs will not be able to cover

mounting maintenance expenses and costly repair bills that accompany owning older vehicles.

Empirical Evidence

Using panel data from San Bernardino County, California, the relative importance of access to cars versus public transit in explaining the ability of some individuals to switch from welfare recipient to active employment was examined (Cervero et al., 2002A). Data obtained from the California Work Pays Demonstration Project (CWPDP) recorded employment and welfare status for two points in time (1993 and 1995) for a sample of 730 individuals who were on Federal welfare aid. While all surveyed individuals were unemployed and on welfare in Wave 1, two years later in Wave 2 some of the individuals had found jobs and gotten off public assistance. Changes in welfare status (from 1993 to 1995) were associated with various predictor variables, including car ownership, job-accessibility via transit, neighborhood-scale measures of bus-service intensity, and attributes of individuals. Multinomial logit estimation allowed the incremental influence of transportation, human capital, and various control variables on the probability of obtaining a job to be gauged.

The model found car ownership to be a strong and positive predictor of whether welfare recipients in 1993 were able to find work in 1995 and also if they were able to get off of welfare as a result. Car ownership not only contributed to successfully finding work, but it also distinguished between those who got a job but stayed on welfare and those who did not. The model also showed that quality of transit access to jobs mattered, however car ownership was a far more statistically significant explainer of positive employment outcomes.

San Mateo County's Car Loan Program

Case experiences from San Mateo County lend support to these model results. In 1998, a Family Loan Program was initiated that provides small loans to welfare recipients and low-income parents residing in San Mateo County who have no access to conventional loans. A partnership of public and private foundation interests funded the program.

The Family Loan Program – serviced by four local banking partners which receive low-interest federal funds under the Community Reinvestment Act (CRA) – provides one-time loans of up to $3,000 to help with job or education-related expenses. Besides providing financial resources, the program also builds experience in obtaining and repaying a bank loan and provides an opportunity to establish or repair credit history.

One and a half years into the program, 89 of 203 applicants, or 44 percent, had been approved for loans. The average loan amount was $2,594 and the average processing time was 15 days. Most loans were for transportation purposes: 71 percent went to car purchases and 8 percent were used for major repairs. By mid-2000, the program had received 750 inquiries and 250 applications, leading to 100 approved loans. Over half of the approved loans went to CalWORKs recipients.

The program has clearly reached needy individuals. During these first 18 months, 97 percent of loan recipients were women. The vast majority were single moms raising one or more children. Many lived below the poverty line. Also, people are paying back loans: its 91 percent repayment rate is

well above the national average of 70 percent for similar programs. Moreover, clients are getting to work more quickly and on-time: 18 months into the program, loan recipients reported a 93 percent average reduction in time spent getting to work and a 90 percent decline in work time missed. Additionally, there was a 26 percent increase in attendance at job-related educational activities.

More important are "outcome" measures – i.e., to what degree did the loans achieve their its intended purpose of promoting welfare-to-work? The best indicator is that average gross incomes rose after loans were issued: by 23.8 percent within the first 6 months of receiving a loan and by 36.9 percent at the end of the loan term.

IMPLEMENTATION AND COORDINATION

Successful job-access and reverse-commute programs depend upon successful collaborations. The many stakeholders – county welfare departments, transit service-providers, regional planning entities, faith-based and charitable organizations, among others – must build partnerships that coordinate efforts in ways that deliver suitable and cost-effective transportation services to clients. Partnerships can increase productivity by tapping into scale economies. Teaming multiple service-providers across multiple human-service agencies, for example, can create opportunities for centralized driver training, vehicle maintenance and inspection, vehicle scheduling, and insurance coverage.

Collaborations are sometimes easier said than done, however. Disagreements and "turf problems" between California's county welfare offices and local transit agencies have thwarted progress in some instances. In small and rural counties, a lack of institutional capacity and staff training to do short-term needs assessments and long-range transportation planning have also been impediments. Additionally, funding programs can pose barriers. While many one-year grant sources are available, the absence of sustained multi-year funding discourages many localities from pursuing ambitious job-access strategies. Restrictions also prevent a van purchased to provide mobility for the elderly from being used to transport a CalWORKs client to a job interview.

