MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

September 27, 1993

To: Board of Directors (Engineering & Operations Committee--Action) (Executive Committee--Action) (Finance & Insurance Committee--Action) (Legal & Claims Committee--Action)

From: General Manager and General Counsel

Subject: Owner-Controlled Insurance Program (OCIP) for Domenigoni Valley Reservoir Project

Report

An owner-controlled insurance program (OCIP) is designed to protect all work performed at a job site under one insurance program. It is implemented by the owner (District) and provides coverage for all contractors, subcontractors and construction managers. An OCIP presents advantages over conventional construction insurance and loss control procedures for two reasons: the economies of scale produced by centralizing the purchase of insurance coverage, and the streamlining of project management by coordinating a number of on-site functions (loss control, safety, recordkeeping etc.) under a single authority. The key to the operation and success of an OCIP is control--control of essential project insurance lines (i.e., general liability, workers compensation, and builders risk), control of subcontractors in all tiers through their contracts, control of site security, and control of loss control programs by a single project manager (owner). The attached exhibit (A1) shows a comparison of costs between a District OCIP at a 55 percent loss ratio and a conventional insurance and loss prevention program. Under this conservative scenario, the financial benefit to the District is estimated to be approximately $11 million. The staff's objective is to establish a program of loss control and incentives that results in a substantially lower loss ratio than that which the aforementioned exhibit shows, and to demonstrate savings of $20/25 million (Exhibit A2) during the term of construction of the Domenigoni Reservoir.

In addition to the safety and economic benefits that accrue to the District under an OCIP, the District's current self-insured program ($25 million) is further protected against losses associated with this project.

Attached to this letter and following Exhibits A1 and A2, are a series of issues and the responses to the most frequently asked questions concerning OCIP or "wrap-ups." Also enclosed with this letter is a detailed staff report entitled "Owner-Controlled Insurance Program, October 1993."

The Ad Hoc Committee for Owner-Controlled Insurance Program reviewed the proposed program on September 14, 1993, and recommends the actions proposed under the Recommendations paragraph of this letter.

The proposed action is exempt from the provisions of the California Environmental Quality Act because there is no possibility that it would have a significant effect on the environment.

Board Committee Assignments

This letter is referred for action to:

The Executive Committee because of its authority to study, advise, and make recommendations with regard to major policy issues, pursuant to the provisions of the District's Administrative Code section 2417, subdivision (g);

The Engineering and Operations Committee because of its authority to study, advise, and make recommendations with regard to the initiation, scheduling, contracting, and performance of construction programs, pursuant to the provisions of the District's Administrative Code section 2431, subdivision (b);

The Finance and Insurance Committee because of its authority to study, advise, and make recommendations with regard to the financial aspects of the District's risk management program and questions pertaining to insurance coverage and self-insurance, pursuant to the District's Administrative Code section 2441, subdivisions (g) and (h); and

The Legal and Claims Committee because of its authority to study, advise, and make recommendations with regard to policy considerations concerning District contracts, pursuant to the provisions of the District's Administrative Code section 2461, subdivision (d).

Recommendations

ENGINEERING & OPERATIONS, EXECUTIVE, FINANCE & INSURANCE, AND LEGAL & CLAIMS COMMITTEES FOR ACTION.

It is recommended that the Board of Directors take the following actions:

1. Authorize the creation of an Owner-Controlled Insurance Program for the Domenigoni Reservoir; and

2. Authorize the staff to issue a Request for Proposal for broker/administrative services to support the program.

for John R. Wodraska

for N. Gregory Taylor

LPG:lg/gld
OCIPltr.brd

Attachments

Exhibit A1

COST COMPARISON
OCIP vs. CONVENTIONAL

The Metropolitan Water District of Southern California
PERIOD 1994 to 2000

PROJECT COSTS
(55% Loss Ratio)

COST ELEMENT	OCIP	CONVENTIONAL
Workers' Compensation	$29.3 million	$39.2 million
Liability ($100 million)	$ 9.4 million	$11.7 million
Builders' Risk	$ 6.6 million	$ 8.7 million
SUBTOTAL:	$45.3 million	$59.6 million
OCIP Broker/Administrator	$ 3.0 million	-0-
*Pre-Construction	$ .05 million	-0-
	$48.35 million	$59.6 million

* existing staff and consultant resources

Exhibit A2

PROJECT COSTS
(Objective: 40%(-) Loss Ratio)

COST ELEMENT	OCIP	CONVENTIONAL
All Insurance	$38.9	$59.6
Broker/Administrator	3	0
TOTAL	$41.9	$59.6
Potential Cost Improvements thru Cash Flow, Retro/ Deductibles, Underwriter Negotiables, Potential Lessoning of Builders' Risk Costs	($8/10 million)	
Estimated Net Cost Element	$32/34 million	$59.6

TARGET NET COST $30 MILLION

ATTACHMENT

ISSUES/RESPONSES

OWNER-CONTROLLER INSURANCE PROGRAM

ISSUES/RESPONSES

1. Without penalties or claim deductibles, contractors have no incentive to act and operate safely.

   Contractors are required, by law, to operate and maintain a safe work environment in order to protect the workers employed therein. There are civil and criminal penalties associated with failing to do so.

   A strong safety program combined with financial incentives and sanctions will be a part of the OCIP program. 10% of the savings will be set aside to be shared with contractors who achieve safety objectives.

2. The door will be opened to contractors who cannot meet bonding and insurance standards.

   Not true! By California law, all contractors bidding on public works contracts in excess of $25,000 must post a payment bond. Metropolitan policy requires performance bonds. Contractors will be required to show proof of insurance in order to prevent off-site losses from encroaching on the "wrap up."

