



Working Party No. 2 on Competition and Regulation

REGULATION AND COMPETITION ISSUES IN ROAD TRANSPORT

-- United States --

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REGULATION AND COMPETITION ISSUES IN ROAD TRANSPORT

United States

1. Over the past twenty-five years the transportation sector has benefitted from significant regulatory reform at the federal level in the U.S. This paper reviews some of the developments in interstate trucking and intercity bus services, and discusses experience with the U.S. taxicab industry, which is regulated at the state or municipal level.

1. Interstate Trucking

2. For many years interstate trucking was heavily regulated by the Interstate Commerce Commission (ICC). The ICC reviewed rates, on complaint, that common carriers were required to file, and the ICC strictly limited entry. Beginning in the late 1970s, a series of administrative and legislative actions liberalized regulation of the industry. These, and similar initiative deregulating the railroad industry, led to the abolition of the ICC in 1995. Today little economic regulation remains, and the antitrust laws, including merger review by the federal antitrust agencies, apply except with respect to certain immunized conduct discussed below. Entry is no longer restricted and barriers to entry are low. Rates are no longer filed and reviewed for reasonableness,¹ and Congress has pre-empted state economic regulation of intrastate transport (except for transport of household goods).

Surface Transportation Board

3. The Surface Transportation Board (STB) was established on January 1, 1996 as an independent adjudicatory body housed within the U.S. Department of Transportation (DOT), with jurisdiction over certain surface transportation economic regulatory matters. It was created by the ICC Termination Act of 1995 (ICCTA). The ICCTA terminated the ICC effective December 31, 1995; eliminated various functions previously performed by the ICC; transferred licensing and certain non-licensing motor carrier functions to the Federal Highway Administration within DOT; and transferred remaining rail and non-rail functions to the Board.

4. The Board is headed by Board Members appointed by the President and confirmed by the Senate. The Board is authorized to have three members, each with a five-year term of office. The Board's Chairman is designated by the President from among the Members.

Rate Bureaus

5. With the enactment of the Motor Carrier Act of 1980 ("MCA of 1980"), the way in which interstate trucking firms formulated their rates changed dramatically. Prior to 1980, virtually all interstate motor common carriers collectively formulated their rates through regional rate bureaus that enjoyed broad antitrust immunity. The collectively established rates were subject to review by the Interstate Commerce Commission. Deviations from published bureau rates through the independent actions of individual motor carriers were rare. The rate bureaus were effective in establishing both less-than-truckload (LTL) general freight sector rates and truckload (TL) rates, but were particularly effective with LTL rates. Since 1980, however, the scope of antitrust immunity for motor carrier rate bureaus has been greatly reduced. Under current law, collectively agreed single-line rates are no longer generally immune from the antitrust laws. The main exception is the formulation of general rate increases (GRIs).² Carriers are considerably more free to establish their own rates. While rates set pursuant to a rate bureau agreement must be reasonable,

there is no requirement that the Board examine the reasonableness of a rate increase prior to its becoming effective.

6. The Board is currently reviewing the status of rate bureau agreements to determine whether to renew their immunity. In 1998 the Board concluded that “collective ratemaking, under present circumstances, contravenes the public interest, and that existing collective ratemaking agreements ought to be approved ... only if all existing class rates are amended to reflect market-based rates.” Carriers had argued that the collectively agreed “benchmark” rates were not harmful because most shippers received discounted rates and the established rates were “only paid by a handful of uninformed or pressured shippers.” On February 9, 2000, the Board reconfirmed its decision and initiated a proceeding “on how to effect appropriate reductions in benchmark rates.” The Board stated “that carriers should not be given immunity to collectively set, and to charge, rates that are above competitive levels; rather, if carriers want to set and charge rates above competitive levels, they must do so individually and not through their rate bureaus.”³

7. The DOJ’s position, as set forth in comments submitted to the Board, is that despite the provision for independent action and a competitively structured industry, the ability to engage in collective ratemaking for GRIs can lead to supracompetitive rates. This is particularly true given the “light” regulation of GRIs under the ICCTA. The *quid pro quo* for antitrust immunity to set rates collusively has always been regulation of those rates by a regulatory agency. Consumers would depend on the regulators to prevent the regulated firms from setting rates that were supracompetitive. In the absence of a strict regulatory regime, shippers depend on competition among trucking firms to ensure competitive rates. But even in competitive industries such as trucking, oversight under the antitrust laws is needed to assure that competition is not thwarted. Otherwise, explicit collusion or other anticompetitive practices could emerge.

