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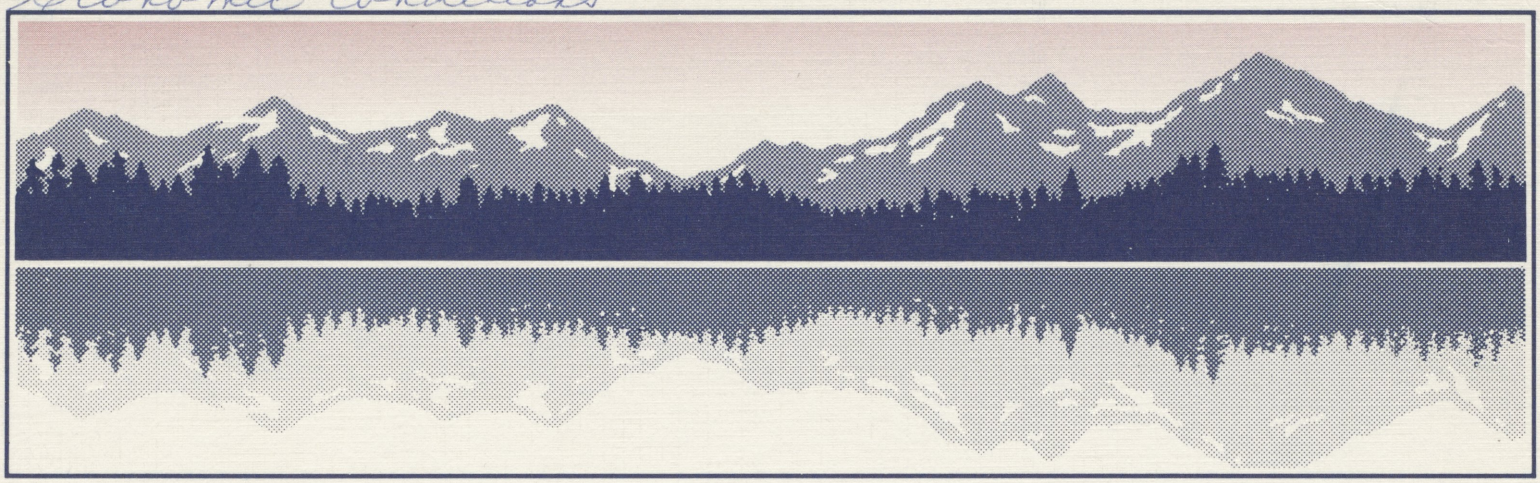

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PUBLIC CONSTRUCTION CONTRACTING PRACTICES AND THE LEAKAGE OF BUSINESS TO OUTSIDE CONTRACTORS

by

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Construction of new facilities is often a component of regional economic development efforts. Such projects might include new roads, airports, visitor's centers, libraries and schools. These investments are expected to promote economic development in several ways. The immediate effect of this spending is to increase local income as workers are hired and materials and services are purchased for the construction itself. Once the projects are complete, this investment in the "infrastructure" is expected to promote economic development by attracting new private investment either by decreasing the operating costs of businesses and/or by appealing to amenity-seeking managers interested in relocating their businesses. Whatever the ultimate success of the projects in attracting new firms to the area, the total impact on the community will be greater if more of the first round effects due to the actual construction occur in the local area.

A number of government procurement policies, however, may make it more difficult for local contractors to win these construction contracts. The usual practice is for the agency funding the construction to issue a public invitation to bid which is published in area newspapers and general business or trade publications. The Commerce Business Daily, for example, publishes all such notices issued by federal agencies, while the Daily Journal of Commerce does the same for Oregon agencies. Any qualified contractor interested in this work can then inspect the plans and submit a bid.[1] The contracting agency then opens the bids and awards the contract to the lowest qualified bidder. The requirement that public agencies publish notices of the opportunity to bid and accept the lowest qualified bidder may result in more construction companies from outside the area being aware of the project and submitting bids, thus increasing the chance that an outsider will be awarded the contract.

In addition, virtually all projects funded by federal agencies and some funded by state and local governments include a provision that the contractor pay the prevailing wage. Indeed, it was Congressman Davis's dismay over the awarding of the contract on a Veteran's hospital in his district to an "outsider" company that led him to introduce legislation that would protect local living standards and ensure that local businesses had a chance to bid successfully on jobs in their area. By requiring contractors on federal projects in excess of $2,000 to pay the wage rate prevailing in the area, the Davis-Bacon Act would, it was believed, prevent outside contractors from undermining local development efforts by using low wage workers from other areas or offering substandard working conditions in order to submit the lowest bid. Since 1931, the law has been amended to include fringe benefits as well as wages. In addition, many programs providing aid to agencies or state and local governments require compliance with Davis-Bacon provisions. Thirty-five states (including Alaska, Montana, Oregon and Washington) also have prevailing wage laws that apply to construction for state and local government units (Thiebolt, 1986). The state laws are generally similar to the federal Davis-Bacon Act, although there are variations in coverage and the procedures used in determining the prevailing wage.