3. The door will be open to poor performing contractors if they do not have to provide their own insurance.

   There are several factors that inhibit this. The large prime contractors are always concerned with project performance and employ reliable sub-contractors whom they know, or are able to verify, have good construction performance records. The primes are well aware that the quality of work or the lack thereof on the part of the sub-contractors is ultimately their responsibility and will affect their reputation and credibility. Bonding requirements cited above (#2) tend to eliminate marginal firms. Liability and Builders' Risk insurance is not usually a major factor in the screening of contractors and these insurance costs represent a small fraction of a contractor's total bid. While there is some relationship between insurance and performance the presence or absence of insurance is not a determinant in establishing the work product quality of a contractor. Where insurance has been a screening factor, often it is the result of the owner setting insurance requirements at such a high level that many smaller firms, particularly MBE and WBE firms could not obtain the required level or the premiums required for the coverage put them at a competitive disadvantage.

4. Success of OCIP cannot be evaluated

Measures for evaluation include the monitoring of the actual experience in puchasing insurance vs. the projected cost; the achievement of the objective of a 40% or less loss ratio in workers' compesation; the achievement of an incident rate below the national heavy construction average (1991 - 8.30); the achievement of a cost per worker below the national average (1991 - $540 @). The latter two statistics are produced by the National Safety Council.

5. Insurance underwriters will not allow contractors credit against premium for non-OCIP insurance.

Construction insurance premiums are usually geared to payroll or contract cost and need to be identified to the insurer prior to commencement of a project. A clear definition of project site combined with early calculation of estimated payroll or contract cost provides an adequate basis to disassociate the two programs.

6. Contractors will not receive dividends or returns on premium based upon their own insurance plan.

In a conventional program, the owner pays the full price for the contractors' insurance which is dedicated to a specific project, but the owner does not share in the rebate if losses are low. Through a "wrap up" the owner shares this rebate.

7. Contractors provide their own construction insurance programs and "wrap ups" are disruptive of their program.

A loss under a "wrap up" is borne by the owner's program and not chargeable against the contractor. Recordkeeping under either system is the same and the contractor does not incur additional premiums or administrative costs.

8. Contractors may be self-insured.

Contractors will have a policy issued to them under "wrap up." A "wrap up" will not affect a contractor's financial arrangement that supports the self-insurance reserves.

9. Increases the requirements for meetings and the gathering of data.

True, but such meetings are directed toward more control and overall efficiency of the project. They increase safety, reduce the potential for claims, and contribute to a successful and cost-effective project.

10. Contractors' insurance brokers lose commission income when a job is in a "wrap up" project.

There is no solution to this. The first obligation of the owner is to ensure that the project is properly insured and that the costs are held to absolute minimums within the need to properly protect the public entity.

MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

OWNER-CONTROLLED

INSURANCE PROGRAM

(OCIP)

October, 1993

INTRODUCTION

In order to ensure the future delivery of reliable water supplies, the District has embarked upon a major capital improvement program, of which the proposed 800,000 acre foot capacity Domenigoni Reservoir is a major component. The project envisions a $1.1 billion construction project commencing in early 1994 and concluding in 1999.

A project of this magnitude entails many auxiliary services, among which is one to ensure that the project's construction phase has a high degree of safety and security, and that risk control and insurance are adequately provided during and after project completion.

Customarily, and within the limits of California law, owners of construction projects shift the risk of expense associated with third party liability, workers' compensation, and builders' risk to the contractors. The contractors are then required to obtain and maintain specified forms and amounts of insurance during the term of the project.

Larger construction projects ($200+ million) lend themselves toward examining alternative methods of managing casualty and property loss exposures. The District's risk management consultant and the Risk Manager have been examining an alternative insurance program known as an Owner Controlled Insurance Program (OCIP), commonly referred to as a "wrap up". California law requires local government agencies to obtain an exemption from State law in order to institute such a program. Both houses of the legislature have acted positively on the exemption and it is now before the governor for signature. Our Sacramento representative has stated that no formal opposition has been recorded and that, assuming the Governor signs the legislation, the exemption will be effective January 1, 1994.

An OCIP presents advantages over conventional construction insurance and loss control procedures for two reasons: the economies of scale produced by centralizing the purchase of insurance coverage, and the streamlining of project management by coordinating a number of on-site functions (loss control, safety, recordkeeping etc.) under a single authority. The key to the operation and success of an OCIP is control — control of essential project insurance lines (i.e., workers compensation, general liability, and builders risk), control of subcontractors in all tiers through their contracts, control of site security, and control of loss control programs by a single project manager (owner).

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CHARTS

APPENDIX

CHARACTERISTICS

- Usually confined to a single location.
- Generally in force for a finite number of years (3-5 years actual construction period).
- Control of all contractors and subcontractors in a single insurance program managed by the owner of the project.
- Projects with large financial expenditures ($200 + million) and with large labor components (25/30%).
- Project manager (owner) designs and administers a stringent loss control program.

BENEFITS

The recognized benefits of a consolidated insurance program to the owner/project manager are many. First and foremost, of course, are the financial benefits arising from the reduction of insurance premium costs. Historically, pure loss ratios on major projects using an OCIP have been in the range of 21 percent to 35 percent. Based on such experience, premium savings on the order of 50 percent, as compared to standard premium, are not uncommon.[1]

Additionally, there are qualitative factors that support the concept in large construction projects. They include the following:

- Insurers are willing to offer broader coverage than would be available to individual contractors for their individual participation in a project. It is usually possible to manuscript a policy that addresses the specific needs of the project at hand. Standard exclusions become negotiable.
- The aggregate insurance limits apply to the specific project rather than being eroded by a contractor's loss experience emanating from other concurrent work.
- With a single program in place, under the direction of the project manager, the administration of the plan is much easier. Continuity and uniformity in the areas of coverage, insurer claims handling, and loss control convert directly into reduced management costs.
- Under a consolidated program, there is little opportunity for cross-litigation involving two or more contractors on the project, or their individual insurers. Losses are managed under a uniform claims handling process which virtually eliminates subrogation, coverage disputes, and cross claims.

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[1]The Wrap-Up Guide. Gary E. Bird, CPCU, ARM, 1990

- It is possible under an OCIP to have higher limits of coverage than could be obtained from the collective contractors, and at lower per unit costs. During a limited insurance market, caused by economic conditions ("hard" market), subcontractors have sometimes been unable to secure the limits of liability required under their contracts. The gap in protection then falls to the prime contractor or to the project owner. Under an OCIP, these individual problems do not affect the financial protection of the project.