8. The remaining antitrust immunity enjoyed by the rate bureaus could lead to rates in excess of competitive levels in at least two ways. First, a rate bureau could function like a cartel in promoting coordinated pricing. With immunized rate bureaus, motor carriers can meet with their competitors, exchange cost information, discuss their preferences on price increases, resolve differences among the firms, and ultimately, through the implementation of GRIs, achieve collective agreement to raise rates across the board. In addition, rate bureaus provide members with the opportunity to confront an efficient and aggressive rival, discuss alternative responses to its conduct, and dissuade it from price-cutting.

9. Second, even if immunized rate bureau activity does not lead to explicit agreement by carriers to collude at supracompetitive rates, rate bureaus could still have an adverse effect on rates. Firms competing in the marketplace have many prices from which they can choose. They will choose those that are expected to generate the highest profits. One factor going into each firm’s calculation of the most profitable price to charge is the price it believes its competitors are likely to charge. Collectively determined and publicized GRIs give all trucking firms a “benchmark” rate increase to consider. And, while no firm is bound or required to adhere to that increase in carrying particular traffic, the existence of such a benchmark may nevertheless give each firm somewhat greater reason to expect that its rivals will select it from among the many possible price increases available to them. This, in turn, provides firms with an incentive to designate through the rate bureaus relatively profitable GRIs. Although there may be no actual agreement to adhere to these increases, there is a somewhat greater likelihood that carriers will end up increasing their rates by this amount in anticipation that others will do likewise. The result, whether or not one observes discounting from the posted GRI, may be that actual rates exceed competitive levels.

10. The DOJ stated in its comments that reliance on discounting from a cartel price -- a price that would not otherwise be set -- to protect consumers is to stand competition policy on its head. There is always the risk that the cartel prices will not be completely discounted away. And there is no reason to take such a risk, given that there are no significant benefits from retaining rate bureau agreements. The

rate bureau functions that benefit the public, such as classification of commodities with similar transportation characteristics, basic information dissemination, or rate publication, can be done in ways that do not limit competition and thus can continue without antitrust immunity.

Effects of Regulatory Reform

According to one study,

The deregulatory [Motor Carrier Act] of 1980 has spurred intense competition in virtually every element of the interstate trucking sector. Combined with technological and service innovations, this competition has produced a dynamic and expanding industry. As the ICC has noted, the benefits of interstate trucking deregulation are wide-spread and likely to be long-term. The vast majority of shippers and many members of the trucking industry are pleased with deregulation.⁴

Clifford Winston analyzed the effects of deregulation on the LTL and TL sectors:

The trucking industry is composed of two sectors: “less-than-truckload” (LTL), which uses a network of terminals to consolidate shipments of more than one shipper’s goods on a truck, and “truckload” trucking, which provides point-to-point service for one shipper’s goods that fill an entire truck. In the LTL segment, low-cost non-union regional carriers ... have become an important competitive force. In response to this challenge, the national LTL carriers ... have pursued an aggressive policy of purchasing regional (non-union) carriers and operating them as independent business units. The dominant force in “truckload” trucking has become the “Advanced Truckload” or “High Service” mega-carrier These carriers have become so efficient that they are capturing substantial traffic from firms that historically, in response to high regulated truck rates and poor service, provided their own trucking services. For-hire trucking operations are now roughly 25 percent less expensive than private carriage, which relies primarily on (more costly) unionized labor.⁵

11. For LTL trucking, he concludes that carriers have substantially reduced their empty miles since deregulation, with real operating costs per vehicle mile dropping 35 percent. For truckload trucking, these costs have fallen at least 75 percent; in both cases, operating profits are slightly lower than they would have been under regulation.⁶ Average rates charged per vehicle mile have declined by the same percentages as have costs, with significant service improvements.⁷

12. Another study notes that “the number of large (Class I [over \$10 million in revenues]) LTL carriers fell from more than 600 in 1976 to around 50 in 1995. Nonetheless, although figures for specific markets are difficult to obtain, competition in LTL markets has clearly become much more intense since deregulation, both because of the growth of low-cost (non-union) regional LTL carriers ... and because of increased competition from alternative small shipment carriers such as UPS and Federal Express. ... LTL carriers’ share of small shipment revenue declined from nearly 60 percent in 1980 to 35 percent in 1995. The truckload (TL) industry has always been quite competitive, and although the number of competitors has increased since deregulation, from some 20,000 small (Class III) TL carriers in 1980 to nearly 55,000 in 1995, competition has actually intensified because of the growth of national mega-carriers (commonly referred to as advanced truckload carriers)”⁸ with annual revenues of roughly \$1 billion each.