There have been many complaints about the way the Davis-Bacon Act has been administered. One of the major criticisms has been that the wage the Department of Labor declares to be prevailing is often artificially high because of DOL's heavy reliance on union wage data and its use of urban wage rates for projects in rural areas. A second criticism is that DOL requires a firm to pay these rates for any work done within each of the traditional craft jurisdictions unless the firm can show that use of "general construction worker" or "helper" classifications is standard for the area. Small, non-union companies which use labor in a flexible way must either change their work practices or incur the costs of recording and paying workers by how long they spend doing each type of work (Gujarati; GAO; Goldfarb and Morrall, 1978). In addition, contractors on such projects must file weekly statements of compliance and weekly payroll reports listing for each employee the hours worked, wage rate, total earnings, deductions and net pay. Monthly reports showing hours worked on public and private projects by trade and journeyman/apprentice status, as well as statistics on minority employment are also required.

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1. Contractors "pre-qualify" by providing evidence of experience in the construction trade and financial stability. The review process serves mainly to disqualify financially unstable firms; most firms are approved for bidding.

These practices are alleged to discourage local contractors, especially those in rural areas, from bidding on public construction. The General Accounting Office's report of its 1979 survey of 30 federal construction projects notes:

> *"During our surveys some contractors state that, rather than disrupt their wage structures and worker classification practices, they would not bid on federally financed projects. Reasons given were the increased administrative costs (including preparation of certified payrolls) and the general problems of dealing with the Government. Some contractors cited hardship and morale problems among employees when wage rates were reduced after completion of the Federal projects and the workers were returned to the lower rates paid on private construction in the area."(GAO, p.73)*

Although the above-mentioned practices may discourage local contractors from bidding or expose them to increased competition, state and local governments often try to support and encourage indigenous businesses by giving preference to resident contractors or requiring contractors to give residents preference in employment. For example, on Idaho public works projects employing more than 50 people, no more than 5% of the workers may be from out of state. On smaller projects, up to 10% of the work force may be from out of state (Thiebolt, pp. 166-7).

Government procurement policies — public notice, competitive bidding, prevailing wage requirements and local preference — are alleged to affect the portion of public work done by local contractors. It is not clear, a priori, whether the intended positive effect on local firms is greater or less than the unintended results of these procedures in discouraging local contractors from bidding or in attracting outsiders. To resolve this debate, one must first define "local" and then turn to the empirical evidence.

In studying the impact of procurement policies, the ideal definition of local would be the area of intended impact. If the state or federal government was funding construction as part of an economic development plan that applied to one county, then local would be defined to be within that county. If the development plan applied to a group of counties (the South Coast, for example), then anyone located within that area would be considered local. The area of intended impact is not usually known to a researcher examining public construction policies. Alternative definitions may be inferred, however, from procurement practices. To protect local wages, the Davis-Bacon Act requires payment of the wage prevailing "in the city, town, village, or other civil subdivision of the State...." Certainly, a contractor from the city in which the project is to be located is indeed a local contractor. Other definitions of local, though, are plausible and consistent with the intent and language of the law. The Department of Labor has found it more practical to consider an entire county as a local market. This use of "local" to mean from within the same county seems to be generally accepted, even by the law's critics. This definition can result in classifying some contractors whose place of business is actually quite close to the project as "outside" or non-local" merely because an arbitrary boundary lies between the two locations while contractors from a greater distance within the county's boundaries are considered "local." To avoid this problem, the definition of local could be enlarged to include the entire SMSA in urban areas and to include adjacent counties in rural areas. Another alternative is to define "local" on a physical basis — mileage — not on the basis of an arbitrary governmental unit (county). All these definitions of a local contractor (within the county, within adjacent counties, or within a short distance of the project) will be used in examining the extent to which construction business remains in the local areas and whether government policies adversely affect this.

