Transit Privatization: An Overview of the Industry With A Closer Look At Non-Operations Contracting

June 2005

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MTM 290
Strategic Management in Transportation

Mineta Transportation Institute
College of Business
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Technical Report Documentation Page

1. Report No.	2. Government Accession No.	3. Recipients Catalog No.
4. Title and Subtitle **Transit Privatization: An Overview of the Industry With A Closer Look At Non-Operations Contracting**		5. Report Date **June 16, 2005** 6. Performing Organization Code
Authors **Joseph Rye**		8. Performing Organization Report No.
9. Performing Organization Name and Address **Mineta Transportation Institute** **College of Business** **San José State University** **San Jose, CA 95192-0219**		10. Work Unit No. 11. Contract or Grant No.
12. Sponsoring Agency Name and Address		13. Type of Report and Period Covered **Abstract for Publication** 14. Sponsoring Agency Code
15. Supplementary Notes		

Abstract

This study is geared toward public transportation professionals with an interest in both the history of transit privatization and an inclination toward expanding their knowledge of the latest trends in privatized or "contracted" public transit in California. With the supermajority of existing research on this subject focusing only on the privatization of operations, my research will provide an informative background on operations contracting, then focus on three other venues for privatizing portions of public transit agency functions: vehicle maintenance, marketing, and bus stop janitorial services.

Each function subject to privatization shall be analyzed using a manageable set of survey properties. Surveys were sent to 30 transit agencies, comprising a broad spectrum of transit property sizes and characteristics. Quantitative (cost and other measurable statistics) and qualitative (agency satisfaction with process and privatization) data was collected from each survey property.

17. Key Words	18. Distribution Statement No restrictions.		
19. Security Classif. (of this report) Unclassified	Security Classifi. (of this page) Unclassified	21. No. of Pages	22. Price

Form DOT F 1700.7 (8-72)

ACKNOWLEDGEMENTS

The author wishes to thank each and every California transit agency professional who contributed to this research paper. Nearly 30 different persons volunteered to be the point of contact for the data gathering effort at each of the 30+ agencies contacted for assistance. Please refer to Appendix C for a list of the points of contact at each surveyed agency.

The author wishes to extend special gratitude to his supervisor at the City of Santa Maria, Rick Sweet, City Engineer/Public Works Director.

The author wishes to thank the entire Mineta Transportation Institute faculty for the great insight and wonderful demonstration of interest, enthusiasm for their subject matter, and patience with their students. Special thanks to Mineta Transportation Institute Education Assistant, Viviann Ferea, without whose assistance this student would never have matriculated to this point.

Finally, to my wife Nataliya for allowing me to immerse myself in the MTI program. Without her self-sacrifice this author would not have been able to accomplish this career goal.

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Obtaining provision of transit services from private companies via competitive bidding procedures (known collectively as privatization) has gained increasing popularity among transit providers across America, including those within California. With its primary origins in the 1970s and 1980s, transit **operations** privatization has been thoroughly researched by a plethora of academicians and ideologues alike. Privatization existed for centuries in some form from the historic American bias toward the private sector. Prior to our exploration of contracting of transit jobs, it may be wise to quickly overview the typical transit agency structure.

The basic components of nearly all transit systems include:

- Operations (drivers, supervisors, dispatchers, customer service agents)
- Rolling stock maintenance personnel
- Bus stop and train station maintenance personnel
- Bus stop and train station janitorial personnel

- Administration
- Marketing.

Scholars have extensively debated what public services are best suited to private sector provision. A consensus identified by Donahue (1989) points out that for a public service to easily lend itself to effective and efficient provision by the private sector it must be:

- easy to spell out exactly in a contract
- easy to monitor quality indicators
- where ends are more important than means
- and when individual profit-seekers are more easily replaced (much contractual competition).

Public transit fails all four "contractability" tests miserably. With public transit operations so dependent on safety, people skills, and so overarching as to require self-monitoring, how did contracting become so prevalent in public transit?

Specific to California, privatization may have been accelerated by the 1971 statewide transit funding legislation called the Transportation Development Act. In order for transit-friendly democratic legislators to get this landmark legislation thru the powerful rural and suburban streets and roads bloc, significant compromises were required. The most impactful of the compromises may have been the strict "return to source" component. This return to source provision made the disbursement of TDA revenues move away from the intended benefactors (cash-starved, highly productive urban transit systems) and toward fast-growing, sprawl-driven and heavily auto-oriented suburbs and small urban areas. This sudden infusion of transit money into suburbia may have increased transit privatization momentum due to:

- The ideology of privatization was spreading quickly during this era
- Sudden funding infusion, without an established demand for transit services
- lack of experience with transit operations at the newly-funded cities and counties.

All pro-privatization literature reviews and discussions cite cost savings as the primary reason for governments to shed direct provision of needed public services in favor of obtaining the services via contracts with the private sector. In public transit, where do these cost savings come from?

Research has identified two major sources of the "cost savings" commonly associated with operations contracting in public transit:

- lower operator wages and lesser benefits
- flexible work rules: split-shifts and higher percentages of part-time bus operators.

These cost benefits of privatization of transit relate directly to the three biggest transit operations cost escalators identified by McCullough, Taylor, and Wachs (1997)

- vehicle scheduling – service design
- political environment and overall union friendliness
- inflexible work rules: inability to utilize split-shifts and part-time bus operators.

Part II: A closer look at non-operations privatization

Three lesser-discussed components of transit system privatization were examined in order to obtain trends and uncover possible best practices in Bus Stop/Station Janitorial, Marketing, and Rolling Stock Maintenance.

For all three functional areas, data was requested via telephone and e-mail from 30 public transit agencies in California. Survey data was then classified and summarized in hopes of identifying "best practices" and potential cost savings.

BUS STOP/TRAIN STATION JANITORIAL SERVICES

15 responses were received (50%), yielding four general methods of obtaining these cleaning services. The lowest costs were associated with utilizing a mix of "in-house" (agency employees) and contracted personnel, usually contracting for certain rail and bus stations while using in-house crews for the high number (but less intensive janitorial demands) of bus stops. While costing a bit more than either mixed or completely "in-house" janitorial methods, there is a great deal of political capital to be realized by contracting with a local workforce (usually for the developmentally disabled) training center. No clear best practice emerged from the data obtained.

MARKETING

20 responses were received (66%), yielding three general methods of obtaining marketing services. The majority of respondents directly employed marketing professionals within their transit agencies, while others reported using a mixture of 'in-house" and contracted marketing staff. It became clear that those transit agencies employing their own marketing staff were able to dedicate far more person-hours to marketing that those who contracted out for these services for about the same costs-per-rider. Responders cited the higher hourly rate and travel costs inherent with utilizing outside contractors versus in-house staff. However, no trend on ridership increase or decrease emerged from the data received, so it is unclear whether or not in-house marketing staff are more effective. Not withstanding further detailed research on this topic, it appears that if allowable by the transit agencies governing powers, the direct employment of marketing staff is preferable to the utilization of consultants. Direct employed "in-house" marketing staff expend more hours and more energy serving the agency and are available to conduct vital grass roots (also called guerrilla) marketing. While consultants likely perform the same work in less time due to experience and ability to adapt past projects to each new client, they are often not practical to utilize on the ground for any local event, due to travel and high hourly rates.

ROLLING STOCK MAINTENANCE

20 responses were received (66%), yielding three general methods of obtaining fleet maintenance services. Transit properties either conducted "in-house" maintenance, obtained maintenance via their operations contractor, or a mix of both. The dichotomy between responding rail transit properties and bus-only agencies made comparison of the data nearly impossible (rail maintenance far more intensive, and agencies did not provide rolling-stock-only costs data) but some interesting data did emerge. Miles between road calls is often a good indicator of quality of maintenance efforts. The two best properties in the responding pool of transit agencies were both small to medium in size, with one conducting in-house maintenance and the other utilizing a direct contract with a private maintenance firm. This functional area clearly requires further study. I would like to conduct a case-study-based research on transit agencies utilizing the different service provision methods, but on fleets of similar size, age, and composition.

PART I: TRANSIT PRIVATIZATION HISTORY

Transit managers are constantly under political and administrative pressure to cut costs and expand services. Interestingly, transit managers are also under constant pressure to deliver better services while maintaining low fares. Caught in this vise, transit managers need to be aware of successful and unsuccessful experiments in cost control.