- Under a coordinated safety program, fewer loss control personnel are required, and it becomes easier to develop and enforce uniform techniques. In addition, smaller subcontractors that may not be able to provide sophisticated loss control programs on their own gain the benefit of more technically qualified loss control personnel.

- Under a consolidated insurance program the owner is assured of completed operations insurance to cover a loss that occurs after completion of the project but that arose out of work performed on the project.

- Allows MBE/WBE or small contractors to compete on an equal footing by having an insurance program equal to the largest contractor.

ADDITIONAL BENEFIT TO MWD

- The self-insured retention ($25 million) of the District's general insurance program is protected against losses associated with the project.

- Cost savings on District OCIP should be 1-2% of the project's cost ($10-20 million on the Domenigoni Reservoir).

INSURANCE COVERAGES

An Owner Controlled Insurance Program (OCIP) will include the following insurance coverages:

- Workers' Compensation Insurance

- General Liability Insurance

- Builders' Risk (Optional)

  - <u>Workers' Compensation Insurance</u>

    All contractors will be insured under a group rating approach for workers' compensation insurance. The group in total will be rated for final premium cost by their collective loss history.

- General Liability Insurance

  This insurance will be written under a Master Liability Policy with individual coverage certificates issued to each contractor participating in the construction. Because of the "buying power" inherent in the placement of OCIP insurance, it is anticipated that the policy terms and conditions will be broader than the coverage normally received as part of individual construction contracts.

  Premium cost estimates are predicated upon a total limit of liability insurance of $100 million per occurrence. Staff and its consultants estimate that the major risk to the District is in the period following completion and continuing up to the point where the reservoir will be partially-to-fully filled.

  Total limits requirements will be evaluated at annual periods to determine if circumstances warrant a change in the initial limit of coverage.

  In addition to insuring the individual contractors, the District will also be insured by the insurance, relieving the District's current self-insurance retention ($25 million) of exposure to loss.

- Builders' Risk Insurance

  The Builders' Risk Insurance will be written under a single master policy covering the District and all tiers of contractors.

INSURANCE PROGRAM COST

Cost estimates have been developed in order to contrast the OCIP insurance approach with the conventional approach. Under the conventional approach, each individual contractor would provide its own insurance coverage and pass the cost onto the District as part of the construction bid. Estimated costs are detailed, by line of insurance coverages, in the charts on pages 9-13. Estimates of insurance costs were developed based upon general insurance underwriting standards.

- Estimated Workers' Compensation Payroll

  Workers' Compensation payroll is the primary rating factor in the development of both workers' compensation and general liability insurance. The cost estimates use a total workers' compensation payroll for the term of the construction of $329,310,000. This estimate was developed by District engineering staff and equates to 30% of the total estimated contract value.

- Retrospective Rating Plan Workers' Compensation

The net premium cost for workers' compensation is determined by a formula in which total group losses are the primary factor in determining final cost. The basic concept is that cost is based upon final loss development, and that the group should be rewarded for a better than average safety record.

Given the type of construction and the size of the project, it is estimated that the loss ratio for the project will range between 40% and 55%. The charts illustrate estimates at three different loss ratios (40%, 55%, and 75%), in order to test the cost savings available when aggressive safety measures are undertaken.

The formula used is conservative. Improvement may be possible when the program is actually taken to the insurance market. This assertion is based upon advice from insurance brokerage sources as well as experience with insurance industry standards for pricing workers' compensation when it is offered in very large single blocks and where administrative costs can be significantly contained by the group approach.

The estimates under the conventional approach and the OCIP approach are based upon the insurance industry manual premium rating. The actual composite rating based upon the rating of individual contractors will vary somewhat from this figure. The composite rate is so influenced by the individual large contractor's workers' compensation experience, that any attempt to estimate deviations from the manual premium would not be valid.

- Shared Savings

The program will share some of its loss experience savings with individual contractors who have safety results significantly above average.

- General Liability Insurance

General liability insurance estimates were developed after discussion with insurance brokers with respect to market conditions and probable reaction of the market to the type of construction and the overall project cost. The OCIP cost has been discounted nearly 20% from the conventional approach, based upon a number of criteria:

1. The group approach to buying insurance allows an insurer to offer substantial discounts based upon the reduction in overall administrative cost. A major portion of the cost of marketing and soliciting of business is eliminated by preparing one OCIP solicitation as opposed to the costs associated with soliciting many individual contractors.

2. The assurance of a long-term commitment in an OCIP permits an insurer to price more aggressively; with the knowledge that it will not have to re-solicit this major premium block each year.

3. With the owner and all tiers of contractors covered in a single program, the OCIP insurers can reasonably calculate the cost differential associated with administration and defense of claims in the OCIP, as opposed to a program in which multiple contractors' insurers are involved. A recent construction industry forum estimates that a minimum cost of 10% over value received is attributable to the growth of disputes among the parties in a construction project.

4. Insurers know that the overall control of work place safety by a centralized and well coordinated OCIP program will generally result in better than average loss experience on construction projects.

The cost of the excess limits insurance for the conventional approach is probably understated since many of the contractors would have to pay significant market add-on costs in order to achieve the total limit proposed. In fact, it is likely that many of the smaller contractors would not try nor be able to acquire this amount of insurance.

- **Excluding Insurance Costs from Contractor Bids**

  - Workers' Compensation

    Under California workers' compensation rating procedures, it is permissible for an employer to have separate insurance written on a job basis. Workers' compensation insurance is the easiest of insurance costs for a contractor to calculate since it is based on payroll. As a consequence, excluding this cost from the construction bid is relatively simple.

  - General Liability

    General liability insurance costs are either calculated on a payroll or a contract cost basis, or a combination thereof, making it relatively easy to isolate and exclude them from the bid process. In some cases, insurers are unwilling to allow a contractor to exclude wrap-up payrolls and contract cost from their insurance programs. Most major insurers are willing to work with their policyholders to enable them to bid on projects that are going into an OCIP. Any concern about eliminating insurance costs from contractors' bids is limited to the general liability aspect, which yields the least benefit in cost and savings under an OCIP.

