

# **Project Labor Agreements Research Study: Focus On Southern Nevada Water Authority**

**Prepared For:**

**Associated Builders & Contractors – Southern Nevada**

**Associated Builders & Contractors – National**

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## **Research Study Sponsorship**

This Project Labor Agreement Research Study with a focus on the Southern Nevada Water Authority PLA was funded under a joint grant from the Associated Builders & Contractors of Southern Nevada and the Associated Builders & Contractors – National. Our directive to these associations is that the subject researchers would perform an unbiased research study on the Southern Nevada Water Authority over the past five years of history under their Project Labor Agreement.

## **Executive Summary**

The work described in this research study was sponsored and funded by the aforementioned two groups listed on the cover page. Both these groups permitted the investigators complete discretion in defining the specific points and scope of their work within the general area of Project Labor Agreements, and complete freedom in the conduct of their research.

A number of contractors, owners, and craft personnel granted interviews and furnished data that proved very helpful. The study authors are indebted to them as well as to many in the construction industry for their time and suggestions. Data obtained from the Southern Nevada Water Authority related to the PLA was from a public records request. The Southern Nevada Water Authority has claimed a number of advantages from their Project Labor Agreements through the five year history of the PLA. Our study looked at whether these advantages were in fact valid and what the impact of the PLA was on construction contractors.

**In summary, based on the results of this research study and a thorough analysis of the experience on the Southern Nevada Water Authority Project, we can not find any compelling reason for construction owners to implement Project Labor Agreements on their projects.**

## **Project Labor Agreements – Public Sector**

Project Labor Agreements (PLAs) have been a controversial subject both on a local as well as a national basis in the public sector. As of the date of this report, November, 2000, here in Southern Nevada with public agencies, there are PLAs in place for the Southern Nevada Water Authority, Las Vegas Convention Center, and the Nevada Test Site (Bechtel Nevada). There are other public agencies in Southern Nevada studying

whether or not to implement Project Labor Agreements for their capital construction projects.

**Southern Nevada Water Authority**

The Southern Nevada Water Authority (SNWA) since 1996 has had a PLA in place. For the purposes of this study the construction bidding history was analyzed on a year-by-year basis. SNWA has cited as a success their bidding history since they have received bids below the engineer’s estimate. In order to compare work that is principally heavy construction, figures from the Las Vegas Valley Water District (LVVWD) for the same time frame were also analyzed on a year-by-year basis. The LVVWD has no PLA in place. SNWA supplied bidder information for 65 separate projects. Out of these 65 projects, 57 were construction projects. The balance of the 65 were for procurement of equipment. Of the 57 construction projects, 14 successful firm contracts (25%) were identified as non-union. 43 contracts went to union firms or 75% of the total. Of these 14 non-union firm contracts, 7 were Nevada-based with 1 firm, MMC (Southern Nevada) receiving 6 contracts and Highfield (Northern Nevada) receiving 1 contract. The other non-union firms (50% of the total) are from out-of-state contractors as follows:

<b>Construction Firm</b>	<b>State Of Origin (Home Office)</b>	<b>Number Of Contracts</b>
Ames	Arizona & Minnesota	1
Highfield	Nevada (Northern Nevada)	1
Malibu Pacific	California	2
Meadow Valley	Arizona	1
Mingus	Arizona	1
MMC	Nevada (Southern Nevada)	6
Upper Valley	Utah	2

It should be noted that MMC's holding company, New Com is the parent of TAB Contractors which is a union firm that has also been a successful bidder on a number of these SNWA contracts. The analysis of the SNWA and LVVWD construction bidding data is attached to this report.

**Actual Union/Non-Union Firm Mix**

While these 14 contracts out of the 57 contract total were listed as performed by non-union firms according to the Southern Nevada Water Authority, this is inaccurate. Firms were apparently classified by SNWA as non-union even though they have union operations. This analysis looked at both the percentage of prime contracts and the dollar volume. In the type of heavy construction under review, prime contractors typically perform the vast majority of the work with their own forces. Again, the firms listed by SNWA and their contract numbers are as follows:

<b>Construction Firm</b>	<b>State Of Origin (Home Office)</b>	<b>Number Of Contracts</b>
Ames	Arizona & Minnesota	1
Highfield	Nevada (Northern Nevada)	1
Malibu Pacific	California	2
Meadow Valley	Arizona	1
Mingus	Arizona	1
MMC	Nevada (Southern Nevada)	6
Upper Valley	Utah	2

**Highfield**

Highfield is listed as a non-union firm. Highfield is a northern Nevada contractor based in Fernley, Nevada. However, Barnard out of California actually owns Highfield.