The few pieces of available evidence suggest that public policy has adversely affected the portion of government contracts received by local contractors. For example, in the GAO survey, non-local contractors were the successful bidders on 10 of the 30 projects which it studied. The GAO concluded that prevailing wage determination procedures increased the share of work awarded to non-local contractors as such companies were the low bidders on 7 of 12 projects where DOL's wage determinations were above the true rate but won only 3

of 18 other projects. The 7 non-local contractors on the projects with inflated wage rates were from places between 28 and 200 miles distant from the project.[2]

Additional evidence can be gleaned from the list of all public construction awards in the state of Oregon which is maintained by the Construction Engineering Foundation at Oregon State University. In 1988, there were 1,533 such awards made by federal, state, and local agencies. From this population, I drew a 10 percent random sample and attempted to locate both the project and the contractor's place of business project. Insufficient information about the location of the project eliminated 7 awards; another 16 were eliminated because I was unable to locate the contractor. Local (same county) contractors were used on 57 (44.9%) of the remaining 127 projects. This percentage of contracts awarded to local contractors was somewhat higher (54.2%) on small projects (under $50,000) and less (16.7%) for projects valued at $1 million or more. Of the 70 out-of-county contractors, 40 came from adjacent counties and 30 came from non-contiguous counties. Thus, if the definition of local is enlarged to included adjacent counties, 76.4 percent of all awards went to local contractors. In terms of the dollar volume of construction work, $14,637,400 or 19.7% of public construction dollars stayed within the county. If the definition of local is expanded to include other counties within an SMSA or adjacent counties in rural areas, the percent of construction spending remaining in the county is 50.6. These percentages are lower than those based on the number of projects because large projects are more likely to attract outside contractors while small projects are bid on and awarded to local contractors.

Certainly some contract work would go to non-local firms even in the absence of any government requirements on wages or contractors chosen. In all but the most populous counties the volume of work of a very specialized type might be too small to support an efficient-sized firm. To get the work done, the government must of necessity bring in non-local companies. The question is, therefore, whether the proportion of work going to outside contractors is large or smaller or about the same as it would be in the absence of notice, low bid, prevailing wage and local preference requirements. Unfortunately, there is no way of knowing what contractor would have received the contract if different procedures were used. A reasonable assumption is that the awards would have been distributed among local and non-local firms in the same proportion as they are on privately-funded construction not subject to these requirements. A comparison, therefore, of successful bidders on public and private projects of similar characteristics will indicate the extent to which the first-round effects of government spending are shifted away from the project area.

This comparison can be made using data on public and privately-built non-residential buildings in non-metropolitan areas of the United States collected as part of an earlier study of the effects of the Davis-Bacon Act (Fraundorf, Farrell and Mason, 1982, 1984) To obtain this sample, a list of publically funded building projects begun during 1977-1978 was compiled for a randomly-selected group of 100 non-metropolitan counties across the United States. Many of these projects were built as part of the Economic Development Administration's Local Public Works Program. An equal number of projects of similar size, type and location were randomly-selected from permit data on privately-built buildings in these same counties. Some projects had to be dropped from the sample because the contractors could not be located or because additional inquiry revealed the project to be inappropriate for the sample. Of the remaining 382 projects, 208 were publically financed and 174 were privately-built. As Table 1 shows, overall, contractors on the privately-financed projects were significantly more likely to be from within the county than were contractors on public projects. The chi-square was 15.946 which is significant at greater than the .005 level. Chi-square tests also show significant differences in the distribution of contractors on public and private projects in all regions except the West.[3] The difference in distribution of contractors that exists on public compared to private projects seems to occur mostly due to greater use of non-local contractors on the smaller public projects. As Table 2 shows, the distribution of contractors by location within or outside the county is significantly different from the location of contractors on

2. No mileage figures are given for the other three projects done by non-local contractors.

3. In the West, the contractor on 57.7% of the public projects was located in the same county as the project. Although this is significantly higher than the 27.4% national average in the sample, it is somewhat similar to the 44.9% to local firms in the 1988 Oregon data.

Table 1. Contractor's Location: Public and Private Projects

Contractor's Location	Public Projects	Private Projects	Total
Same County	57 (27.4%)	82 (47.1%)	139 (36.4%)
Different County	151 (72.6%)	92 (52.9%)	243 (63.6%)
Total	208 (100.0%)	174 (100.0%)	382 (100.0%)

private projects for those projects in the under $100,000 class and for those in the $100,000 to $250,000 class (chi-squares of 6.21 and 7.38, d.f. = 1). For projects in the $250,000 to $1,000,000 class and those over $1,000,000 there is no significant difference in the distributions (chi squares are 1.94 and .99, respectively).