- Builders' Risk Insurance

  Contractors below the level of the prime contractor rarely purchase Builders' Risk Insurance, relying instead on the owner or prime contractor. Isolating costs for this is no problem to an OCIP.

- **Summary of Insurance Cost Estimates**

Loss Ratio Level	Total Conventional Cost	OCIP Cost	OCIP Cost Savings
40%	$59,592,848	$38,939,598	$20,653,250
55%	$59,592,848	$45,259,850	$14,332,998
75%	$59,592,848	$51,633,680	$7,959,168

At the 75% loss ratio level, both the general liability and the workers' compensation programs in the OCIP continue to show an advantage. This advantage would be retained even if the loss ratio exceeds the 75% level because the workers' compensation program would be written with a maximum cost of the manual premium.

ADMINISTRATION

- Broker/Administrator

  Meticulous oversight is essential to the success of an OCIP. Through insurance marketing control, data management reports, loss control inspections, claim management and audits, the program can be guided toward better-than-average experience and the resulting economic rewards.

  A Request for Proposal (RFP) will be published and directed toward major insurance brokers for purposes of selecting a broker/administrator. The initial phase of work will involve setting the specifications, marketing and implementation of the OCIP prior to the start of construction. The second phase will include administration of the insurance program after construction begins, as well as related project services for claims administration, liability/employee/property loss control, publication of insurance and loss control manuals, project insurance briefings and financial administration and control of the above matters.

  The estimated outlay for broker/administrator services is estimated to be $3 million over the term of the construction (1994-1999). This expense is more than offset by the savings in brokerage commissions (approximately $1.5 million) and decreased insurance costs.

- Loss Control/Safety

The implementation of a successful loss control and safety program is essential to the success of an OCIP. A successful program depends upon the proper assignment of responsibilities, monitoring of activities and enforcement. An overall OCIP safety program is developed with the involvement of the Owner, Broker/Administrator and the Construction Manager or Prime Contractor. Once the loss control/safety program and the manual have been agreed upon, the parties then act in accordance with the responsibilities they have been assigned. In most OCIP programs, the responsibilities tend to break down as follows:

— The Owner (MET): A Broker/Administrator is employed, the Owner's primary responsibilities are enforcement of the program and assignment of Owner loss control personnel to supplement the loss control field activities; primarily in monitoring and auditing to ensure safety compliance.

— Construction Manager/Prime Contractor: The Construction Manager/Prime is assigned the responsibility of promoting safety in the work place and enforcing compliance with the program and all applicable government regulations through all tiers of contractors. The Construction Manager/Prime is responsible for the establishment of all of the support safety services and the training programs required for proper implementation.

— Contractors and Sub-contractors: Primary implementation of the program at the actual construction level is the responsibility of the individual contractors. They must assure that they have individual safety programs that comply with the overall OCIP program. They must cooperate fully with the OCIP program and orient and conduct safety training of their personnel in conjunction with the orientation and safety training programs and requirements established by the Construction Manager/Prime.

— Broker/Administrator: After insurance placement is completed, the broker/ administrator will develop the loss control/safety program, and produce construction safety, insurance and claims manuals tailored to the project, and for all tiers of contractors. The broker/administrator will have a constant on-site presence and will coordinate and monitor safety efforts as well as administer and manage claims emanating from the project.

- Internal Staffing

The District will reorganize its current self-insured claims management program and expand the scope of the unit's responsibility to include oversight of the claims management aspect of the OCIP. This ongoing effort will be supported through periodic audits by the Safety Section of the Environmental Compliance Division. The Risk Manager will have overall responsibility for the conduct of the OCIP, as an agent of the

General Counsel. The District's internal management of this program will be accomplished with current personnel resources.

- Appropriation

  A separate appropriation is necessary in order to facilitate the tracking, control and evaluation of the OCIP. Ultimately all costs associated with the OCIP will be charged against the Domenigoni Reservoir project. An appropriation of $30 million is necessary for the term of the project (1994-1999). Approximately $3 million for broker/administrative services and $27 million for insurance premiums.

CONCLUSIONS

- The workers' compensation insurance aspect provides the greatest opportunity for savings within an OCIP. The charts (pages 9-13) illustrate the varying cost/savings that can be achieved based upon different loss experiences. The more aggressive the loss prevention program, the higher probability of achieving the lower loss ratios, which results in additional economic benefits.

- The charts also show a source of hidden additional cost to an owner. Contractors have historically bid their full insurance costs and then reaped the benefits of dividends of other returns that accrued to them because of favorable loss experience. Despite an owner who aggressively promotes safety, none of this benefit is shared with the owner by the contractor. On major projects, it is easy to illustrate just how significant a cost factor this can be to an owner.

- Initially it appears that the savings available on general liability are small. However, that this is not fully reflective of the ultimate cost savings which flow from the control that can be exerted by having a single program in effect for the owner and all contractors.

- With a standard of loss at a ratio of 55%, the savings under an OCIP amount to $14+ million. Any increase in effort that reduces losses below this ratio increases the savings.

WORKERS' COMPENSATION

Illustrated at 55% Loss Ratio
(Project Standard)

Total Construction Value:	$1,094,700,000
Workers' Compensation Payroll:	$ 329,310,000

	Conventional		OCIP
1) Manual Premium:	35,665,326		35,665,326
2) Basic Factor:			13.0%
3) Basic Premium:			4,636,492
4) Losses @ 55% Loss Ratio:			19,615,929
5) Loss Conversion Factor — 10:			1,961,593
6) ELPF @ $500,000 (2.97% of Manual Premium):			1,059,260
7) Premium Tax (7.4% of 3+4+5+6):			2,018,222
Estimated Cost (3+4+5+6+7):			29,291,496
Contractor Overhead & Profit (10%):	3,566,533		
Estimated Cost:	39,231,859		29,291,496
OCIP Savings:		9,940,363	

WORKERS' COMPENSATION

Illustrated at 40% Loss Ratio
(Project Objective)

Total Construction Value:	$1,094,700,000
Workers' Compensation Payroll:	$ 329,310,000