The overarching topic of privatization of governmental services is rich in volumes of research, however, the subset of public transportation privatization has been analyzed in a far more limited manner. Transit privatization research has focused almost exclusively upon the contracting of operations (drivers, supervisors). "The most typical strategy is competitive contracting (competitive tendering), in which the transit agency continues to administer the system, but purchases service for a specified period of time from private providers." (Cox, 2005)

Obtaining provision of transit services from private companies via competitive bidding procedures (known collectively as privatization) has gained increasing popularity among transit providers across America, including those within California. With its primary origins in the 1970s and 1980s, transit **operations** privatization has been thoroughly researched by a plethora of academicians and ideologues alike. A number of key concepts and findings were identified in the literature review on operations contracting in transit and a few are highlighted here in order to give the reader an insight into where to begin researching the effectiveness and externalities surrounding transit contracting. In addition, I have added some of my experiences as transit manager in a typical, privatized transit operation here at Santa Maria Area Transit.

Privatization existed for centuries in some form from the historic American bias toward the private sector. This paradigm (right or wrong) that the private sector was inherently more efficient led government to expend a share of funds directly to the private sector, building to a flurry of ideologically-driven privatizations initiated both "across the pond' by the Thatcher Administration in the United Kingdom (and quickly spreading to conservative "intellectuals" in the USA) in the 1970s and 1980s.

McCullough, Taylor, and Wachs (1997) estimated the spread of transit operations contracting had continued during the timeframe 1989-1993 by 27% nationally. "By 1993 contracted bus service made up about 6% of all United States fixed-route revenue hours." (McCullough, Taylor, and Wachs, 1997)

Specific to California, privatization may have been accelerated by the 1971 statewide transit funding legislation called the Transportation Development Act. In order for transit-friendly democratic legislators to get this landmark legislation thru the powerful rural and suburban streets and roads bloc, and the anti-tax Republican governor (Reagan), significant compromises were required. The most impactful of the compromises may have been the strict "return to source" component, which the above-mentioned powers forced into the bill to get their votes. This return to source provision made the disbursement of TDA revenues move away from the intended benefactors (cash-starved, highly productive urban transit systems) and toward fast-growing, sprawl-driven and heavily auto-oriented suburbs and small urban areas. "They also locked a suburban bias into the TDA in perpetuity." (Taylor, 1991). With regards to the expansion of operations privatization, the TDA act spawned a frenzy of formation of previously non-existent suburban, small urban, and rural transit systems. The supermajority of these newly created transit operations chose the privatization path at startup and most have stayed privatized to this day.

Prior to our exploration of contracting of transit jobs, it may be wise to quickly overview the typical transit agency structure.

Transit Functional Areas: Overview

Here, we break out the basic functional components of most public transit entities: operations (which HAS been well studied for privatization impacts), vehicle maintenance, bus stop maintenance, bus stop janitorial/cleaning, administration, and marketing.

OPERATIONS consists of the majority of the activity conducted in the name of and process of providing public transit services. Top to bottom operations often appears as:

- Operations Manager or Director of Operations – reports to GM/Transit Manager
- Safety/Training Manager – Reports to Ops Mgr, manages Road Supervisors
- Road Supervisors – field supervision of all vehicle operators
- Dispatchers/Customer Call Agents – field calls, oversee pullouts, ADA trip delivery, convey vital information to management from operators, and clients
- Fare Security staff/clerks – in office count fares, reconcile with driver logs
- Revenue vehicle operators – bus and train drivers, the front line employees
- Bus wash staff – clean vehicles.

Operations is ultimately directed by Transit Agency policy, planning, and administration, but implementation relies upon the skills of the *Operations Manager/Director of Operations*. This crucial position within the agency requires both attention to transit detail, but also state of the art human resources skills, labor relations skills, budgeting and performance measurement, and the ability to communicate effectively with everyone from the GM/Transit Manager to the bus washers. Generally, Operations Managers have done some time behind the wheel as bus operators to prepare for the technical side of transit operations.

Safety/Training Managers often will fill in for the operations manager in their absence, but additionally the Safety Manager will oversee all bus/train operator training (hiring and on-going) and take the lead in investigating all incidents and accidents that occur. These folks are often senior bus operators that have proven themselves as safe and competent operators and now impart their skills upon those with less experience.

Road Supervisors are the daily connection between the rank and file vehicle operators and management. The road supervisors often will be on scene at key train or passenger transfer center points, at operations centers during bus pullout times, and are constantly available to all drivers via radio equipment.

Operations also consists of the *dispatchers/customer call center staff*, who interact with the public constantly dispersing information on fixed route services/status, and reserving, providing status of, and canceling Americans with Disabilities Act (ADA) paratransit trips.

Fare security agents/clerks work on the financial side of the operations process. Fare clerks will empty bus/train vaults, ticket sales machines, and then reconcile the amounts of monies collected with the anticipated fares from the operator logs. This is a trusted and often overlooked function of operations. Often fare security personnel will cross train as dispatchers or customer service representative to allow more organizational flexibility.

Bus/Train Operators make up the majority of the operations (and overall) staffing of a transit agency. They are the heart and soul of the operation, acting as the service's ambassadors and interfacing daily with thousands of passengers. They are charged with the unenviable task of maintaining on-time performance while providing service with safety as their top concern.

Bus/Train Wash Staff work (often at night) making sure that all agency revenue vehicles are kept in a clean and attractive manner. Bus washers clean the exterior and interior of vehicles using various equipment and materials. Often bus washers will have the aid of automated bus/train wash equipment. Regardless, it has been gleaned from countless passenger preference surveys that clean vehicles are among the top priorities of transit users. These workers usually perform their important work from the operations center.

BUS/TRAIN VEHICLE MAINTENANCE is often included into operations when calculating overall "operating costs" (along with some other functional areas) and often, privatizaing efforts include maintenance responsibility to the winning operations bidder, often calling for maintenance as a subcontractor under the direction of the operations contractor. While maintenance is included with operations in the calculation of operating costs, and often bid together in privatized transit sytems, maintenance retains a distinctly separate niche within the transit agency. Typical titles found within a transit maintenance shop include:

- Maintenance Manager/Director of Maintenance – reports to GM/Transit Manager
- Senior Mechanics
- Entry-level Mechanics.

Certainly, there are additional titles and specialization opportunities in larger agency maintenance entities, but in general even the smallest of maintenance units features elements of these three positions. Someone is responsible for the entire maintenance function (*Maintenance Manager*) and less experienced *entry-level mechanics* often perform the more routine scheduled preventative maintenance tasks while *senior mechanics* troubleshoot more complex vehicular issues, including breakdowns. Efforts to contract for maintenance will be studied as part of this research effort.

BUS STOP/STATION MAINTENANCE involves repairing vandalism and providing general maintenance to prolong the useful life of the transit agency's bus stop assets and rail stations. General examples of this function include repair of broken passenger shelter panels, benches, and schedule holders. Since this function often depends upon the sporadic instances of vandalism, and auto-bus stop conflicts, that are (fortunately) not consistent or predictable, often transit agencies obtain this service via either the bus stop janitorial staff or vehicle maintenance staff. Bus stop maintenance will not be studied further as part of this research, due to issues such as uniqueness of every transit environment, and prevailing labor cost variability between rural and urban systems.

BUS STOP JANITORIAL/CLEANING is the scheduled and on-demand ability of a transit agency to clean its revenue vehicle stops (bus stops and rail stations). Generally a routine will be established based upon the frequency each particular stop or station requires cleaning and trash collection services. Bus stop janitorial requirements will vary from stop to stop, from only loose debris collection and occasional bill or sticker removal at stops with only bus stop signage, to trash collection, hand or power scrubbing of bus shelters, shelter pads, schedule and map holders, stairs and platform mopping, escalator, elevator and structure cleaning at rail stations. Generally,

a *crew leader* will supervise 4-6 cleaning personnel. Bus stop and rail station janitorial will be studied further as part of this research effort to attempt to ascertain data on best practices.

ADMINISTRATION includes professional staff whose responsibility it is to implement policies that are adopted by the governing board (Transit Board of Directors, City Council, etc.) and to ensure that all functional areas of the transit agency conspire to provide the daily services that the agency is supposed to provide. Finance is run by a *Chief Financial Officer* and usually contained within administration, as is risk management, and human resources (*Human Resources Director*). The planning department provides the strategic analysis of current and future areas for transit service expansion or contraction using Short Range Transit Plans and long range planning documents (*Planning Director*). Legal counsel is generally contained within or reports to administration. At a minimum:

- General Manager/Transit Manager
- Chief Financial Officer/Finance Director
- Director of Human Resources/Labor Relations
- Governmental Affairs Manager
- Director of Planning
- Agency Counsel.