13. The same study states that “trucking firms have achieved higher load factors by optimizing their routing and negotiating price-service packages with shippers to minimize their empty milage. They have also made more efficient use of inputs and reduced their labor costs. As a result, since 1977, just before

administrative deregulatory policies went into effect, LTL carriers' real operating costs have fallen 35 percent and TL carriers' costs have fallen more than 75 percent, largely because of the emergence of advanced truckload carriers."⁹ The reduction in rates charged has matched these cost savings. "Large shippers in high-density markets have undoubtedly gained more than small shippers in low-density markets, but small shippers have been able to share in some of the benefits from lower rates through third-party logistics firms. Shippers have also gained from improvements in service time and service time reliability. Including these benefits, the annual net benefits to shippers from trucking deregulation amount to more than \$18 billion (1996 dollars)."¹⁰

14. A study of the effects of deregulation on employment shows "an appreciable reduction of the union membership rate of 46 to 23 percent over the deregulation period of 1978 to 1996. ... The union membership pattern is consistent with the notion that the trucking industry has relatively low barriers to entry, which meant that deregulation allowed non-trivial entry of non-union carriers. The trucking employment pattern reveals further evidence suggesting the ease of entry into this industry. After a pre-deregulation period of relatively low employment growth, from 977,000 in 1973 to 1,111,000 in 1978, the number of workers employed in trucking dramatically increased to 1,907,000 in 1996. Together, the union membership rate and the industry employment trends suggest a tremendous loss of bargaining power following deregulation. This loss is further supported by the findings ... that show workers in this industry experiencing their real weekly earnings falling from \$491 in 1978 to \$353 in 1996."¹¹

NAFTA Provisions

15. Cabotage is not permitted in the U.S. trucking market.¹² There are no restrictions on foreign investments in motor carrier companies in the United States. Mexican citizens, however, cannot own a controlling interest in a U.S. motor carrier. Neither can they obtain DOT authority to operate outside of certain border commercial zones. The Congress placed a moratorium on the issuance of new grants of operating authority to Mexican motor carriers in 1982. This was done because Mexico did not allow U.S. motor carriers to operate in Mexico. For a very short time in 1982, there was a moratorium with respect to Canada as well, but the issue with Canada was resolved immediately when Canada agreed to lift restrictions on U.S. trucking.

16. The NAFTA creates a timetable for the removal of barriers to the provision of motor carrier services for the carriage of passengers and international cargo between the United States and Mexico. Implementation of the NAFTA land transportation access liberalization provisions has been delayed since December 1995 because of U.S. safety concerns. The United States and Mexico are working to resolve outstanding safety issues. Mexico has filed complaints under the NAFTA's dispute resolution procedures claiming the United States has failed to meet its NAFTA obligations. A NAFTA panel is considering the case.

17. When operating in the United States, foreign carriers must comply with all applicable laws and regulations, including the Federal Motor Carriers Safety Regulations, and immigration, customs, and labor requirements. The NAFTA parties are working towards more compatibility of motor carrier safety standards, including vehicle weights and dimensions, drivers' hours of service, transportation of hazardous materials, etc. Foreign carriers must pay all state taxes and fees and comply with any state emissions standards just like U.S. carriers.

2. Intercity Bus Services

18. The intercity bus market was fully deregulated by the Bus Regulatory Reform Act of 1982. The U.S. market is now served by a single national carrier, Greyhound, and various regional independent

companies and local feeders. Total annual revenues for the market are about \$900 million. The regular route sector has been declining, while other segments (charter, tour buses) have expanded as a result of the relaxation of regulatory entry barriers. Consolidations and mergers are reviewed by the Surface Transportation Board under a public interest standard. Bus companies may apply to the Board for permission to “pool or divide traffic or any services or any part of their earnings.” 49 U.S.C. §14302. The Board must hold a hearing on such an application if it finds that “the agreement or combination is of major transportation importance” or “there is a substantial likelihood that the agreement or combination will unduly restrain competition.” If either of these conditions is present, the Board “shall hold a hearing concerning whether the agreement or combination will be in the interest of better service to the public or of economy of operation and whether it will unduly restrain competition.”