Barnard is a contractor that has both a union and a non-union face. In essence, it can be said that Barnard is a double-breasted contractor. For the SNWA contract, Barnard of

California performed this work with their union division. Thus to list this contract as being performed by a non-union firm is inaccurate.

### **Mingus**

Mingus is listed as a non-union firm. Mingus is a northern Arizona contractor based in Cottonwood, Arizona. Mingus operates under both union and non-union work arrangements. Mingus is not signatory to local building trades' collective bargaining agreements. But in certain areas such as Nevada and California on prevailing wage work, they will sign job agreements with local unions for that job. Thus it can be said that Mingus is in a sense a double-breasted contractor operating as union on some jobs and non-union on others.

### **Ames**

Ames is listed as a non-union firm. Ames is headquartered out of Burnsville, Minnesota with regional offices in Colorado, Utah, and Arizona. Ames operates under both union and non-union work arrangements. In union areas they will sign local labor agreements. In Salt Lake City, for example, they are signatory with Local Union 3 Operating Engineers' Union. Most commonly they sign labor agreements with the basic trades including carpenters, operating engineers, laborers, and teamsters. Since Ames works as a non-union contractor in some areas of the country and a union contractor in other areas, they could best be categorized as a double-breasted contractor. When performing past work in Southern Nevada they have manned jobs with union personnel.

### **Malibu Pacific**

Malibu Pacific is listed as a non-union firm. They are based in the Los Angeles, California area. Their role in the project thus far has been with two small contracts for

\$356,400 and \$248,800 respectively on disinfection of pipeline systems. These two contracts totaled \$605,200 or less than \$1 million on this billion-dollar SNWA project. They are a non-union firm. The small size of the projects and the inherent minimal labor content on this type of work had few problems. Pipeline disinfection is an equipment-intensive and material-intensive (cleaning chemicals) operation.

### **Upper Valley**

Upper Valley is listed as a non-union firm. They are based in Salt Lake City, Utah. They have had two contracts on the SNWA project. We, at this writing, could not obtain comments from their firm on their experiences with the SNWA PLA.

### **Meadow Valley**

Meadow Valley is listed as a non-union firm. They are based in Phoenix, Arizona. They had one contract on the SNWA under the PLA. They will not bid any more work under the PLA. They found that their field construction costs were significantly higher under the PLA due to reduced union-labor productivity.

In addition, they have an employee benefits package which they consider superior but under the PLA they must remit separate benefits for their 7 core employees to union benefit trusts. This imposed a dual cost burden on their firm. If a separate benefits package costs even just \$5.00 per hour more, over a 2,000 hour work year this is \$10,000 more time seven employees for a difference of \$70,000. Given that the net margin on heavy construction projects may be 1.5%, this \$70,000 represents the net margin on a \$4 million-plus job.

## **MMC Inc.**

MMC was listed as a non-union firm. MMC is based in Las Vegas, Nevada. They have performed 6 contracts under the SNWA PLA. They have been in business for over 30 years. Their specialty is heavy construction involving utility and treatment plant work. This infrastructure work has been performed for a number of public agencies including the Las Vegas Valley Water District. MMC has been a successful non-union construction firm for a number of years here in Southern Nevada on prevailing wage work. Their key competitive advantage in addition to the team concept their firm employs is the absence of restrictive work rules and work jurisdiction problems faced by their union competitors. Conversations with owners representatives on MMC-contracted projects found a high level of respect for the firm.

Based on interviews, it is our understanding that MMC has stopped bidding on SNWA projects due to the presence of Project Labor Agreements. Pre-PLA, MMC performed work on SNWA projects with no problems. MMC under the PLA confronted problems such as lack of performance by union craft labor and restrictive work jurisdictional issues.

It is unfortunate that a capable firm such as an MMC finds such significant problems in working under a Project Labor Agreement that they stop seeking this work in their own work territory.