The shifting of work to non-local contractors is more pronounced when shares are based on the dollar volume of construction, not the number of contracts awarded. Table 3 shows the distribution of construction spending for each region and for the United States as a whole. Overall, only 13.2 percent of construction spending by government agencies remains within the county, whereas 25.7 percent of private construction spending goes to local contractors. The percent remaining within the county is the lowest in the South (8.2%) and highest in the West (46.0%). The total public spending includes contracts for two very large (over $25 million) projects whereas the largest contract for a private project is $13.5 million. All other awards are for $6 million or less. If these are removed from the sample, then the percentage awarded to local contractors is 19.0% overall and 15.3% in the South (a proportion similar to the share awarded to local contractors in the Northeast and North Central regions). The West remains an anomaly. What accounts for this difference is unclear. It would not appear to be differences in government contracting procedures in the West because the percent of private

Table 2. Location of Contractor by Amount of Contract

Size and Location	Public Projects	Private Projects	Total
Under $100,000			
Same County	8 (27.6%)	20 (58.8%)	28 (44.4%)
Different County	21 (72.4%)	14 (41.2%)	35 (55.6%)
Total	20 (100%)	34 (100%)	63 (100%)
$100,000 - 249,999			
Same County	20 (35.7%)	30 (62.5%)	50 (48.1%)
Different County	36 (64.3%)	18 (37.5%)	54 (51.9%)
Total	56 (100%)	48 (100%)	104 (100%)
$250,000 - 999,999			
Same County	22 (23.9%)	24 (33.8%)	46 (28.2%)
Different County	70 (76.1%)	47 (66.2%)	117 (71.8%)
Total	92 (100%)	71 (100%)	163 (100%)
$1 Million or More			
Same County	6 (22.2%)	7 (35.0%)	13 (27.6%)
Different County	21 (77.8%)	13 (65.0%)	34 (72.3%)
Total	27 (100%)	20 (100%)	47 (100%)

Table 3. Distribution of Construction Dollars

Contractor's Location	Dollar Volume of Construction (thousands) Public	Private	Total
NORTH CENTRAL			
Same County	3,598 (14.1%)	4,825 (26.8%)	8,423 (19.3%)
Different County	21,970 (85.9%)	13,202 (73.2%)	35,172 (80.7%)
Total	25,568 (100%)	18,027 (100%)	43,595 (100%)
NORTH EAST			
Same County	1,957 (12.0%)	3,626 (15.7%)	5,583 (14.2%)
Different County	14,311 (88.0%)	19,474 (84.3%)	33,785 (85.8%)
Total	16,268 (100%)	23,100 (100%)	39,368 (100%)
SOUTH			
Same County	8,907 (8.2%)	6,012 (18.1%)	14,919 (10.5%)
Different County	100,334 (91.8%)	27,176 (81.9%)	127,510 (89.5%)
Total	109,241 (100%)	33,188 (100%)	142,429 (100%)
WEST			
Same County	7,700 (46.0%)	8,612 (55.2%)	16,312 (50.5%)
Different County	9,022 (53.9%)	6,989 (44.8%)	16,011 (49.6%)
Total	16,722 (100%)	15,601 (100%)	32,323 (100%)
UNITED STATES TOTAL			
Same County	22,162 (13.2%)	23,075 (25.7%)	45,237 (17.6%)
Different County	145,637 (86.8%)	66,841 (74.3%)	212,478 (82.4%)
Total	167,799 (100%)	89,916 (100%)	257,715 (100%)

construction spending remaining in the county is also much higher than in the other regions. Perhaps the difference can be accounted for by the larger size of Western counties.

The conclusion that public contracting procedures do result in more of the work being let outside the local area does not hold, however, if local is defined as within the same or contiguous counties. Table 4 shows the distribution of contractor locations using this second definition of local.

Table 4. Distribution of Contractors-Local and Non-Local

Contractor's Location	Public Projects	Private Projects	Total
Local	139 (66.8%)	125 (71.8%)	264 (69.1%)
Non-contiguous	69 (33.2%)	49 (28.2%)	118 (30.9%)
Total	208 (100.0%)	174 (100.0%)	382 (100.0%)

The chi-square of 1.18 (d.f. = 1) is not significant at the .05 level or better.[4] Thus the effect of public procurement policies is to award more construction work to contractors from adjacent counties but not to award a significantly greater than expected portion to contractors from more distant locations.

4. The finding of no significant difference in the locations of contractors on public and private projects also holds for each of the four regions. Data available from the author upon request.