19. On October 3, 1997 the DOJ filed Comments with the Board opposing the application of Peter Pan Bus Lines, Inc. ("Peter Pan") and Greyhound Lines, Inc. ("Greyhound") to pool their operations between New York, NY and Washington, DC. The Division's comments argued that there was a substantial likelihood that the proposed pooling agreement would unduly restrain competition. Peter Pan and Greyhound were the only bus lines that provided scheduled transportation between New York City and Washington, DC. The DOJ argued that if the pooling agreement were approved, bus service between those cities would be provided by what is in effect one company. The Division's comments noted that there was no evidence that service from other common carrier modes of transportation -- trains and airplanes -- nor rented or privately owned automobiles, would provide effective competition to the provision of scheduled bus service by the pooled companies on this route. As a result, the pooled companies would likely raise bus fares above competitive levels. On April 21, 1998, the Board issued an order approving the Peter Pan - Greyhound pooling application subject to the condition that applicants file periodic reports on the fares they charge for service between the points in their pooling agreement. The Board noted the pervasive intermodal competition in the market for intercity passenger travel and the declining position of intercity buses in this market, and stated that the DOJ had not submitted sufficient countervailing evidence with respect to the Washington-New York route.¹³

20. In 1995, the DOJ sued Greyhound Lines, challenging a provision in Greyhound's bus terminal leases that prohibited tenant bus companies from selling tickets for intercity bus transportation within a 25-mile radius of Greyhound's terminals. Greyhound, the only nationwide intercity bus company, operates approximately 200 bus terminals. Many smaller bus companies operate out of Greyhound's terminals pursuant to contracts in effect in some 135 cities. Under the terms of the challenged contracts, Greyhound operated as the tenant bus companies' exclusive ticket agent, and also provided other services, including baggage handling and maintenance of the terminal facilities. The tenants paid rents based on ticket sales, either in the form of a set commission on each ticket sold or a pro rata share of the costs of operating the terminal. The DOJ was concerned that the 25-mile rule would limit competition in intercity bus services, particularly when the tenant was an actual or potential competitor of Greyhound, either alone or through interlining. Under the terms of a consent decree, Greyhound was required to remove the provision from existing contracts and was enjoined from conditioning access to its terminals on an agreement not to sell tickets outside the terminals. Greyhound was also enjoined from refusing to interline with a carrier unless that carrier agrees to interline exclusively with Greyhound.

3. The U.S. Taxicab Industry

21. In 1984, Frankena and Pautler co-authored an FTC staff report on taxicab regulation, which was submitted to the Competition Law and Policy Committee (CLP) in 1990 in connection with a round table discussion of this topic. That report, a copy of which is attached to this submission, described the various markets segments that exist in the market including cruising cabs, cabs that wait for riders at taxi stands, radio-dispatched cabs, and cabs providing services under contract. The report also reviewed the history of

taxicab regulation in the United States and described various types of regulation that existed in the taxi industry. These forms of regulation included entry restrictions based on the absolute numbers of cabs or the ratio of cabs to the city population, and requirements that entrants prove that their entry is necessary to improve public convenience. Typical regulations also fix the fares that can be charged or provide for minimum or maximum rates of fare. Numerous other aspects of taxicab service are also regulated.

22. The report also discussed the theories of market failure that would justify regulation of taxicabs serving cruising, cabstand, and radio-dispatched, and contract segments of the market. As the authors note, special characteristics of the cruising and cab-stand segments (e.g., first-in/first-out queues) may make it difficult to induce price competition among the various firms. If so, maximum fare regulation may be an option. Competition in the other two segments would appear to be viable because shopping for lower fares should be possible at relatively low cost. In addition to an analytical examination of the market segments, the report reviewed the evidence of deregulation during the 1970s in several U.S. cities, focusing on Seattle, San Diego, Phoenix, Tucson, Berkeley, and Oakland.

23. The main conclusions of the report were that restrictions on entry (numerical limits, limits based on cab/population ratios, or public convenience and necessity requirements) did not appear to be supported by plausible theoretical arguments. Even in those situations where problems had arisen following a change to open entry,¹⁴ other regulatory responses (e.g., maximum price levels, physical reconfiguration of taxicab queues) would be more efficient. As the authors noted:

In marked contrast to the radio-dispatch segments, there have been many problems in cab stand market segments at airports following regulatory reform as a result of lengthening of the queues. These problems do not provide an argument in favor of entry restrictions, however. Rather, they suggest that there would be significant gains from either increasing fare competition at airports or imposing lower fare ceilings on airport taxi service. Fare ceilings could be reduced until the taxi queue shortened to the desired length. (pp. 8-9)

24. The authors concluded that deregulation would be viable in radio-dispatch segments of markets, but that, due to the difficulty of inducing competition at taxi stands (airports, hotels, etc.), deregulation in cabstand markets would require more care.