### **Non-Union Contract History Summary**

Between themselves, MMC and Meadow Valley accounted for 27 bids out of 85 bids (32%) submitted on the 57 contracts under review for this research study. Both firms have indicated that due to performance issues related to PLA and the restriction on labor

supply that they will not bid future SNWA work. Highfield (Barnard), Mingus and Ames are in essence double-breasted firms with both union and non-union operations depending on the area and project. Malibu Pacific had two small pipeline disinfection contracts as a non-union firm that had low labor content.

The SNWA PLA experience can be contrasted with the LVVWD experience without a PLA. The LVVWD has a high number of non-union contractors successfully performing work for them.

Spreadsheet analysis of the SNWA PLA bidding history is attached to this report. The initial classification and our subsequent reclassification shows the following differences. In addition, contract dollar work volume is a better indicator of union/non-union contractor participation than contract number.

**With MMC and Meadow Valley included, the following year-by-year figures for both contract numbers and contract dollar volume are shown below:**

<b>Year</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
<b>SNWA NU#</b>	18.75%	28.57%	33.33%	25.00%	33.33%	16.67%
<b>SNWA NU Volume</b>	12.89%	3.19%	26.50%	1.09%	5.11%	20.36%
<b>SNWA NU# Reclassified</b>	N/A	16.67%	27.27%	N/A	N/A	N/A
<b>SNWA NU Vol Reclass.</b>	N/A	1.48%	22.64%	N/A	N/A	N/A

SNWA NU# = Southern Nevada Water Authority Non-Union Numbers of Contracts.

SNWA NU Volume = Southern Nevada Water Authority Non-Union Contract Dollar Volume.

SNWA NU# Reclassified = Southern Nevada Water Authority Non-Union Numbers of Contracts Reclassified to eliminate double-breasted firms.

SNWA NU Vol Reclass. = Southern Nevada Water Authority Non-Union Contract Dollar Volume Reclassified to eliminate double-breasted firms.

N/A = Not Applicable.



**Without MMC and Meadow Valley included, the following year-by-year figures for both contract numbers and contract dollar volume are shown:**

<b>Year</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
<b>SNWA NU#</b>	0.00%	28.57%	11.11%	25.00%	33.33%	16.67%
<b>SNWA NU Volume</b>	0.00%	3.19%	14.56%	1.09%	5.11%	20.36%
<b>SNWA NU# Reclassified</b>	N/A	16.67%	0.00%	N/A	N/A	N/A
<b>SNWA NU Vol Reclass.</b>	N/A	1.48%	0.00%	N/A	N/A	N/A

As can be seen for the 1995 year, the prime contract numbers for SNWA would be zero non-union contractor participation on the SNWA classification without MMC and Meadow Valley. The SNWA reclassification is not applicable.

For the 1997 year, the applicable prime contract numbers for SNWA would be 11.11% and 14.56% respectively without MMC and Meadow Valley participation. With contractor reclassification, the applicable 1997 numbers revert to zero.

#### **Costs Below Engineers' Estimates**

As a standard for cost comparisons' savings on their projects with the SNWA PLA, the SNWA has looked to the comparison of engineers' estimates with low bid prices received from contractors. Costs from engineers' estimates have been widely criticized on an historical basis by contractors over the years as too high or too low. Often contractors have a different method than that anticipated by the engineers' estimate which can result in substantial cost savings.

An example of this would be on the Southern Nevada Water Authority Project. Lean concrete or flowable fill is utilized as backfill on large diameter underground piping installation for the SNWA. Lean concrete is a reduced cement-mixture mix that resembles hard dirt with a compressive pounds per square inch (psi) rating of 300 psi. This contrasts with normal foundation concrete of 3,000-4,000 psi ratings. Local concrete suppliers were quoting this material at prices in excess of \$50 per cubic yard. One contractor (Lake Mead Constructors) figured with their own on-site batch plant that they could make lean concrete for less than \$20 per cubic yard. The price difference to them in just this one cost line item meant that Lake Mead shaved \$1 million off their bid price. As a result of these factors, substantial price differences arise between bid prices and engineers' estimates.

In terms of bid price comparisons, both the SNWA and the Las Vegas Valley Water District (LVVWD) perform essentially the same types of work, heavy utility construction. In contrast to the SNWA, the LVVWD does not have a PLA.