Administration plays a prominent role in the status, perception, and efficiency of each and every transit property. A strong administration team seems capable of operating in either a privatized or in-house (or combination of both) transit environment. Conversely, poor effort or skills in the administrative offices will negatively impact both privatized and (especially) in-house transit agencies. A recurring but largely unwritten idea in the transit privatization literature seems to warn against "bringing it (operations) in-house" unless the right mix of administrative talent and political will exists.

MARKETING consists of all materials and programs that the agency implements and how they are conveyed and promoted within the organization and to the outside public. Marketing in transit also always includes development of collateral materials for distribution to customers and potential customers such as schedule brochures, ride guides, system maps, passes, tokens, transfers, and a variety of different informational and promotional items for special events and system changes. Marketing expenses often consist of more than just printing costs. *Marketing Managers or Directors of Marketing* are usually the persons charged with directing the energies of the transit agency marketing program. *Graphic artists* are required to create attractive print materials, prior to (generally) outsourcing printing services. In addition, often marketing projects will require lots of employee time on weekends, representing the transit agency at community events. Privatization of transit marketing will be researched further in this report.

How Does Public Transit Get Targeted for Privatization Experiments?

How did public transit, which generally defies the model for potential "successful" endeavors for privatization, became such an ongoing experiment in outsourcing? (Donahue, 1989) Donahue identified several criteria to be considered when evaluating what public services lend themselves best to contracting. Specifically, success (measured generally in cost savings without quality of service deterioration) is most often found when the activity being contracted out for is:

- easy to spell out exactly in a contract;

- easy to monitor quality indicators;
- where ends are more important than means;
- and when individual profit-seekers are more easily replaced (much contractual competition).

Provision of public transit doesn't seem to fit into ANY of the four criterion noted by Donahue.

For example, great strides have been made in the art of writing public transit contract specifications that detail most all the required performance goals desired from a public transit operation, including incentive and liquidated damages (penalty) clauses, but no written agreement can cover all the diverse variables that occur during the course of delivering transit services.

Quality indicators may be monitorable over time, but the collection of such data almost always requires contractors to self-monitor and present the data to the contracting entity for review. If the contracting agency does not have the resources or the will to expend resources collecting its own performance data (in order to validate data being collected and reported by the profit-seeking contractor), danger exists that performance data is compromised.

Transit also suffers horribly from the difficulty encountered when attempting to switch contractors. The ability to terminate one poor performing contractor and turn to another without a major (backbreaking) service disruption does not exist in public transit. The usual strategy of the incumbent contractor, underperforming (taking more profits, delivering less services) is to begin a campaign of undermining the agency or the transit manager with backroom meetings with local politicians (who rarely have any insight into actual transit performance), simultaneously with a fear campaign aimed at the drivers (your jobs are at stake!). This strategy often includes contractors motivating their employees to "pack the house" at the decision meeting of the transit board or city council to intimidate the elected officials into again awarding the contract in spite of poor performance. This tactic can be mitigated by active communication with elected officials and the rank-and-file drivers, and agency RFPs that guarantee existing (or better) wage and benefit levels REGARDLESS of which private company wins the contract. In summary, all four of the "contractable service" criterion fail when applied to public transit.

Why then is contracting so prevalent in public transportation?

In 1986 Roger F. Teal discovered that (at least at that time) most transit operations contracting was occurring in just a handful of states, including California. Fully 50% of all United States public transit operations contracting were occurring **in California in 1986**! "This is particularly the case for municipally provided transit services, as 27% of all operating expenditures for such systems (nationwide) represent privately contracted services." (Teal, 1986)

It is uncertain but quite feasible that California municipal transit services, many of which came to exist in the 1970s after passage of the 1971 Transportation Development Act funding legislation (which brought new transit monies to almost every city and county in the state) were born under circumstances which favored privatization at the outset:

- the ideology of privatization was spreading quickly during this era
- sudden funding infusion, without an established demand for transit services
- lack of experience with transit operations at the newly-funded cities and counties
- language in the TDA legislation that enable diversion of funds to other projects (roads).

The **conservative-driven ideology of privatization** was near the height of its trendiness and pervasion during the time many California transit agencies were born (1970s and early 1980s). Compounding this atmosphere was the fact that the funding was apportioned directly to Cities and Counties. Cities and Counties have historically been less than enthused about providing transit, and at least half the Counties in California diverted at least half of their TDA funds to road repair, citing no "unmet transit needs".

Even in spite of the inherent transit operations characteristic of oligarchy, the conservative wave that has dominated the United States since the late 20th Century continues to push the limits of privatization in transit. "Denver policy makers attempted to keep the contracting of existing public transit competitive by privatizing in phases and limiting the market share of individual providers to fifty percent. Three national bus companies won the contracts by offering exceedingly low prices for the first contract term and then rapidly inflating charges to the actual costs after being awarded the contract." (Sclar, 2000)

It was noted that public agencies that were either facing budgetary crisis or had **established a pattern of using TDA transit funding for other local government purposes** (TDA and anywhere that General Fund monies were going to transit) were most likely to contract. (Teal and Giuliano, 1986). In addition, history shows that privatized transit operations tend to be smaller than directly operated (in-house) transit operations. (Teal, 1986)

Lastly, many cities and counties found themselves awash in this new TDA funding, with the accompanying mandate to provide SOME level of transit services in order to access the funding, with **nobody on staff who had any experience with public transit**. The fear of inability to provide efficient transit services "in house", combined with the desire to operate transit on as small a budget as possible (in order to divert more TDA money to road repair) made contracting an easy decision for many a 1970s and 1980s city manager or county administrator.

California's TDA is not the only example of dedicated transit funding that has caused some negative externalities. Portland serves as a good example of how transit funding mechanisms can create inefficient transit services in the name of equity. After Tri-Met formed to bailout the failed private operation (Rose City Transit) in 1969, a regional payroll tax was created to pay for the district operational subsidy. This spawned geographiNRy based constituencies demanding service in their areas, many of these being dispersed cities with little propensity to use transit. (McCullough, 1997)

Variations of Transit Operations Contracting

Regarding **vehicle ownership**, by the mid 1980s a clear pattern regarding ownership of transit vehicles had emerged within the privatized operations contracting society. Those agencies contracting for paratransit (that was pre-ADA, but many cities were already doing paratransit (demand-response, or dial-a-ride) voluntarily to meet the perceived needs of the elderly, disabled, and difficult to serve sprawling suburban residential areas) tended to also obtain their vehicles from the contractor as part of the agreement. Conversely, fixed route agencies obtaining operations via contractors tended to retain ownership of the buses. (Teal, 1986) The useful lives of the buses used by the two distinct modes of transit seem to dictate the ownership. The smallish, body-on-chassis, or "cutaway" vehicles preferred for paratransit are only identified as 6-year lifespan buses by the Federal Transit Administration (FTA) whereas the full-size, heavy-duty transit buses used in fixed-route services feature 12 year life spans. Teal postured that the expensive price tags and long service lives of the 30'-60' fixed route buses would not lend

themselves easily to the standard 3-year operations service contract, requiring the bidding contractors to amortize far too many costs into each contract.

In addition to the choice of vehicle ownership, is the concept of **how to "administer the contract"**. The supermajority of current privatized transit agencies in California still directly employ the person(s) assigned the task of ensuring the private profit-seeking operations companies adhere to their contractual agreements and provide an acceptable level of service to the agency customers. Titles such as "Transit Manager", "Contract Administrator", and others refer to the person responsible for the transit system and the array of contracts required to provide a similar product offering as an "in-house" transit system, only instead using third party contractors.

Privatized Transit Management

There are a couple examples of transit agencies and/or municipalities that actually take on another contract with a professional (private) transit management company to administer their contracts with the actual contractors who do the daily work. Most of the major operations contracting firms will offer this service to a potential client should the agency express interest in obtaining their management services via contract also. A couple examples of such COMPLETELY privatized transit systems in California would be Foothill Transit and Antelope Valley Transit Authority in suburban and exurban Los Angeles respectively. These agencies rely on the private sector for every aspect of their management, including route planning, service monitoring, policy implementation, and daily administration. An elected (or appointed) board of directors periodically will evaluate the performance of BOTH their contracted management firm AND their array of operations and other contracts to assure that the mission of the agency is being fulfilled. There are also *temporary instances* where a transit agency or municipality will contract with a transit management consultant or firm (become completely privatized) for a short time period during the search for replacement full-time transit management employees.

The Cost Savings Debate: How Does Contracting Save Money (or does it?)?