	Conventional		OCIP
1) Manual Premium:	35,665,326		35,665,326
2) Basic Factor:			13.0%
3) Basic Premium:			4,636,492
4) Losses @ 40% Loss Ratio:			14,266,130
5) Loss Conversion Factor — 10:			1,426,613
6) ELPF @ $500,000 (2.97% of Manual Premium):			1,059,260
7) Premium Tax (7.4% of 3+4+5+6):			1,582,749
Estimated Cost (3+4+5+6+7):			22,971,244
Contractor Overhead & Profit (10%):	3,566,533		
Estimated Cost:	39,231,859		22,971,244
OCIP Savings:		16,260,615	

WORKERS' COMPENSATION

Illustrated at 75% Loss Ratio
(Project Marginal)

Total Construction Value:	$1,094,700,000
Workers' Compensation Payroll:	$ 329,310,000

	Conventional		OCIP
1) Manual Premium:	35,665,326		35,665,326
2) Basic Factor:			13.0%
3) Basic Premium:			4,636,492
4) Losses @ 75% Loss Ratio:			26,748,995
5) Loss Conversion Factor — 10:			2,674,900
6) ELPF @ $500,000 (2.97% of Manual Premium):			1,059,260
7) Premium Tax (7.4% of 3+4+5+6):			2,598,854
Estimated Cost (3+4+5+6+7):			37,718,501
Contractor Overhead & Profit (10%):	3,566,533		
Estimated Cost:	39,231,859		37,718,501
Maximum Cost — 100%			35,665,326
OCIP Savings:		3,566,533	

GENERAL LIABILITY INSURANCE

Primary Insurance — $2,000,000/$6,000,000 aggregate limits - $250,000 Deductible

	Conventional		OCIP
Estimated Rate/$100 WC Payroll	1.98		1.65
Estimated Premium	6,520,338		5,433,615
Estimated Deductible	652,034		1,086,723
Net Cost:	7,172,372		6,520,338
Contractor Overhead & Profit @ 10%	717,237		—
Estimated Cost:	7,889,609		6,520,338
OCIP Savings (Primary):		1,369,271	

Excess Insurance: $100,000,000 Total Limit

$23 Million xs $2,000,000:	1,956,101		1,630,085
$25 Million xs $25 Million:	978,051		815,042
$50 Million xs $50 Million:	521,627		434,689
	3,455,779		2,879,816
Contractor Overhead & Profit @ 10%:	345,578		—
Estimated Cost:	3,801,357		2,879,816
OCIP Savings (Excess):		921,541	
Total OCIP Liability Savings		2,290,812	

BUILDERS' RISK INSURANCE

Property Values: $1,000,000,000

Deductibles:

Flood: $250,000

Earthquake: (20% subject to a $250,000 minimum
and $5,000,000 maximum
$25,000,000 coverage limit

All other perils: $50,000

	Conventional		OCIP
Project Rate:	$0.72		$0.60
Estimated Premium:	$7,881,840		$6,568,200
Contractor's overhead profit @ 10%	788,184		
Estimated Cost:	$8,670,024		$6,568,200
OCIP Savings:		$2,101,824	

ISSUES/RESPONSES

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Measures for evaluation include the monitoring of the actual experience in puchasing insurance vs. the projected cost; the achievement of the objective of a 40% or less loss ratio in workers' compesation; the achievement of an incident rate below the national heavy construction average (1991 - 8.30); the achievement of a cost per worker below the national average (1991 - $540 @). The latter two statistics are produced by the National Safety Council.

5. Insurance underwriters will not allow contractors credit against premium for non-OCIP insurance.

Construction insurance premiums are usually geared to payroll or contract cost and need to be identified to the insurer prior to commencement of a project. A clear definition of project site combined with early calculation of estimated payroll or contract cost provides an adequate basis to disassociate the two programs.

6. Contractors will not receive dividends or returns on premium based upon their own insurance plan.

In a conventional program, the owner pays the full price for the contractors' insurance which is dedicated to a specific project, but the owner does not share in the rebate if losses are low. Through a "wrap up" the owner shares this rebate.

7. Contractors provide their own construction insurance programs and "wrap ups" are disruptive of their program.

A loss under a "wrap up" is borne by the owner's program and not chargeable against the contractor. Recordkeeping under either system is the same and the contractor does not incur additional premiums or administrative costs.

8. Contractors may be self-insured.

Contractors will have a policy issued to them under "wrap up." A "wrap up" will not affect a contractor's financial arrangement that supports the self-insurance reserves.

9. Increases the requirements for meetings and the gathering of data.

True, but such meetings are directed toward more control and overall efficiency of the project. They increase safety, reduce the potential for claims, and contribute to a successful and cost-effective project.