25. As of 2000, the general description of the taxicab industry and taxicab regulation in the United States remains much as it was when Frankena and Pautler described it in 1984. That is, nothing dramatic has happened to alter the U.S. industry in the interim.¹⁵ Although the details of regulation vary from place to place, most major cities still regulate entry and fares in some manner, most also regulate the types of service that can be provided (e.g., minimum number of cabs per company or association, 24/7 coverage of telephone requests, no shared riding, no service refusals, service areas are defined, dispatch capability is often required, taximeters are normally required), and vehicle and driver characteristics (e.g., cab age and design, no criminal background, knowledge of the city streets and landmarks, neatness), and service quality (maximum response times). In addition, jurisdictions often regulate the maximum hours of service per driver per day, license transferability, safety inspection frequency, and insurance and bond requirements. The monitoring levels for these various regulations seem to vary widely across local jurisdictions.¹⁶

26. The stringency of entry regulation can manifest itself in the value of taxicab licenses. In a competitive, open entry market, the right to serve the market would be zero. However, if the right to serve is restricted, the value of the right to serve a noncompetitive market is capitalized in the price of the license. A list of taxicab license values for selected cities in the U.S. is attached.¹⁷ The fact that license values are substantial in several U.S. cities implies that entry restrictions have raised the rate of return in

taxi service provision above that in other lines of endeavor and that prices are likely higher and the number of trips lower than they would be in the absence of regulation.

Two Experiments with Deregulation in the U.S. (Seattle and Indianapolis)

27. Since entry restrictions were adopted by most cities in the United States during the 1930s, experiments with taxicab deregulation have been infrequent. One exception was a period in the late 1970s when several moderate-sized cities altered their regulations to make entry less difficult.¹⁸ One major city, Washington D.C., has retained an easy entry policy (and its unique zone pricing structure) from at least 1970 through 2000.¹⁹ Since the late 1970s, however, there has not been a great deal of activity in taxicab deregulation and open entry among U.S. cities.²⁰ Two of the leading examples of deregulation in the U.S. are probably provided by Seattle, Washington in 1979 and Indianapolis, Indiana in 1994; these are briefly discussed below.

Seattle, Washington (1979)

28. Seattle opened entry and allowed fares to be set by individual firms in 1979. The effects of these changes on fares has been the subject of some debate. They may have led to a small (5%) net reduction in fares as radio-dispatch fares fell and taxi-stand fares rose. Other reports indicated no net change in fares.²¹ One effect that is not in dispute is the increase in service to cabstands at the airport due to the influx of additional cabs. This led to longer taxi lines and disputes among cabbies. Price competition did not develop in part due to the first-in first-out queuing system often used at airports. In response to this problem, the airport imposed maximum fares and later disallowed additional entry. Still later, they moved to an exclusive monopoly franchise system.

29. Although a 1980 survey of residents and visitors indicated positive evaluation of taxicab service in Seattle immediately after the deregulation, Seattle later returned to entry limits and fixed fares in the 1980s. A 1996 report indicated dissatisfaction with the taxicab industry among various groups particularly the hospitality industry (hotels, conventions, tourism, etc).²² The complaints centered on the independent (non-fleet) cabbies who reportedly provided poor service and were difficult to hold accountable for poor service or rule infractions. As of 1996, Seattle had 637 licensed cabs organized in 7 fleets and 210 single-cab firms. Licenses sold for about \$12,000 each, and entry, fares, and driver standards of conduct and dress are fully regulated.²³ Thus, 17 years after the experiment with deregulation, complaints about taxi service remain.

Indianapolis, Indiana (1994)

30. In July 1994, Indianapolis, Indiana deregulated taxicabs and allowed jitney²⁴ and minivan operation as part of a broader market-oriented approach to city governance taken by a new city administration. The city administration indicated that the deregulation was a success, pointing to increases in the number of cabs and the number of taxicab companies, fare reductions (newcomers cut fares by 7-10%), service improvements, reductions in customer complaints, and the granting of one new jitney license. Wages and profits fell, and the safety of cab drivers may have also decreased (as they drove into less safe neighborhoods). As in Seattle, many of the new cab drivers worked the airport queues and those queues reportedly remain long as of 1999.²⁵

31. The ultimate effect of the 1994 deregulation is in dispute. The city administration continues to view it positively, while the taxi association portrays it as a failure. The policeman in charge of taxicab complaints during the entire period indicated that the number of consumer complaints rose immediately

after deregulation, but that complaint levels are now lower than during the more heavily regulated period, and are focused on fares, rather than service quality.