Often, when researching this emotional topic, conflicting data and conclusions abound. For example, often a positive aspect of contracting out for transit operations is postured as **increased flexibility**. Specifically, the ability to negotiate service expansions and contractions is identified as a positive regarding privatization versus dealing with in-house employees. (Perry, Babitsky, and Gregersen, 1987) Most researchers have identified the lack of flexibility using in-house employees as caused by restrictive work rules negotiated by strong, public employee labor unions during collective bargaining. There is not always a panacea of flexibility using non-unionized private contract employees as I have found in my experience soliciting operations contractors in the recent years. Operations contractors pad additional expenses (profits) into their bid pricings, and are very wary of changes in levels of service. Often, any contractual language allowing more than 10-15% service expansion or contraction during any contract period (generally 3-5 years) causes inflated private sector bidding. Compounding this quandary is that when a transit agency chooses to undertake a major service expansion (beyond the allowed 10-20% in the contract) a forced renegotiation of ALL revenue service rates may be triggered. When negotiating from a point of weakness, the transit agency can expect significant cost increases and often must defer their expansion plans to conform with the allowable percentages in each contract term.

The idea of competition leading to lower pricing and higher quality is inherent in nearly every pro-privatization paper written. What is rarely mentioned, however, is the work done by (usually) incumbent private contractors to lobby elected and appointed officials before, during, and after each contract renewal. Incumbent contractors may often undertake a significant effort to undermine the agency administration (the contract manager, who is privy to the contractor's actual performance) and intimidate the agency board (or City Council) into choosing them at renewal time despite shoddy performance and higher pricing. In addition, as Donahue identified, public transit private operators are not great in numbers, it is NOT an easy-to-enter industry (mostly due to high insurance requirements at this point) so competition is very unpredictable. "If there are no alternative suppliers, then a contractor can extract monopoly profits even if he/she is inefficient." (Perry, Babitsky, and Gregersen, 1987)

Where do the cost savings come from? Problems with "in-house" operations

Research has identified two major sources of the "cost savings" commonly associated with operations contracting in public transit:

- lower operator wages and lesser benefits
- flexible work rules: split-shifts and higher percentages of part-time bus operators.

Fort Wayne, Indiana provides an interesting look at the labor cost savings mechanisms that pro-privatization pundits utilize as a model of cost-savings and taxpayer accountability. Fort Wayne Public Transportation Corporation (PTC) had been bleeding ridership and fighting cost escalations during the time period 1980-1986. Facing service cuts, layoffs of union employees, and low morale, PTC (after a series of court victories over the union) was able to contract out a large piece of formerly in-house transit services and compare costs over the next year. Roughly 70 contract workers performed the work formerly done by the PTC in-house staff. The in-house unionized staff had earned from $14.33 to $18.25 per hour (including benefits) while the privatized replacements only earned $8 to $9.31 per hour for the same identical work. (Bladikas et al, 1992) The impact on the bus operators is profound, yet the private operators do not report excessive problems maintaining staffing even at those subsistence wage/benefit packages. The union was busted, and the standard of living of bus operators in Fort Wayne plummeted. However, the decision to contract out did have the positive effect of stretching the limited PTC budget to allow for service expansions that otherwise could not have been considered. What was a clear defeat for labor was also a modest victory for the bus riding public. There are no data about quality of service or safety from this case study however. All dozen cases examined by the Institute of Transportation Engineering cited the improved position of management in labor negotiations, (from the use or threat of privatization) which resulted in lower costs to the public agency. (McCullough, 1997)

McCullough, Taylor, and Wachs conducted a multi-variate linear regression analysis to found what truly drives up the operational costs of public transit. They found that a complex set of conditions influences transit operating costs and efficiency. Often these cost-inflating conditions include:

- unfavorable work rules
- service to distant communities/commuter services
- high wage rates.

UNFAVORABLE WORK RULES relates to efficient use of labor. "It is important to note that drivers often get paid for hours when they are not actually driving and carrying passengers." (McCullough, Taylor, and Wachs, 1997) This cost-escalation inducer often shows itself in the form of labor-union negotiated rules that restrict the amount of part-time operators that can be hired, mandatory paid deadhead time, paid time between rush hour work, and overtime in excess of eight consecutive hours. (McCullough, Taylor, and Wachs, 1997)

Digging deeper into these "work rules" being blamed for the high costs of unionized, in-house operators leads to issues that perhaps frame the problem as collective bargaining agreements that favor unionized labor. Many negotiated work rules contained in today's collective bargaining agreements virtually prohibit split shifts. Also, many agreements require payment for labor above and beyond the revenue hours that the bus/train actually serves passengers (usually paid deadhead; time when bus or train is out of service but operators are returning to the garage or operations centers). These work rules have an acute impact on transit agencies who operate in a heavily commute-oriented environment, where peak usage of vehicles and labor occurs in the morning and afternoon rush hours but there is a very quiet midday period where drivers are not needed.

SERVICE TO DISTANT COMMUNITIES/COMMUTER SERVICES refers to the difficult mission of intercity commuter transit. The nature of long-distance intercity transit is frought with problems such as crippling deadhead (or, low productive service hours) and a severe reduction in service needs during midday and evening hours. In general, services attempting to connect distant suburbs and exurbs to downtown cores for predominantly work trips suffer from these service design issues. These areas lack a sufficient amount of "recreational" or "transit dependent" midday trip taking that would allow them to offer more "straight shifts" (a straight 8 hour work day with required breaks, but no long paid down time) and keep the majority of their rolling stock and operators working during the midday.

HIGHER WAGES are almost universally inherent where union membership is present among transit operators, whether privatized or not. Transit workers are often represented by large, national labor organizations (Teamsters, ATU) who have often had success negotiating against inexperienced transit agencies or municipalities. These successes have led to higher wages and more labor-friendly work rules, both of which drive up transit operations costs. The tactic that Teamsters and Amalgamated Transit Union negotiators have taken across the USA is what was identified as "pattern bargaining for standardized wage rates". (Freeman and Medoff, 1984) This pattern bargaining refuses to look at localized factors such as prevailing (market) wage rates and cost of living, instead opting to attempt to set the transit operators' wages similarly across an entire geographic region and the nation. (Freeman and Medoff, 1984)

The lowering of wages and work rule reforms surfaced again in a study of San Diego area transit contracting experiences. San Diego has consolidated and privatized a portion of their transportation services over the years. San Diego evolved a series of medium-sized contracts that are being fulfilled by an array of private sector contractors. In fiscal year 1996-1997, San Diego Metropolitan Transit Development Board experienced costs of about $3.50 per revenue miles on contracted services compared with a higher $5.00/per revenue mile on their remaining in-house operations. (Hurwitz, 2000) "While there has been a noticeable reduction of costs due to lower driver wages paid in a competitive environment, there have also been significant productivity gains due to more advantageous work rules implemented by contractors." (Hurwitz, 2000)

In San Diego and Houston, surveys were taken of operator wages at the in-house (Houston Metro & SDMDTB) properties and compared with contracted operators in the same service area (doing the same work under the same transit agency label). The results were astonishing. In-house operators were making $15.69/hr in San Diego compared to their privatized counterparts who were struggling along at $8.96/hr. Houston privatized drivers received 80% less than their transit agency employee counterparts. (McCullough, 1997)

Other mechanisms to lower operational costs

Often, in the debate over how to reduce costs of providing transit, the continuing failure of local governments in the United States to regulate and implement transit-conducive, high-density developments gets overlooked. In other words, the cause of the malaise goes ignored while the political and transit leaders look for ways to service ever sprawling, cul-de-sac-infested strip developments with stable or shrinking funding. The discussion inevitably turns to cost cutting. The stark truth begins to become clear that with the predominant land use patterns that the United States has adopted over the last 60 years, public transit will struggle without counterbalancing legislative actions. Only a handful of older, established, denser cities (New York City, City of San Francisco) and an occasional progressive newer city (Portland), have enacted transit friendly laws such as parking pricing/restrictions, toll roads, growth boundaries, development density bonuses, or dedicated transit lanes to avoid congestion.

The most compelling research that I have found regarding the legitimacy of contracting and some of the OTHER methods transit managers can use instead of privatizing operations to reduce wage and benefit costs is a thesis by William S. McCullough, at UCLA.