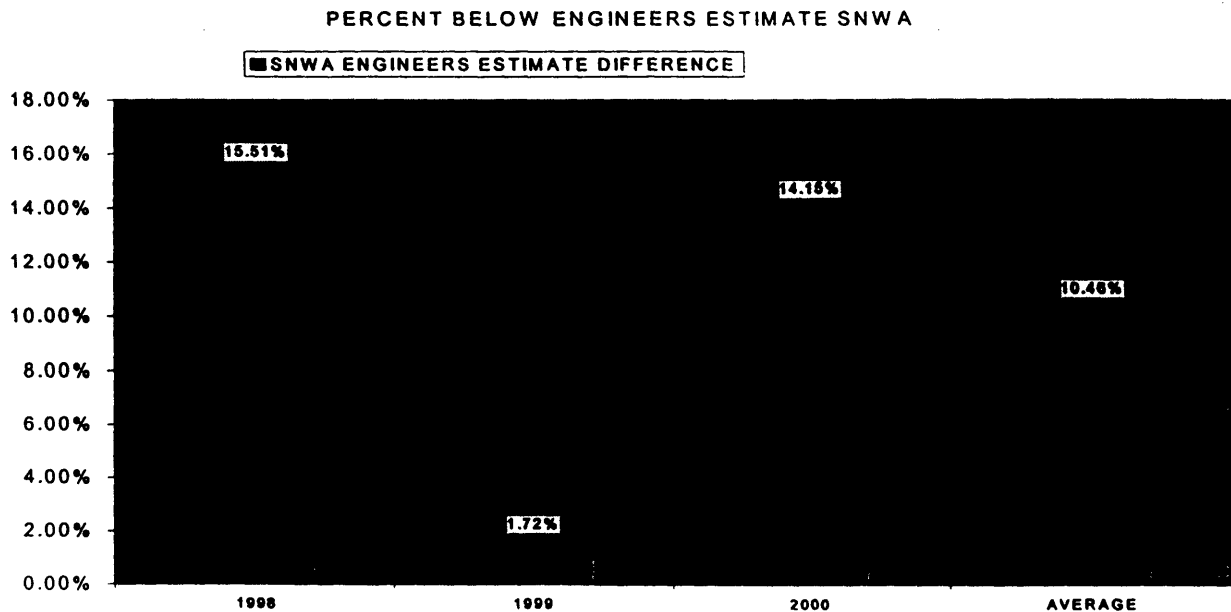
<b>Year</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>Average</b>
<b>SNWA</b>	18.10%	35.69%	17.7%	15.51%	1.72%	14.15%	17.15%
<b>LVVWD</b>	Data req.	18.14%	16.42%	25.80%	8.42%	10.50%	15.86%

It should be noted that both the SNWA and LVVWD are receiving bids below engineers' estimates. The PLA is not the reason for this. The SNWA differences have narrowed over the past three years which is shown by the graph on the following page to a 10.46% average for years 1998, 1999, and 2000.