Lessons from the U.S. Experience

32. Reviews of the effects of deregulation experiences in the United States indicate that:²⁶ (1) the number of cabs and cab companies rise and, therefore, employment opportunities and the number of cab hours of service rise; (2) the bulk of the new entrants serve taxi-stand markets that do not require radio-dispatch capability; this leads to longer queues of drivers at those locations and near zero waiting times for riders;²⁷ (3) new radio-dispatched companies occasionally begin operation, but that is not the norm; and (4) little service innovation is evident. Fares may fall a bit in the radio-dispatch segment of the market,²⁸ but problems with an absence of price competition will occur at airports and taxi stands if maximum fares are not reduced sufficiently or competition is not viable due to first-in-first-out queuing.

33. The U.S. experience has not provided a clear example of the benefits of deregulation on taxi fares. This may be because the few cities that have experimented with deregulation have not been those where the pre-deregulation equilibrium was particularly far from that which would have existed in a deregulated environment. It may also be due to the fact that price competition does not quickly develop among the many individual cab drivers who enter and serve taxi-stand markets. It may also be that consumer responsiveness to price is not very great because: (1) repeat customers may be uncommon in the taxi market, leading to little incentive to cut price to draw future clients, and (2) on-time arrival may be the most important characteristic to occasional phone-hail cab riders, making price a relatively unimportant characteristic (so long as the price is within the realm of reason).²⁹

34. A key lesson from the U.S. experience is that when deregulation is attempted in the future, administrators of the change will have to pay more attention to ensuring that price competition can be developed at the taxi-stand and airport locations. In this vein, perhaps the most intriguing examples of U.S. regulatory reform took place in Phoenix, AZ and Sacramento, CA where easier entry was allowed, but airport service was regulated and downtown hotels were allowed to contract for exclusive service with taxi companies if they wished to do so. This approach reportedly allowed these cities to ameliorate airport and taxistand problems that were associated with open entry in other cities such as Seattle in the 1970s.³⁰ Whether these were the best approaches to solving the taxi-stand problems is open to debate. Exclusive contracts can solve the problems of rowdy or non-accountable independent drivers, but it does not directly improve price competition at the queues (unless pricing is made part of the contract) and may not be the approach that would maximize the welfare of taxi riders.

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- Teal, R.F. and M. Berglund (1987) "The Impacts of Taxicab Deregulation in the USA," *Journal of Transport Economics and Policy*, 37-56.

Taxicab License Values in Various Cities (last update 8-28-00)

Atlanta, GA	\$1,500	1986	Curtis Wagner report from Research Atlanta, July 1986
Baltimore, MD	\$12,000-20,000	1996	“Baltimore: No Harbor for Entrepreneurs,” Institute for Justice, Vehicles for Hire subsection (April 1997)
Boston, MA	\$180,000	2000	T. Ronald Rosenberg, “Boston Mogul Plans To Sell Off Taxi Business,” Boston Globe, June 3, 2000
Chicago, IL	\$23,000	1990	“Taxi! All the World’s A Cab”, The Economist, December 22, 1990, pp. 32-34. p. 123 of Clive Gaunt dissertation
Cincinnati, OH	\$3,000-6,000	1994	Report of Cincinnati Enquirer recounted in R. Hardaway “Indianapolis Reaps The Benefits Of A Deregulated Industry” Christian Science Monitor, April 2, 1996 (law prof, at U. of Denver Col. of Law)
Columbus, OH	Up to \$25, 000	1991-96	The Columbus Dispatch, editorial, November 11, 1996, p. 10A
New York, NY	\$225,000 (independent) and \$250,000 (corporate)	2000	Edward Lewine, “Wanted: Taxi Drivers,” Daily News, April 16, 2000.
Philadelphia, PA	\$55,000	1999	Laura J. Bruch, “Despite Some Positive Strides, Taxi Troubles Return To Philadelphia,” Philadelphia Inquirer 3-26-99
Portland, OR	\$17,000	1998	J. Boroski & G. Mildner “An Economic Analysis of Taxicab Regulation In Portland, Oregon, April 1998, Cascade Policy Institute (at notes 21, 22)
San Diego, CA	\$60,000	1998	J. Boroski & G. Mildner “An Economic Analysis of Taxicab Regulation In Portland, Oregon, April 1998, Cascade Policy Institute (at notes 21, 22)