McCullough gathered data in his landmark research that allowed him to create a linear regression model to ascertain the true impacts on costs (per revenue hour, annual) of many different environmental factors that contribute to transit operating costs. Factors in the model, believed to have an impact on operational costs included:

External Factors

- Political Environment/Union Friendliness (#2 overall)
- Cost-of-Living
- Topography
- Population Density
- Climate
- Traffic Congestion

Internal Factors

- Vehicle Scheduling/Service Design (#1 overall)
- Labor Utilization (#3 overall)
- Contracting/Privatization
- Operational Size
- Service Area
- Vehicle Size/Mode

The McCullough model showed the number one variable in the transit costs per revenue hour equation as *vehicle scheduling (+95.4)*, with *unionization* a distant second *(+47.6)*, followed by *labor utilization (+27.4)*.

A modest surprise was that contracting out for operations, expected by many proponents to produce a large, negative coefficient on operational costs per revenue hour **only produced a slight negative coefficient (-.05)**.

VEHICLE SCHEDULING was identified as the single greatest influencer of transit revenue hour costs. (McCullough, 1997) A survey of the literature has identified that only in extremely rare cases in the United States does a transit agency give its contractors the ability to set routes and schedules. So transit agencies are creating their own quagmires with service designs that attempt to provide geographically equitable services (funding streams?) to meet travel demands that are often heavily peak hour loaded (work trip riders only), over very disperse service areas (suburban sprawl). I have witnessed this in several examples here on the Central Coast. Santa Maria Area Transit (SMAT is a fairly compact, urban bus system serving a relatively dense area) obtains operations services for approximately $35 per revenue hour through periodically competitively bid operations contracts. San Luis Obispo Regional Transit Authority (SLO RTA), an intercity transit agency providing services between cities in the region obtained a winning bid of $95 per revenue hour! Several factors contribute to the difference in revenue hour costs, but the most significant is scheduling and the far flung service areas of SLO RTA. SMAT features only a handful of hours of deadhead each day whereas SLO RTA must endure at least triple the amount of deadhead. The Clean Air Express, a commuter service operating here in Santa Barbara County is paying over $100 per revenue hour due to both the far flung service area and the absence of any services during the midday.

POLITICAL ENVIRONMENT AND OVERALL UNION FRIENDLINESS is rather self-explanatory and refers to the region in which the transit operation resides, and its political slant. A good example is Santa Maria, California. Santa Maria has historically been an arch-conservative area politically. This paradigm extends into areas where one would not generally expect Republican values to dominate, such as the ideologies of Santa Maria Area Transit's (SMAT) bus operators. Never unionized, and paid about the median or slightly above for non-unionized transit operators in the region (average of maybe $12 per hour) this group, that stands to obviously benefit from unionization, has never made an attempt. Several individual operators have approached SMAT management with probing questions (how management would feel about working with a union) but that has been the extent of the effort to obtain higher wages and or other workplace improvements.

LABOR UTILIZATION is closely related to many of the issues described in vehicle scheduling with one major difference: negotiated work rules. In addition to using expertise in runcutting to setup driver runs that are efficient and maximize agency resources, e.g. minimize payroll expenses for non-revenue hour activities, the transit agency needs to avoid agreeing to strangling union-demands for workplace rules. The most common culprits are rules requiring pay for extended mid-day idle time between peak-hour split shifts, paid deadhead time, and overtime for hours otherwise legally paid at straight wage rates.

THE EXISTENCE OR ABSENCE OF A TRANSIT AGENCY-PROVIDED FACILITY to house operations (and often maintenance) is an additional factor not discovered in the literature review on this subject. A facility to house operations and maintenance is an influencing factor in cost escalation. Private contractors who must identify and provide a facility

in order to operate a contract will always include the costs of such facility leasing into their operational cost bids. Thus, a transit agency who builds a maintenance and operations center (or some similar facility to house daily operations) can use CAPITAL funding to consolidate activities and save OPERATIONAL money every year over the life of the facility on their operations contracts.

Operations has received nearly 100% of the research and debate over the merits of transit privatization. However, operations is not the only functional area of transit being privatized and having significant cost impacts on transit agency budgets. The second and final part of this research assignment shall deal with three vital transit functions that also are privatized by many transit properties and hold significant shares of budget at most transit agencies: bus stop janitorial/cleaning, marketing, and bus/train vehicle maintenance.

PART II: CALIFORNIA TRANSIT AGENCIES STRATEGIES ON PRIVATIZATION (NON-OPERATIONS)

The three subcomponents of transit chosen to be evaluated separately for this report are **bus stop janitorial, marketing, and bus/train vehicle maintenance**. Each functional area includes feature tables to facilitate ease of conveyance of the findings. Anecdotal evidence will be utilized due to the extremely "qualitative" nature of data (such as agency satisfaction) that may not have sufficient contrasting data to compare. In other words, often responders mentioned that "we have just always done it that way" or "that's just how our Board wants it" when asked about their level of satisfaction with the status quo. Each component's analysis concludes with some summary findings and narrative as to whether additional research and/or data collection is advised prior to making the crucial privatization decision.

Data was requested from 30 California public transit agencies, ranging in size from Los Angeles Metro (MTA) and San Francisco Bay Area Rapid Transit (BART) to smaller transit entities such as City of Whittier, SLO Regional Transit Authority, and Santa Maria Area Transit. Please see the header columns of Figure 1-3 for the questions asked of each respondent transit agency regarding their particular strategy for obtaining the transit functional area service being examined. One common thread connecting all surveyed transit agencies was their participation in the California Public Employees Retirement System (CalPERS). Long ago, this author determined that only those employers offering PERS as a benefit of employment to their management would require further investigation for possible future employment opportunities. In addition, with California having nearly 100 public transit agencies (including paratransit only and Consolidated Transportation Services Agencies (CTSAs), a criteria for narrowing of the dataset was helpful, especially when the PERs filter yielded a very representive sample of large, medium, and small transit properties, some controlled by municipalities, but most independent of the control of any single local jurisdiction.

Survey questions as sent to each participating agency are included as Appendix A. Response rates varied between functional areas but in each case, responses were obtained from 50% or more of the agencies queried. Several rounds of emails and occasional phone cals were required to elicit additional responses and standardize the data (as well as possible) considering the myriad of methodologies and cost accounting involved in these functional areas.

In all functional areas, a qualitative question attempting to gauge transit agencies' level of satisfaction was asked. Respondents were asked to rank their level of satisfaction from a 0-5, with

zero being absolutely disturbed with the level of service being provided, and a five being totally satisfied with the quality and quantity of services being obtained.

Bus Stop and Rail Station Janitorial Services

One of the most important points of perception that the general public uses to evaluate the worthiness of their local public transit entities is the appearance of the areas that the systems utilizes daily: bus stops and transit/train stations. A clean bus stop or train station, free of debris, graffiti, and transients leaves an impression of professionalism, control, and safety. Whereas a bus stop or train station with noticeable clutter, dirt, graffiti and unsavory clientele often leaves a perception of danger, lack of control and general disarray.

Only revenue vehicle cleanliness likely ranks higher in importance for maintaining a positive community image for transit managers than bus stop attractiveness. Considering this level of criticality, data on how transit agencies across California were obtaining bus stop and train station janitorial services was requested in March of 2005.

30 agencies received requests for bus stop janitorial data, and half (15) submitted responses. A greatly varied spectrum of service procurement combinations were discovered. Contracting out to a social service (work training for developmentally disabled adults mostly) agency and a mix of contracting and in-house janitorial staff were identified in 4 responses each. In-house transit agency staff performed bus stop janitorial services at 3 of the responding properties. Data standardization was profoundly difficult, particularly in the case of the mixed responses, which generally did in-house cleaning of some bus stops/stations, and contracted for others and did not separate their cost allocations. A closer look at the 2 agencies who responded that their operations contractor also handled the cleaning of their bus stops shed light on a problem often encountered with cost comparisons across privatized transit properties. Specifically, some operations contract Request For Proposals (RFPs) require the bidding operations firms to identify all bid costs, including bus stop janitorial (if the agency chooses to included this function under the operations contract) while other RFPs don't require the calling out of the costs for each function.

Further muddying the waters, several responses from the Bay Area (beyond the 15 tabulated) had to be thrown out due to the fact that these transit agencies were fortunate enough to have their bus stop janitorial services provided free of charge in exchange for "allowing" a major outdoor advertising corporation to provide, install, maintain, and clean bus shelters throughout their service area. The transit agencies obtain free bus shelters, free cleaning of stops, and a nice guaranteed advertising revenue allowance each year from the outdoor ad company. Due to the fact that this opportunity is not available to all or most transit agencies, and some questions relating to cost allocation to clean non-sheltered stops, this data was omitted from Figure 1.