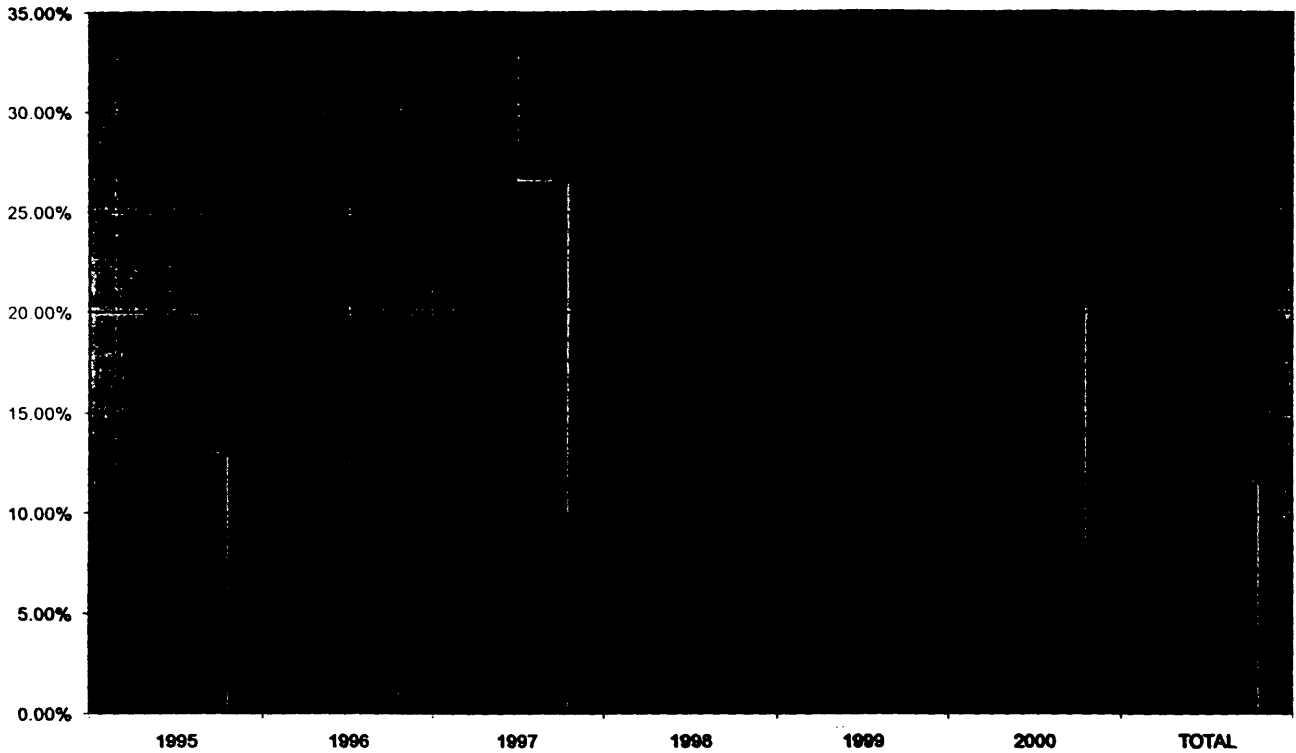
The average of the percentages is remarkably similar between the two agencies. In terms of the competition for projects, the LVVWD projects attract more local prime contractor bid competition. The SNWA projects attract more out-of-state contractor competition. We have interviewed a number of out-of-state contractors that have bid on the SNWA work and they indicated that an additional reason for lower bid prices has been the length of the project spread over several years. If an out-of-state contractor could obtain an initial leg of the SNWA Project, they were then mobilized in place to be able to compete for other sections. Again, the type of project length (spread out over several years) rather than the PLA is the reason for this.

**Safety**

Safety improvements have been cited by SNWA PLA proponents. The safety record for the SNWA under their PLA for the most current year (1999) has a recordable incident rate (RIR) of 3.08 and a Lost Workday Case Incidence Rate (LWCIR) of 0.97. SNWA compares these to construction industry averages of an 8.21 RIR and a 3.67 LWCIR. The RIR is simply the OSHA-required reporting data and the LWCIR is days off the job. Our



■ NON UNION CONTRACTS AWARDED ■ \$ VOLUME OF NON UNION CONTRACTS



safety analysis finds that smaller contractors on smaller projects tend to skew the construction industry averages upward. Improved safety records march hand in hand with larger construction firms and larger projects. Also, with the exception of tunnel construction, much of the SNWA project involves relatively low-rise construction and other types of work that are tend to pose fewer safety hazards than many construction projects. One comparison that can be drawn is between Construction Industry Institute (CII) data and that of the SNWA project. It should be noted that CII members (both union and non-union) represent some of the largest construction firms in the U.S. including BE&K, Bechtel, Fluor Daniel, and Kellogg Brown & Root. This data is from contractors who are working primarily on projects as complex or more complex (increased safety hazards) such as industrial plants, power houses and refineries as opposed to SNWA projects

For 1999, the comparable CII figures have an RIR of 1.67 and an LWCIR of 0.27 (see CII website [www.cii-benchmarking.org/downloads/99safetytrendcharts.pdf](http://www.cii-benchmarking.org/downloads/99safetytrendcharts.pdf)). This is shown on the table below:

<b>Safety Statistic</b>	<b>Construction Ind.</b>	<b>SNWA</b>	<b>CII</b>
<b>RIR</b>	8.21	3.08	1.67
<b>LWCIR</b>	3.67	0.97	0.27

This graph of CII data versus the construction industry average data is on the next page. It should be noted that many of the CII projects achieving these exemplary safety records are being done in non-union or mixed non-union/union contractor environments. Thus a PLA is not required to promote job site safety.

As part of the safety advantages cited by proponents of PLAs, substance abuse testing programs are listed as an advantage of these Project Labor Agreements. However, it should be noted that many contractors, both union and non-union have implemented substance abuse testing programs without PLAs. Thus a PLA is not required to implement substance abuse testing programs.