10. Contractors' insurance brokers lose commission income when a job is in a "wrap up" project.

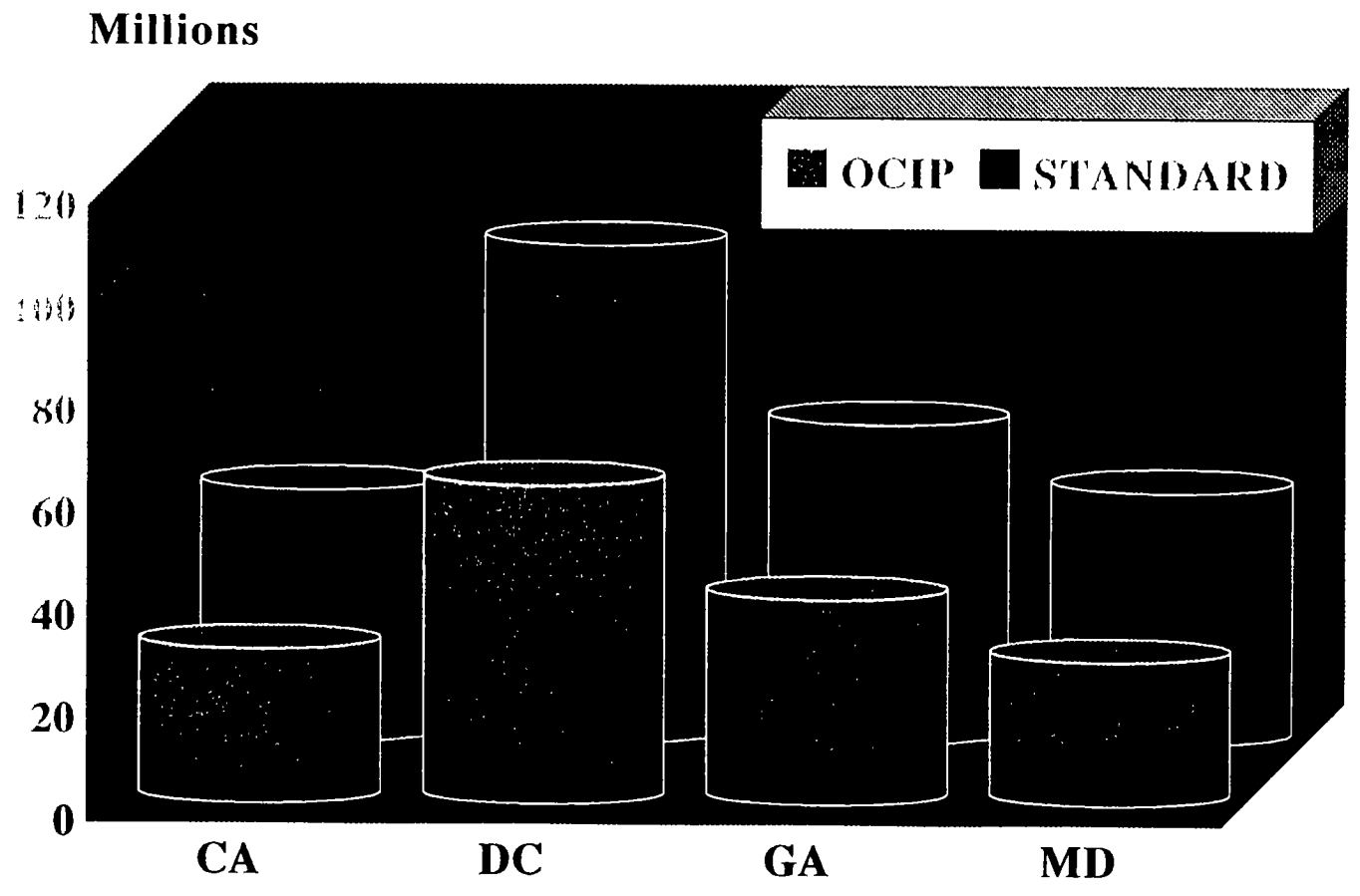
There is no solution to this. The first obligation of the owner is to ensure that the project is properly insured and that the costs are held to absolute minimums within the need to properly protect the public entity.

TABLE 3-7
COST COMPARISON

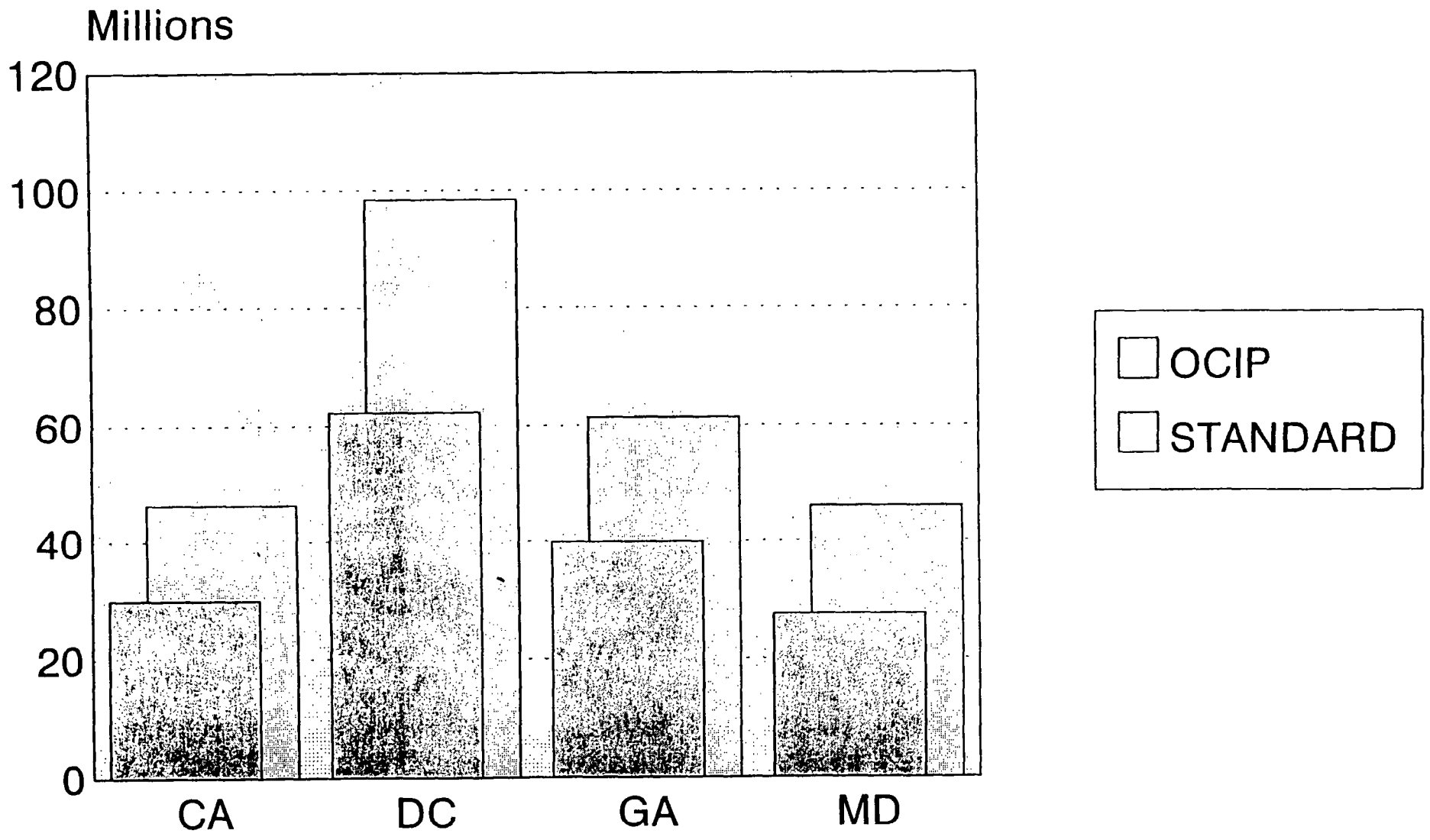
	BART		WMATA		MARTA		MTA	
	San Francisco CA		Washington DC		Atlanta GA		Baltimore MD	
	Period 8/64 to 1/74		Period 1971 to 1976		Period 1973 to 1981 *Projected Costs*		Period 1977 to 1982 *Projected Costs*	
COST ELEMENT	Wrap-up	Conventional	Wrap-up	Conventional	Wrap-up	Conventional	Wrap-up	Conventional
	dollars		dollars		dollars		dollars	
WORKERS' COMPENSATION	16,724,772	16,724,772	39,805,000	62,973,000	28,751,961	28,751,961	18,136,744	18,136,744
LIABILITY	10,913,416	17,024,928	17,660,882	30,401,000	19,202,729	27,300,000	13,487,060	21,487,000
PROPERTY	7,640,634	12,607,046	3,200,000	5,100,000	3,500,000	5,300,000	3,857,000	6,437,000
Subtotal	35,278,822	46,356,746	60,665,882	98,474,000	51,454,690	61,351,961	35,480,804	46,060,744
Claims Service Charge								
Workers' Compensation Dividend to Owner	5,468,294	-0-	1,570,230 -0-	-0-	11,541,690	-0-	8,000,000	-0-
TOTAL INSURANCE COST	29,810,528	46,356,746	62,236,112	98,474,000	39,912,949	61,351,961	27,480,804	46,060,744
Source:	*BART*	*F.S. James*	*MIA*	*MIA*	*MIM*	*F.S. James*	*F.S. James*	*F.S. James*