The most cost effective method of obtaining bus stop janitorial of the survey responses appears to be a mix of in-house and contract efforts. Follow-up questions revealed that all 4 "mixed" responses used contract janitorial services for bus/train stations and in-house staff for bus stops. For those transit systems <u>without</u> transit/train stations it would appear that conducting the cleaning of bus stops in-house is slightly cheaper. In addition, *more than one responder mentioned that their in-house bus stop cleaning crew also performed bus stop maintenance as well*. This is generally not an option when using a local work training center as the skills of the contract employees often are inadequate to conduct shelter maintenance in addition to cleaning. However, the amount of political good-will that a transit agency can cultivate by utilizing a local social service workforce training agency may be more than enough impetus to pay slightly higher annual per-stop costs. These life-skills training centers perform an important service in the

community. By awarding contracts for bus stop janitorial to these benevolent agencies, transit systems can obtain a decent level of service using workers who often are loyal bus riders as well.

Figure 1: Bus Stop Cleaning Summary

Method of Service Procurement	Via Local Social Service/Work Training Agency	Mix of Private Contract and In-House Staff	In-House	Via Operations Contractor as part of overall duties	Via Private Contractor (non-social service agency)
Number of Responses in Category	4	4	3	2	2
Average Annual Cost per Stop	$210/year	$80/year	$140/year	$98	$808/yr
Average Level of Agency Satisfaction	3.9	3.75	3.2	4.0	3.0

Marketing

Transit agencies conduct many efforts that fall under the rubric of "marketing". Reflective of the various motives and administrative paradigms found in local governments, marketing also is conducted using both in-house and/or contracted personnel.

Of the 30 agencies contacted for data on marketing methods and efforts, 20 responses were received. Data standardization was again a challenge. The majority of responses (12) came from transit systems using directly-employed, "in-house" marketing staff. Six (6) properties reported using a mixture of contracted and in-house marketing efforts, while one (1) property reports using only contracted consultants for all marketing efforts, and the twentieth reporting property had completely discontinued marketing of their services.

In order to facilitate some platform for comparison, FTE equivalents were requested and an annual figure of 2080 hours per FTE was assumed. Survey results clearly indicate that *more person-hours are dedicated to marketing for nearly the same annual cost per rider at the transit agencies who perform in-house marketing*. However, the costs of the different amounts of marketing effort between the "in-house" marketing staffs and the contracted marketing consultants were nearly identical. Further investigation into this illogical situation finds that the costs to employ a marketing professional, especially one in the earlier stages of their careers are far less than the hourly rates paid to contract-retained marketing consultants. A fully loaded in-house marketing staff person may cost an agency $70,000 per year for 2080 hours of effort while an experienced marketing consultant's $100 per hour fee will only allow for 700 hours of effort in that same fiscal year.

The choice between creating an in-house marketing position and contracting out may depend upon the focus of the agency's marketing thrust. Experienced transit marketing consultants already have created many pieces of collateral materials and have the ability to create work

without "starting from scratch". These consultants simply modify existing work efforts to fit the needs of each client and each unique marketing task. However, in my experience most contracted marketing firms are likely to have to endure travel for each site visit, thus escalating costs. This travel cost issue, combined with their far higher hourly rates, conspires to prohibit their staffing of local grass roots marketing efforts at local events in the service area.

Figure 2: Marketing Summary

Method of Service Procurement	Number of Responses in Category	Average Annual Cost Per Rider	Average Annual Hours Per Rider	Ridership Trends Agencies w/ FY 03-04 increase/decrease Then Aggregate AVERAGE	Satisfaction
In-House Staff	12	$0.0850	0.00207	7+ 5- (-0.3%)	3.900
Mix of Contracted & In-House Staff	6	$0.0854	0.00110	4+ 2- (+0.5%)	3.916
All via Contract	1	$0.0564	0.00078	(+9.2%)	4.0
No Marketing	1	$0	0	(-32%)*	0
TOTAL/AVG	20	$0.079	0.00161		3.69

* Whittier Transit surrendered a portion of its service area to another transit agency and discontinued marketing

Rolling Stock Maintenance

Rolling stock maintenance is also subject to privatization, and as the survey data uncovered, there are three primary methods of obtaining each transit agency's vital fleet maintenance: in-house, contracted as a sub-contractor of the operations contractor, and a mixture.

30 transit agencies were contacted to identify how they obtained rolling stock maintenance and their associated costs. 20 responses were received, and four different methodologies for obtaining rolling stock maintenance labor were found. Data standardization was extremely difficult due to the marked difference in maintenance costs associated with rail transit versus bus and paratransit services.

Nine (9) responding agencies were conducting strictly in-house maintenance activities. This category of "in-house" does not preclude the outsourcing of heavy (engine and transmission) rebuilds and tire services, which are often bid out even at "in-house" properties. Of these 9 responding in-house shops, 5 were involved with non-rubber-tired vehicles (4 rail, 1 ferry). Six (6) responding properties obtained their fleet maintenance services via their operations contractor while still 4 others agencies reported utilizing a "mix" of in-house and contract mechanics.

Due to the intermingling of rail properties into the categories of "in-house" and "mix" in Figure 4, cross-comparisons between the categories in Figure 3 make little sense. Anecdotally, there appears to be a higher level of agency satisfaction (regardless of modes) among both "in-house"

and the single "direct contracted" operation versus the 6 transit agencies who rely upon their operations contractors to also maintain their fleets. A fear of many a privatized transit manager is that without constant agency supervision (rarely possible with the skeleton staffs of most privatized systems) maintenance "via the operations contractor" will slip in favor of increased profit taking. "File-stuffing", or forging of preventive maintenance records is not unheard of. The supermajority of a privatized transit agencies assets ARE the agency's rolling stock and many managers feel more comfortable having "in-house" staff fixing their vehicles.

While the aggregate data does not lend itself to reasonable cross-categorical comparisons, some direct comparisons between transit agencies with similar size and composition fleets are insightful. (see Appendix B3) The two agencies with the best miles-between-road calls statistics are both small transit agencies (Unitrans and Santa Maria Area Transit), but one retains in-house mechanics (Unitrans) and the other (SMAT) enters into a direct contract with a talented local maintenance firm. 4 of the 5 agencies with the worst miles-between-road calls statistics were using *in-house mechanics*. 2 of the 4 agencies who contract for SOME of their fleet maintenance use contract mechanics only for their paratransit fleet services.

Figure 3: Vehicle Maintenance Summary

Method of Service Procurement	# of Responses	Avg. # Buses	Avg. # train cars	Average vehicles per FTE	Average Annual Labor Costs Per Vehicle	Average Miles Between Road NRs	Average Satisfaction
In-House	9	434	212	1.14	$48,535	18,114	4.36
Contracted Via Operations Contractor	6	23.8	0	4.25	$3414	27,065	3.83
Mix of In-House & contractor	4	166	24	1.68	$46,283	14,923	4.0
Direct contract with maintenance firm	1	23	0	11.5	$6261	52,719	5.0

CONCLUSION & RECOMMENDATIONS

No clear best practice emerged from this research on bus stop janitorial services. A combination of in-house and contracted janitorial (in house for bus stops, contract for brick and mortar transit buildings/stations) was shown to be cheap and most agencies were satisfied with

this arrangement. Agencies utilizing their operations contractor to clean their bus stops also experienced a great pricing structure and were satisfied with the level of cleanliness of their bus stops. Although utilizing a local workforce training center was not the cheapest alternative in the survey, almost every transit property surveyed expressed satisfaction with the fact that they are obtaining a decent product and providing employment to folks that not only ride transit, but often are have challenges in their employment search.

Not withstanding further detailed research on this topic, it appears that if allowable by the transit agencies governing powers, **the direct employment of marketing staff is preferable to the utilization of consultants**. Direct employed "in-house" marketing staff expend more hours and more energy serving the agency and are available to conduct vital grass roots (also called guerrilla) marketing. While consultants likely perform the same work in less time due to experience and ability to adapt past projects to each new client, they are often not practical to utilize on the ground for any local event, due to travel and high hourly rates.

No best practice emerged from this research on rolling stock maintenance. The inclusion of fleets of many different sizes and compositions rendered the data unruly to manipulate. However, comparisons between agencies with similar fleets using different methods of obtaining maintenance services is interesting and begs for further, more defined research. Perhaps further research (nationally perhaps) on other transit agencies utilizing direct contracts to obtain maintenance outside of their operations contract in a fashion similar to Santa Maria would be useful. There are certainly some advantages to having a private firm acting like an 'in-house" maintenance operation. Foremost is the fact that the direct contracted maintenance firm works for the AGENCY, not the profit-seeking operations contractor, so their loyalty is to the agency in cases such as road damage (operator error) and prioritization of the preventative maintenance function over bus availability.