Seattle, WA	\$15,000 (city) \$90,000 (airport)	1998	S. Nina Shapiro, "Taxi Blues," Seattle Weekly, p. 20, March 5, 1998
Ottawa	\$95,000	1997	T. Corcoran "Taken For A \$1 Billion Tax Ride," Toronto Globe & Mail, April 5, 1997
Toronto	\$80,000	1997	T. Corcoran "Taken For A \$1 Billion Tax Ride," Toronto Globe & Mail, April 5, 1997
Vancouver	\$120,000	1990	November 1990 Terry Smythe article. "Taxi Regulatory Fees" published in <u>The Regulator</u> , (originally July 1991)
Adelaide	\$141,000	1995	Data provided to the author by the respective State Transport Departments as at February 1995. p. 123 of Clive Gaunt dissertation
Brisbane	\$169,500	1995	Data provided to the author by the respective State Transport Departments as at February 1995. p. 123 of Clive Gaunt dissertation
Melbourne	\$150,000	1995	Data provided to the author by the respective State Transport Departments as at February 1995. p. 123 of Clive Gaunt dissertation
Sydney	\$215,000	1995	Data provided to the author by the respective State Transport Departments as at February 1995. p. 123 of Clive Gaunt dissertation
Hong Kong	\$153,000	1991	"Taxi Prank", Far Eastern Economic Review, June 20, 1991, pp. 96. p. 123 of Clive Gaunt dissertation
Paris	\$46,000	1990	"Taxi! All the World's A Cab". The Economist December 22, 1990, pp. 32-34 p. 123 of Clive Gaunt dissertation
Rome	\$160,000	1990	"Taxi! All the World's A Cab", The Economist December 22, 1990, pp. 32-34. p. 123 of Clive Gaunt dissertation

35. All license values from Clive Gaunt's dissertation are in U.S. dollars. Clive N. Gaunt, "A Finance Analysis of Taxicab Industry Regulation," School of Accountancy, Faculty of Business, Queensland University of Technology, Brisbane, Australia, June 1998.

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NOTES

1. Rates and rules relating to movements of household goods, to non-contiguous domestic trade (*i.e.*, involving Alaska or Hawaii), or collectively set by rate bureaus and immunized by the Surface Transportation Board, are subject to review by the Board for reasonableness. Filing requirements are limited to non-contiguous domestic trade.
2. The ICCTA permits a rate bureau to establish “rate adjustments of general application based on industry average carrier costs (so long as there is no discussion of individual markets or particular single-line rates).” 49 U.S.C. § 13703(a)(1)(G). Antitrust immunity is also given for collective action with respect to through routes and joint rates; rates for the transportation of household goods; classifications, mileage guides, rules and divisions. 49 U.S.C. §13703(a)(1).
3. Surface Transportation Board, EC-MAC Motor Carriers Service Ass’n, Inc., Sec. 5a Application No. 118 (Amendment No. 1), February 9, 2000.
4. Paul Teske, Samuel Best, and Michael Mintrom, *Deregulating Freight Transportation*, AEI Press (1995), p. 81.
5. Clifford Winston, U.S. Industry Adjustment to Economic Deregulation, *Journal of Economic Perspectives*, Summer 1998, p. 94.
6. *Ibid.*, p. 99.
7. *Ibid.*, p. 101.
8. Stephen Morrison and Clifford Winston, *Regulatory Reform of U.S. Intercity Transportation*, in *Essays in Transportation Economics and Policy*, Brookings (1999), eds. Jose Gomez-Ibanez, William Tye, and Clifford Winston; p. 477.
9. *Ibid.*, p. 481.
10. *Ibid.*, pp. 486-87.
11. James Peoples, *Deregulation and the Labor Market*, *Journal of Economic Perspectives*, XII:3 (Summer 1998), p. 112.
12. According to regulations administered by the Immigration and Naturalization Service, transportation operators "may load from locations in the United States if all goods or passengers to be loaded will be delivered in the territory of another party. Purely domestic service or solicitation, in competition with U.S. operators, is not permitted."
13. The STB has approved a number of pooling arrangements between intercity bus companies, including other pooling arrangements between Greyhound and Peter Pan. Prior to the pooling arrangement discussed above, the Board approved a pooling arrangement between these two carriers for service between New York and Philadelphia (June 24, 1997) and between New York and Boston and between New York and Springfield, MA (February 3, 1998). The STB has also approved an agreement by these two carriers to pool operations between Albany, NY and Boston (June 25, 1998).