In addition, we have interviewed several owner members of the Construction Industry Institute and they do not report safety differences between union and non-union contractors.

Figures 1 and 2 depict 11 years of RIR and LWCIR data. Estimates of industry performance for 1999 are projected using the least squares regression technique since OSHA data are not yet available for the period. Industry data are based on OSHA reported rates for Standard Industrial Classification Code (SIC) 15, Construction, which is a relatively high level rollup. Companies may find data more relevant for their analysis in the industry breakdowns that follow:

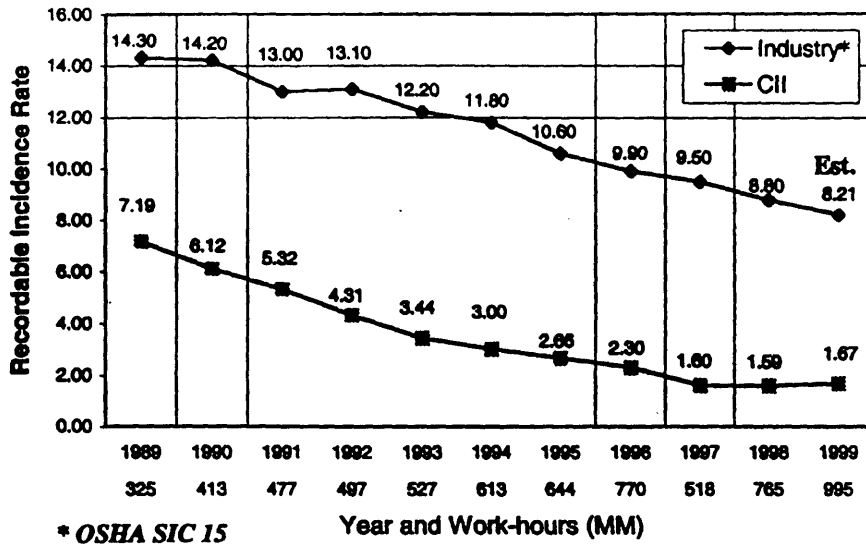


Figure 1. RIR for Aggregated Data

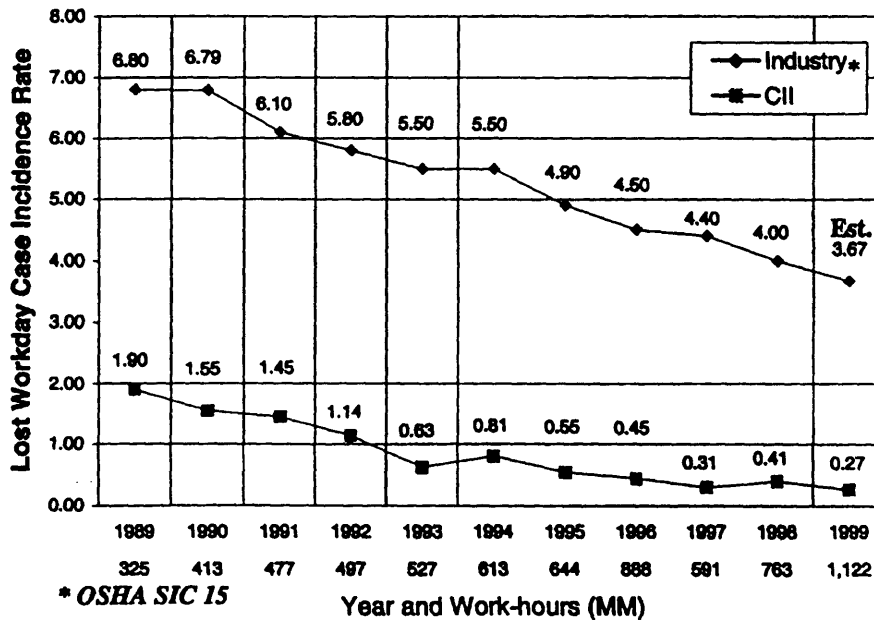


Figure 2. LWCIR for Aggregated Data

## **Summary**

The Southern Nevada Water Authority Project Labor Agreement end-result has been reduced competition. Both MMC and Meadow Valley are strong competitors in the Southern Nevada construction market on prevailing wage projects. Their negative experiences under the SNWA PLA has meant that they are declining to bid these PLA projects. A reduction in competition by contractors that have been previously successful means higher prices for taxpayers under the Project Labor Agreement method of contracting.