Often privatization is not up to the transit manager to choose or decline, but rather an ideology directed upon a transit agency from the elected officials and powerful appointees who genuinely believe in the merits of expending public dollars to boost the private sector. Other times privatization is utilized as a tool to keep transit running lean and politically powerless so that transit's funding can be utilized for other (more appreciated) projects. Whatever the reason behind the privatization experiment, further research like this and others in the literature review can improve the decision making information for future transit management and users alike.

APPENDICES

Appendix A: Survey instrument

Survey Data Request Email

Fellow Transit Professional,

My name is Joe Rye, manager of Santa Maria Area Transit writing to you requesting some data to help me complete a research project involving costs of doing business and methods of service provision. This research paper will act as my capstone project in the Mineta Institute masters of

transportation program at San Jose State. Your help in transmitting this data will prove crucial to my success with this paper.

Attached is a quick abstract of my topic. I have either talked with you or someone in your organization recently that referred me to you for this data request. If you are not the person with access to the information requested, PLEASE forward this info request to the proper person within your organization for response. It is quite possible that more than one person may possess the data within each organization. Again, I thank you for your help. Please let me know if you are interested in a copy of my paper once it is completed in June, 2005. If you have any questions about this project and data request, please contact me at (805) 260-0012 or email me at tverklan@comcast.net.

Marketing

Do you possess in-house (agency employees) marketing staff or contract out for marketing? For transit agencies who do their own marketing in-house, how many FTEs?

For those agencies who contract out for marketing, approximately how many person-hours does your agency obtain from your consultant last fiscal year (FY 03-04)?

For all agencies, what is your annual marketing budget?

What was your ridership in FY 03-04? How does this compare to recent years, e.g. is ridership up or down and by what percentage?

On a scale of 1-5, with 5 being the highest satisfaction and 1 the least satisfied, how do you feel about the effectiveness and efficiency of your current marketing efforts?

Bus Stop Janitorial

Do you possess in-house (agency employees) bus stop/rail station janitorial staff or do you contract out for the cleaning of your stops/stations? Or some other method of obtaining bus stop janitorial services?

How many bus stops in your system?

How many rail stations in your system? Any other facilities that your bus stop janitorial provider also cleans under the same agreement?

What was your bus stop/rail station janitorial services budget for FY 03-04?

On a scale of 1-5, with 5 being the highest satisfaction and 1 the least satisfied, how do you feel about the effectiveness and efficiency of your current bus stop/rail station janitorial services efforts?

Rolling Stock Maintenance

Do you possess in-house (agency employees) rolling stock maintenance staff or contract out for maintenance, or a combination of both? For transit agencies who do their own maintenance in-house, how many FTEs? If available, for those who contract out for maintenance, how many FTEs does your contractor provide to you daily?

For both in-house and contracted maintenance operations: What are the titles and staffing levels of your maintenance team?

How many buses does your system utilize?

How many railcars (powered and unpowered) does your system utilize?

What was your annual (FY 03-04) maintenance LABOR costs (excluding parts & facilities)?

What was your "miles between road calls" in FY 03-04?

On a scale of 1-5, with 5 being the highest satisfaction and 1 the least satisfied, how do you feel about the effectiveness and efficiency of your current rolling stock maintenance efforts?

Appendix B: Survey Raw Data

APPENDIX B1: BUS STOP CLEANING

Agency	How They Do It	# Stops	# Stations	Annual Budget	Annualize Cost/ Stop	Satisfied?
Yuba Sutter Transit	Contract w/ Social Service Agency	275	0	$10,000	$363/yr	4
SLO Transit	Contract w/ Social Service Agency	150	0	$5700	$38/yr	5
CCCTA Central Contra Costa County	Contract w/pvt for Walnut Creek BART, Viacom cleans all other stops for free (ad rev)	1700	0	$0	$0	3
Santa Maria Area Transit	Contract w/ Social Service Agency	227	0	$30,000	$132/yr	2.5
BART Bay Area Rapid Transit	NR	NR	NR	NR	NR	NR
Visalia City Transit	Contract w/pvt, use City staff to clean transit ctr.	500	0	$15,000	$30/yr	4
North County Transit District (San Diego)	Mix: cities responsible for stops, in house staff clean rail stations	2000	6	NR	NR	5
Golden Gate Transit	In-house for non-sheltered	NR	0	NR	NR	NR

District	stops, Viacom cleans all other stops for free (ad rev)					
Los Angeles MTA (METRO)	Mix: cities responsible for stops, juvenile offenders clean graffiti (free), in house staff clean rail stations	18,500	97 plus various admin and operatin buildings	NR	NR	2
Monterey Salinas Transit (MST)	Mix, in-house and contractor	1300	0	$25,000 for contracted portion janitorial	NR	3
Arcata Mad River Transit	Mix: in-house at transit center, contract for bus stops	61	0	$8000	$131/yr	4
Union City Transit	Mix, City PW cleans bus stops, pvt contractor cleans UC Transit Center	203	0	$9600/yr	$47/yr	4
Whittier Transit (City)	Private contractor	138	0	$23,000	$167/yr	2
Unitrans (UC Davis)	In-house	310	0	$50,000	$161/yr	2
VTA (Santa Clara County)	NR	NR	NR	NR	NR	NR
Fresno Area Express (FAX)	Mix, In-house cleans bus stops, pvt contractor cleans Transit Center	2400	0	$268,000	$112/yr	3
Santa Rosa CityBus	In-house, 2 FTE	540	0	$65,000	$120/yr	3
San Diego MTS	Mix, in-house and contracted	3000	53	NR	NR	NR
San Luis Obispo Regional Transit Authority (RTA)	Via operations contractor	200	0	NR	NR	3
Riverside	In-house	2200	0	$306,000	$139/yr	4.5

Transit Authority (RTA)						
Livermore Amador Valley Transit Authority (LAVTA)	Via Operations Contractor	1107	0	$93,937	$85/yr	5
Merced County Transit	Contract w/ Social Service Agency	55	0	$16,800	$305/yr	4

NR= No Response

APPENDIX B2 MARKETING

Agency	How They Do It	Man Hours Annual	Annual Costs	FY 03/04 Ridership Trends	Satisfied?
Yuba Sutter Transit	Less than 1 FTE, plus $12k contract for youth pass campaign	Less than 2080 + est. 100 contract hours	70,000	652,529 (+3.9%)	4
SLO Transit	In-house, .5 FTE	1040	$27,000	681,000 (+?%)	5
CCCTA Central Contra Costa County	In-house, 3 FTE	6240	$550,000	4,474,534 (-4.7%)	4
Santa Maria Area Transit	Mix, contract w/support from staff	Est 720 total	$70,000	676,321 (-4.8%)	4
BART Bay Area Rapid Transit	In-house, 7.5 FTE	15,600	$3.5 M	91.04M (+4.19%)	5
Visalia City Transit	Contract out	900	$65,000	1,153,258 (+?)	4
North County Transit District (San Diego)	Mix, in-house 4 FTE, contract as needed	8320	$1.7M	11,984,000 (+2.29%)	3.5
Golden Gate Transit District	In-house 6 FTE	12,480	$1.2M	NR	NR
Los Angeles MTA (METRO)	In-house 30 FTE	62,400	$10M	370,000,000 (+2.5%)	5
Monterey Salinas Transit (MST)	Mix: 1 FTE plus some contracting	2180	$285,000	4,700,000 (=?%)	4
Arcata Mad River Transit	In-house .1 FTE, minimal	208	$2000	180,000 (+2.0%)	3
Union City Transit	In-house 1 FTE or less	2080	$84,000	430,520 (-2.6%)	2
Whittier Transit (City)	No marketing or contracting staff	0	$0	255,135 (-32%) other	0

				operator now serving	
Unitrans (UC Davis)	In-house, 1 FTE	2080	$65,000	3,450,000 (+10%)	4
VTA (Santa Clara County)	In-house, 65 FTE	135,200	$5,700,000	38,375,000 (-14%)	5
Fresno Area Express (FAX)	Mix; in house 1FTE plus contractors	1600 plus consultants	$90,000 plus consultants	10,872,487 (-3.0%)	4
Santa Rosa CityBus	In-house, minimal effort	100	$63,000	2,654,536 (+1.0%)	2
San Diego MTS	In-house 8 FTE	16,640	$1,400,000	75,400,000	NR
San Luis Obispo Regional Transit Authority (RTA)	In-house 1 FTE	2080	$80,000	? (-4.5%)	4
Riverside Transit Authority (RTA)	Both in house (3 FTE) and consultants	6240 + consultants	$625,000	7,100,000	4