* *Prepared for the U.S. Department of Transportation, Urban Mass Transportation Administration*

INSURANCE COST COMPARISON
LIGHT RAIL TRANSIT SYSTEMS



INSURANCE COST COMPARISON
LIGHT RAIL TRANSIT SYSTEMS



*Prepared for the U.S. Department of Transportation, Urban Mass Transportation Administration

REFERENCE LIST - ALPHABETICAL

PROJECT	LOCATION	CONTRACT AMOUNT	TERM
Amoco Research Center	Naperville, Il.	$ 40 Million	1974-1976
Bay Area Rapid Transit-Phase I (original construction)	San Francisco, Ca.	$1.6 Billion	1963-1973
Bay Area Rapid Transit-Phase II (extensions construction)	San Francisco, Ca.	$1.6 Billion	1991-2000
Bonaventure Hotel	Los Angeles, Ca.	$ 62 Million	1974-1976
BMW	Spartanburg, S.C.	$320 Million	1992-1995
BOSCOM	Boston, Ma.	$140 Million	1983-1985
Broward County-Airport Expansion	Ft. Lauderdale, Fl.	$260 Million	1983-1986
Carolina Power Plant Mayo	North Carolina	$600 Million	1979-1985
Cook County Jail	Chicago, Il.	$130 Million	1992-1994
Dallas Area Rapid Transit	Dallas, Tx.	$350 Million	1989-ongoing
Detroit People Mover (SEMTA)	Detroit, Mi.	$125 Million	1982-1986
Dirksen Federal Bldg.	Chicago, Il.	$ 50 Million	1969-1971
Ellis Island Restoration	New York, N.Y.	$250 Million	1984-1990
Georgia Dome	Atlanta, Ga.	$210 Million	1990-1992
Ga. Power Company-Bartletts Ferry	Columbus, Ga.	$ 80 Million	1983-1986
Ga. Power Company - Coal Plant	Monroe City, Ga.	$2.5 Billion	1977-1989
Ga. Power Company Plant Vogtle	Waynesboro, Ga.	$10.2 Billion	1976-1990
Ga. Power Company Wallace Dam	Milledgeville, Ga.	$120 Million	1980-1985
Greater Pittsburgh Airport	Pittsburgh, Pa.	$500 Million	1987-1993
Harold Washington Library	Chicago, Il.	$140 Million	1987-1991
Harris Trust & Savings	Chicago, Il.	$ 48 Million	1972-1975
Hartsfield Airport	Atlanta, Ga.	$ 95 Million	1982-1985
Inland Steel - Coating Line	Chicago, Il.	$500 Million	1989-1992
Inland Steel - Rolling Steel	Chicago, Il.	$500 Million	1987-1990
INTEL	Albuquerque, N.M.	$500 Million	1993-1996
Interstate Power Co.	Dubuque, Ia.	$150 Million	1978-1980
Kluczynski Federal Bldg.	Chicago, Il.	$ 60 Million	1972-1974
L.A. County - Blue Line	Los Angeles, Ca.	$560 Million	1986-1991
L.A. County - Green Line	Los Angeles, Ca.	$350 Million	1990-1994
L.A. County - Red Line MOS-2	Los Angeles, Ca.	$1.4 Billion	1991-1998
Marriott Marquis Hotel	Atlanta, Ga.	$250 Million	1982-1986
Marriott Marquis Hotel	New York, N.Y.	$280 Million	1982-1986
Mass Transit Administration	Baltimore, Md.	$750 Million	1976-1983
Memphis Airport	Memphis, Tn.	$180 Million	1993-1995
Metro Dade County	Miami, Fl.	$600 Million	1979-1985
Metropolitan Transit	Atlanta, Ga.	$1.2 Billion	1972-1985
Mission Bay	San Francisco, Ca.	$4.5 Billion	1992-2005
Mt. Hope Waterpower Project	Rockaway, N.J.	$1.6 Billion	1993-2001
Muni Turnaround	San Francisco, Ca.	$130 Million	1991-1993
National Energy Construction	5 locations in No. Ca.	$250 Million	1988-1991
New Jersey Sports Complex	Hackensack, N.J.	$115 Million	1974-1976
New Jersey Turnpike	New Jersey	$2.2 Billion	1987-Ongoing
New United Motors Mfg. Inc.	Fremont, Ca.	$380 Million	1989-1991
Ogelthorpe Electric	Rocky Mountain, Ga.	$700 Million	1989-1996