14. Problems associated with entry occurred at cab stands as lines of waiting cabs lengthened, cabbies bickered over their places in the queue, and service refusals occurred if a passenger wanted a short trip. See the discussion (pp. 125-143) of the situations at airports in Seattle, San Diego, and Phoenix. Reports of similar problems at hotels are common.
15. For a detailed description of the industry, see Frankena and Pautler (1984, pp. 10-28 and especially note 21) and Price Waterhouse (1993, pp. 4-5). New technology has not impacted the industry greatly, although Soon (1999) indicates that dispatch costs may have fallen as telecommunications options have increased. Perhaps the biggest continuing change in the industry has been the move to lessee/contractor drivers from the owner-operator or employee format of the 1950s and 60s. The advent of contracting was likely caused by tax changes that made it advantageous for taxi firms to characterize their drivers as independent contractors rather than employees. It is not clear how this has changed driver incentives to provide high service quality, but that issue is a recurring theme of certain industry commentators.
16. In most cases the jurisdictional unit is a city or a county. In a few instances, regulation occurs at the state level.
17. Many cities restrict entry but do not allow license transfers, so public information on the value of the right-to-serve in those cities is not available. The list was compiled from readily available information and it does not represent a complete listing of license values for all U.S. cities. Some data on license values from an earlier period for more cities is included in Frankena and Pautler (1984, pp. 106-107).
18. The 1970s experiences of several cities are recounted in Frankena and Pautler (1984, pp. 125-154). These same experiences (with a more negative gloss on the results and some additional information on fares) are discussed by Teal and Berglund (1987) and Price Waterhouse (1993).
19. The District of Columbia's cab scheme and its apparently relatively low prices in 1984 are described in Frankena and Pautler (1984, pp. 83-89). DC taxicab prices are difficult to compare to those of other cities due to the unique zone-based system used in the District.
20. Complete freedom of entry would destroy the value of the existing licenses and would therefore be vigorously opposed by incumbent service providers. This is likely the primary reason for the retention of entry regulation in many areas. Many jurisdictions allow increases in the number of cabs over time as population grows or other demand factors change.
21. Zerbe indicated that radio-dispatch fares fell, but airport and taxistand fares rose, resulting in a small net decline in fares. For a description of Zerbe's results and the Seattle experience, see Frankena and Pautler (1984, pp. 125-131). Teal and Berglund (1987) examined taxicab trade association survey data and concluded that fares did not fall in Seattle following deregulation.
22. See Avants et al. (1996).
23. As of 1998, licenses to serve the city of Seattle traded for \$15,000, while airport licenses traded for \$90,000. The airport is served by monopoly franchise taxis. The current Seattle taxi regulations are incorporated in the Seattle Municipal Code sec 6.310.100 to 6.310.730. Ord. 118341 Section 2 (1996).
24. Jitneys provide transportation service for individuals along a semi-fixed route.

25. For a very positive description of the changes about one month after entry was allowed, see Editorial, Indianapolis News, August 4, 1994. Later press reports were less positive, reflecting either deteriorating performance or information from other sources. See, David Shaffer "Cab Deregulation: Competition or a License to Gouge? New Firms Hail the Equipment, but Older Firms Say Fares are Up, Profits Down," Indianapolis Star, June 11, 1995, E-1; and Adam Ellick "Stuck in Idle: Cab Drivers Who Work Indianapolis International Have Found it Tough to Make a Living Since Airport Service was Deregulated Five Years Ago," Indianapolis Star, Aug 22, 1999, E-1. The city administration still considered deregulation a success as of 12-98. (See 12-10-98 letter from John Hall, Indianapolis Deputy Mayor to Hamilton Smythe, President, International Taxicab and Livery Association (the industry trade association) arguing that all the underlying goals of the Indianapolis deregulation had been met.)
26. See Frankena and Pautler (1984), Teal and Berglund (1987), and Price Waterhouse (1993).
27. Changes in customer waiting times in the radio-dispatch portion of the market were documented in only one case, San Diego, where a reduction in average waiting time from 10 to 8 minutes occurred.
28. In the U.S., fares may have fallen a small amount in the radio-dispatch segments of certain deregulated cities (Seattle, Indianapolis, and Sacramento), but even those effects are in dispute. See Teal and Berglund (1987, pp. 42-46). The New Zealand evidence reported by Gaunt (1998) and Soon (1999) indicates that fares in major cities might declines by as much as 20 percent due to deregulation of entry. The Working Party may be interested in pursuing the evidence regarding taxicab deregulation in New Zealand, because it appears to provide a counterpoint to the U.S. evidence where fare reductions were not common. The effect of deregulation on fares is important. If open entry does not result in fare reductions or waiting time reductions for riders, then the increased cab use might well be characterized as pure waste.
29. Empirical estimates do not imply, however, that customers are unresponsive to price. The responsiveness to price as measured by the elasticity of demand for taxi rides has been estimated to be slightly inelastic (falling in the -0.8 to -1.0 range). See Frankena and Pautler (1984, p. 162-165). See Schaller (1999) for a more recent estimate from New York.
30. Based only upon Price Waterhouse (1993, p. 17).