NR= No Response

APPENDIX B3 ROLLING STOCK MAINTENANCE

Agency	**How They Do It**	**# buses**	**# trains**	**Annual Labor Costs**	**Miles Between Road Calls**	**Satisfied?**
Yuba Sutter Transit	Via operations contractor (ATC) w/ 9 FTEs	37	0	$84,992	18,303	4
SLO Transit	Via operations contractor (First) w/ 3 FTEs & 2 p/t	16	0	$121,324	9322	5
CCCTA Central Contra Costa County	Mix, in-house for fixed route, via operations (39FTE) contractor (4 FTE) (laidlaw) paratransit	131 Fixed Route and 53 ADA	0	$2,537,826	27,118	5
Santa Maria Area Transit	Direct contract with maintenance firm, hourly + parts 2 FTE	23	0	$144,000	52,719	5
BART Bay Area Rapid Transit	In-house, 630 FTE	0	669	$55,451,641	NR	NR
Visalia City Transit	Via Operations Contractor 8 FTE, 2 p/t	40	0	$40,000	NR	4

North County Transit District (San Diego)	In house, 54 FTE	175	35	$2.8M	11,500	4.5
Golden Gate Transit District	In house, 75 FTE	205	6* Ferries	$7,300,000	24,000	5
Los Angeles MTA (METRO)	In-house, 2700 FTEs in 10 bus and 4 rail divisions/garages	2600	250	$100M	6790	3
Monterey Salinas Transit (MST)	In-house, 20 FTE	84	0	$1,338,339	12,904	4
Arcata Mad River Transit	Via operations contractor w/ 1 FTE	6	0	$60,000	NR	4
Union City Transit	Via operations contractor, 5 FTE	20	0	$100,000	15,831	3
Whittier Transit (City)	In-house, 1.5 FTE	6	0	$97,377	9500	4
Unitrans (UC Davis)	In-house, 12 FTE	48	0	$530,000	57,500	5
VTA (Santa Clara County)	In-house, 503 FTEs	357, incl 27 contractor operated ADA van	98	$52,494,416	NR	NR
Fresno Area Express (FAX)	In-house, 64 FTE	103	0	NR	4607	5
Santa Rosa CityBus	In-house, shared FTE load, they fix all city vehicles	26	0	$1,346,540	6600	3
San Diego MTS	Mix of in-house and contracted, 403 FTE total	220	98	$18,100,000	11,050	n/a
San Luis Obispo Regional Transit Authority (RTA)	Contractor, 7 FTEs	29	0	NR	64,803	3
Riverside Transit Authority (RTA)	Mix of in-house and contracted, 55 in-house fixed route, contractor DR unknown	136 FR, 98 DR	0	NR	NR	NR

NR= No Response

Appendix C: Survey Dataset (agencies contacted)

SJSU MTM 290 Privatization Capstone Dataset

April 8, 2005

			EMAIL ADDRESS
Arcata and Mad River Transit System	Larry Pardi	707-822-3775	lpardi@arcatacityhall.org
BART (San Francisco Bay Area Rapid Transit	Bob Lockhart	510-464-6140	mpayne@bart.org
City of Santa Rosa/City Bus	Barbara Schepis	(707) 543-3060	bschepis@ci.santa-r
Fresno Area Express	Abbie Hyde	(559) 621-1454	abbie.hyde@fresno.gov
Golden Gate Transit	Betty Conder	(415) 257-4528	gwalker@goldengate.org
Los Angeles County Metropolitan Trans Authority	Michelle Lopes Caldwell	(213) 922-2452	caldwellm@mta.net
Mendocino Transit Authority	Sally Webster	(800) 696-4682 x11	maint & bus stop: da
Montebello Bus Lines	Pat Vera	(323) 887-4606	maint & bus stop: tb
Monterey-Salinas Transit	Kellie Halcom	(831) 393-8161	khalcon@mst.org
Norwalk Transit	Ms. Fabi Gibson	(562) 929-5718	transit@ci.norwalk.ca.us
Omnitrans	Amelia Toledo (fin mgr)	(909) 379-7260	Amelia.Toledo@omnitra
Riverside Transit Agency	Chris Gallanes	(951) 565-5000	cgallanes@riversidetran
San Luis Obispo Regional Transit Authority	David Lilly	(805) 781-4472	dwilliams@slorta.org
San Luis Obispo, City of	Austin Odell	(805) 781-7121	AOdell@slocity.org
San Mateo County Transit District	Juliette or doug johnson (opera	650.508.6236	johnsond@samtrans.cor
Santa Clara Valley Transportation Authority	David Terrazas	(408) 321-5575	david.terrazas@vta.org
Santa Clarita Transit	Dave Peterson	661-284-1406	dpeterson@santa-clarita
Santa Cruz Metropolitan Transit District	Shirley Cruser	(831) 423-5583, ext	scruser@scmtd.com
North County Transit Development Board (SD)	Barbara Murray	(760) 967-2828	bmurray@nctd.org
Santa Monica's Big Blue Bus	Mable Borka	(310) 458-1975 x58	mabel.borka@smgov.ne
Union City Transit	Wilson Lee	(510) 675-5409	transit@ci.union-city.ca.u
Visalia City Coach	Monty Cox	(559) 713-4100	transit@ci.visalia.ca.us
Whittier, City of	Susan Chow	(562) 698-2131	schow@whittierch.org
Yolo County Transportation District	Kwai Reitz	(530) 661-0816	kreitz@yctd.org
Yuba-Sutter Transit	Donna Dutra	(530) 634-6880	ddutra@sbcglobal.net
Central Contra Costa Transit Authority	Cindy Dahlgren	925-676-1976	cdahlgren@cccta.org
San Diego MTDB/MTS	Larry Marinesi	(619) 557-4542	Larry.Marinesi@sdmts.c
Unitrans	Geoff Straw	(530) 752-buss	ajpalmere@ucdavis.edu
Santa Maria Area Transit & The Breeze	Joseph Rye	(805) 925-0951	jrye@ci.santa-maria.ca.u

ACRONYMS AND ABBREVIATIONS

ATU	Amalgamated Transport Union
ADA	Americans with Disabilities Act
FTA	Federal Transit Administration
FTE	Full-Time Employee
FY	Fiscal Year
GM	General Manager
Ops Mgr	Operations Manager
TDA	Transportation Development Act

BIBLIOGRAPHY

"Privatization of Public Transit Services", Athanassios K. Bladikas & Institute of Transportation Engineers (ITE) Technical Council Committee 6A-41, ITE Journal, pgs 29-33, September 1992

Cox, Wendell, 2005 "Transit Performance Briefs" The Public Purpose, http://www.publicpurpose.com/tpb-ix.htm

Donahue, John D., 1989 "The Privatization Decision: Public Ends, Private Means", Basic Books (Harper Collins)

Freeman, Righard B. and Medoff, James L, 1984, "What Do Unions Do?", Basic Books.

Hurwitz, Elliot Paul, 2000 "Contracting For Success-San Diego, California", San Diego Metropolitan Transit Development Board

Perry, James L, Babitsky, Timlynn, and Gregersen, Hal, 1987, "Organizational Form and Performance in Urban Mass Transit", Institute of Transportation Studies, University of California, Irvine, Irvine, CA, USA August 1987

Teal, Roger F. 1986, "Public Transit Service Contracting: A Status Report", Institute of Transportation Studies, University of California, Irvine, Irvine, CA, USA December 1986

Teal, Roger F. and Guiliano, G. 1986, "Contracting for Public Transportation Service", Transportation Planning and Technology, Vol. 10, pg 279-291 1986

Sclar, Elliot, 2000. "What's Competition Got to Do with It? Market Structures and Public Contracting," Chapter 4 of *You Don't Always Get What You Pay For: The Economics of Privatization.* Ithaca, NY: Cornell University Press.

ABOUT THE AUTHOR

Joseph Rye is the Transit Services Manager for the City of Santa Maria. He manages both the Santa Maria Area Transit and the new Breeze Intercity Bus systems. Both systems are composed of an array of contracts similar to those discussed here in this report.

Prior to employment in Santa Maria, Joseph worked in a variety of planning fields, from transit planning intern to community development director. He holds a Bachelor of Science degree from Metropolitan State College of Denver and a Masters of Public Administration from the University of Colorado.

The author intends to continue his public transportation research in the future, and is particularly interested in transit marketing, market segmentation, and customer satisfaction studies. He lives with his wife, Nataliya, and two children, Anastasiya and Daniil, in Orcutt, California.