Institutional problems also create contradictions that make it difficult to rationalize job-acess programs. Surveys of low-income and jobless CalWORKs participants in California underscored the need to keep transit fares affordable. One way to do this is to competitively contract out services so as to lower operating costs. Most private vendors hire non-unionized, low-wage drivers to keep costs down however this can also end up lowering service quality. Experiences show that contracted services can compromise reliability and on-time performance. Sometimes contracted buses do not show up or are well behind schedule. Reliability is of utmost importance to many CalWORKs clients in that if they arrive to work late more than once, they are usually let go, especially those who make a living serving customers in the restaurant, retail, and lodging industries. Additionally, efforts to introduce some door-to-door van services in the state have been stonewalled by organized labor out of fear that low-wage shuttle drivers will take away jobs from unionized workers or eventually depress salary levels. Such problems might be averted by enlarging partnerships to include union interests, private vendors, and others with a vested stake in job-access programs. Expanded partnerships can bring new people with fresh ideas and different perspectives to the table.

CLOSE

Reverse commuting is expected to grow in coming decades in the United States as more and more jobs migrate to the suburbs, inner-city neighborhoods get gentrified, and workfare initiatives continue to require the inner-city poor to eventually find jobs. Research summarized in this paper reveals that America's reverse commuters comprise significant numbers of minorities and transportation-disadvantaged individuals. Reverse-commute services that meet the mobility needs of the inner-city poor will likely gain importance on social-equity grounds for this very reason. A host of factors, including spread-out workplace destinations, poor transit connectivity, and free parking, conspire against traditional public transit approaches to serving reverse-commute trips.

To date, a rich assortment of job-access and reverse-commute services has been introduced in California. Many other improvements can be expected in the next few years as some programs move from the conceptual planning to the implementation stage. Experiences show, however, there is no "one-size-fits-all" transportation solution to welfare-to-work challenges, at least in California. Mobility needs vary across urban, suburban, and rural settings. Specialized transit services and private mobility have roles to play. In this regard, much is to be said in favor of transportation programs that are client-based and offer a menu of options, as introduced in Santa Cruz County, California. While this "buffet" approach adds costs, the ability to customer-tailor transportation services to meet individual mobility ends is a huge benefit.

California's experiences show that successful job access and reverse commute programs depend upon successful collaborations. The many stakeholders – county welfare departments, transit service-providers, regional planning entities, faith-based and charitable organizations, among others – must build partnerships that coordinate efforts in ways that deliver suitable and cost-effective transportation services to clients. Partnerships can increase productivity by tapping into scale economies. Teaming multiple service-providers across multiple human-service agencies, for example, can create opportunities for centralized driver training, vehicle maintenance and inspection, vehicle scheduling, and insurance coverage.

While California communities have made progress on several fronts, strategies introduced to date to cope with job-access needs have been fairly traditional. There have been few cases where localities have aggressively sought to "test the waters" by introducing innovative transportation initiatives, like smart paratransit, user-side subsidies, or community-based mobility enterprises. This is likely due to a number of factors: limited budgetary resources; limited knowledge among the many non-transportation professionals who managed welfare programs at the county level; reliance on public transit agencies, who tend to be risk-averse and to stick with traditional approaches; and one-year grant awards that provide no guarantees of ongoing funding and thus encourage conservative transportation approaches. Regardless, the time is ripe to pilot-test new transportation strategies and ideas, unencumbered by traditional approaches. Federal and state funding agencies should weigh the possible advantages of pilot-demonstration programs. Ideally, demonstration programs should be judged on "outcome" measures of performance, not "outputs". Output-based measures examine what was delivered – e.g., miles of transit service. Outcome-based measures focus on the degree to which objectives have been achieved – e.g., moving adults from welfare rolls to gainful employment.

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