The impact of government procurement policies when measured in dollars of construction spending varies by region. As Table 5 shows, overall 35.9 percent of public construction dollars are paid to contractors located in the same or contiguous counties as the projects. The comparative figure for private spending (43.9% remaining in the local area) suggests that public policies shift construction dollars to non-local firms (those in non-contiguous counties). If the three very large projects described above are excluded from the calculations, then the resulting percentage of dollars awarded to local (same or contiguous counties) contractors is 51.6 for both public and private projects. The conclusion is, therefore, that government procurement policies do not significantly affect the share of construction spending received by local contractors when "local" is given this more inclusive meaning.

Table 5. Dollar Volume by Location and Funding

Contractor's Location	Dollar Volume of Construction (thousands) Public	Private	Total
NORTH CENTRAL			
Local	10,146 (39.7%)	8,680 (48.2%)	18,826 (43.2%)
Non-Contiguous	15,422 (60.3%)	9,347 (51.8%)	24,769 (56.8%)
Total	25,568 (100%)	18,027 (100%)	43,595 (100%)
NORTH EAST			
Local	12,266 (75.4%)	5,300 (22.9%)	17,566 (44.6%)
Non-Contiguous	4,002 (24.6%)	17,800 (77.1%)	21,802 (55.4%)
Total	16,268 (100%)	23,100 (100%)	39,368 (100%)
SOUTH			
Local	23,652 (21.7%)	13,100 (39.5%)	36,752 (25.8%)
Non-Contiguous	85,589 (78.3%)	20,088 (60.5%)	105,677 (74.2%)
Total	109,241 (100%)	33,188 (100%)	142,429 (100%)
WEST			
Local	14,208 (84.9%)	12,381 (79.4%)	26,589 (82.3%)
Non-Contiguous	2,514 (15.0%)	3,220 (20.6%)	5,734 (17.8%)
Total	16,722 (100%)	15,691 (100%)	32,323 (100%)
UNITED STATES TOTAL			
Local	60,272 (35.9%)	39,461 (43.9%)	99,733 (38.7%)
Non-Contiguous	107,527 (64.1%)	50,455 (56.1%)	157,982 (61.3%)
Total	167,799 (100%)	89,916 (100%)	257,715 (100%)

The distance in miles between the contractor's location and the location of the project provides another measure of the area of impact. The mean distance in miles between the two locations is 53.7 for public projects and 51.5 for private ones. As Table 6 shows, the distribution by miles between project and contractor's place of business is significantly different when public projects are compared to private ones. The chi-square of 44.62 with 10 degrees of freedom is significant at the .001 level. More contractors on private projects come from the immediate vicinity (within 25 miles) or from far away (over 100 miles) while a greater percentage of contractors on public projects come from 25 to 75 miles distant. This confirms the finding noted above that public work attracts more contractors from nearby areas (adjacent counties or from 25-75 miles distant).

Table 6. Miles from Project to Contractor's Place of Business

Mileage	Public Projects	Private Projects	Total
0-24	78 (37.9%)	93 (54.4%)	171 (45.4%)
25-49	63 (30.6%)	24 (14.0%)	87 (23.1%)
50-74	27 (13.1%)	14 (8.2%)	41 (10.9%)
75-100	14 (6.8%)	10 (5.8%)	24 (6.4%)
100-150	7 (3.4%)	13 (7.6%)	20 (5.3%)
150-200	11 (5.3%)	4 (2.4%)	15 (4.0%)
200 or more	6 (2.9%)	13 (7.6%)	19 (5.0%)
Total	206 (100.0%)	171 (100.0%)	377 (100.0%)

Thus, whether or not public procurement policies have resulted in a shift of business away from local firms depends on which definition of local is used. If the adjacent counties are similar to the counties in which the projects are located, then the second definition is acceptable and public policies have not had a detrimental impact. This does not appear to be the case, however. All the projects in the sample of non-residential buildings are in rural areas yet 64.3% of the public awards made to out-of-county contractors went to firms located in urban areas. Thus for local, and especially rural, development efforts, the first definition (within county) would appear to be the appropriate one. Using this definition, it is clear that public policies do result in a shift of business away from local firms to those located in nearby urban counties.

Is a change in public policy appropriate? Without additional information as to which aspect of public procurement policies is responsible for the shift, a conclusive answer is not possible. Few would advocate abandonment of public notice and competitive bidding even if these were responsible for the shift as such a change could lead to both higher costs and increased opportunities for favoritism and graft. If the prevailing wage laws are responsible for this shift of business, then some modifications may be in order as the laws have failed to bring about the protection of local firms and workers that was one of the purposes of these laws.

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