PROJECT	LOCATION	CONTRACT AMOUNT	TERM
O'Hare International Airport	Chicago, Il.	$1.6 Billion	1982-1992
O'Hare International Terminal	Chicago, Il.	$450 Million	1990-1994
Omaha Public Power	Nebraska City, Ne.	$360 Million	1975-1979
Oregon Arena Corporation	Portland, Or.	$140 Million	1993-1995
Orlando Utilities	Orlando, Fl.	$520 Million	1992-1995
Plaza of the Americas	Dallas, Tx.	$ 70 Million	1980-1983
Port Authority Rapid Transit (PAT)	Pittsburgh, Pa.	$250 Million	1981-1986
Rocky Mt. Hydro (Georgia Power)	Rome, Ga.	$130 Million	1981-1987
St. John's River Power Park	Jacksonville, Fl.	$1.2 Billion	1983-1986
State of Wisconsin	Wisconsin	$150 Million	1992-1995
Sanitary District	Decatur, Il.	$ 85 Million	1985-1992
Sears Roebuck	Jacksonville, Fl.	$ 50 Million	1973-1974
Southern Ca. Rapid Transit District	Los Angeles, Ca.	$1.3 Billion	1986-Ongoing
Statue of Liberty	New York, N.Y.	$160 Million	1983-1987
Star Enterprises	Houston, Tx.	$160 Million	1989-1991
Transco Tower	Houston, Tx.	$ 75 Million	1980-1984
Tri-Met	Portland, Or.	$200 Million	1982-1985
Tucson Electric	Tucson, Az.	$200 Million	1980-1985
Tucson Electric & Power	Springerville, Az.	$1.5 Billion	1979-1985
TVA	Tn., Ky., Ga.	$1.5 Billion	1992-Ongoing
Walt Disney World	Orlando, Fl.	$1.2 Billion	1988-1990
Wayne County Airport	Detroit, Mi.	$400 Million	1992-1995
W. Palm Beach Judicial Center	Palm Beach, Fl.	$170 Million	1990-1995
Williams Square	Irving, Tx.	$ 50 Million	1981-1983

OWNER CONTROLLED INSURANCE PROGRAM

GLOSSARY OF TERMS

- ALLOCATED LOSS ADJUSTMENT EXPENSE — Expense in adjusting loss which can be assigned to a particular loss.

- BASIC FACTOR — In a retrospective premium calculation, the factor utilized to arrive at the basic premium.

- BASIC PREMIUM — In a retrospective premium calculation, the basic premium is the amount the insurance company keeps for its expenses and profit.

- BUILDERS' RISK INSURANCE — This is a form of property insurance coverage which ensures physical damage to the property and equipment while the property is under construction.

- COMMISSION INCOME — The amount of commission paid to an agent or broker for the placement of insurance business with an insurance carrier. Commission is usually expressed as a percentage of premium, although it is sometimes possible to negotiate a flat fee arrangement.

- CONVENTIONAL INSURANCE PROGRAM — Each contractor and subcontractor provides individual policies for each required line of insurance.

- DIVIDEND — Amount of premium returned to the insured due to good loss experience after all claims and expenses have been paid.

- ELPF — "Excess Loss Premium Factor." A component of a dividend or retrospective rating plan which develops a charge for limiting the amount of any one loss used for a dividend or retrospective premium calculation.

- ESTIMATED DEDUCTIBLE/UNCOVERED LOSSES — A deductible is the amount deducted from a claim payment by the insurance company, which the insured is obligated to pay. AN uncovered loss is a loss which does not fall under the terms of the insurance contract, and which the insured, if found liable, is obligated to pay.

- EXCESS LIABILITY INSURANCE — Coverage over and above a certain amount. One insurance company is often unable or unwilling to provide as much coverage for a claim as necessary. Another company will write an excess policy for the additional amount.

- GENERAL LIABILITY INSURANCE — The term "general liability" means liability insurance other than automobile and other means of transportation, liability covered

under workers' compensation laws, professional errors and omissions liability and personal liability.

- GROUP RATING — Rating based on the combined loss experience of a group comprised of membership, license, franchise, contract, agreement or any method other than common ownership, or use and control.

- INCURRED LOSSES — All paid and reserved losses for a given period of time.

- INDIVIDUAL COVERAGE CERTIFICATES— Official evidence issued by an insurance company, on behalf of an insured, that insurance is in force.

- LOSS CONVERSION FACTOR — The factor applied to incurred losses in a dividend or retrospective plan to develop a charge for unallocated loss adjustment expenses.

- LOSS RATIO — The relationship between incurred losses and earned premium, usually expressed as a percentage.

- LOSS SENSITIVE RATING PLAN — Any type of insurance rating plan in which the ultimate cost will vary with incurred losses.

- MANUAL PREMIUM — Premium amount generated by rates in the underwriter's manual without further credit or debit modification.

- MASTER POLICY — A document which sets forth the terms, conditions and limits of insurance coverage, and on which are issued certificates of insurance to individual contractors and subcontractors.

- MAXIMUM AND MINIMUM PREMIUMS — The most and the least amount of premium the insurance company will charge, regardless of losses.

- OWNER CONTROLLED INSURANCE PROGRAM — A centralized and controlled insurance and loss control program authorized by the owner and applicable to a defined work site. The program is purchased and administered by the OCIP manager, and covers all participating contractors and subcontractors in any tier.

- PREMIUM BASIS — Units of exposure for computation of premium. The premium basis is multiplied by rates to develop premium. For Workers' Compensation, the basis is per $100 of payroll. General liability may be per $100 of Workers' Compensation payroll or per $1,000 of hard construction cost. Property is based on $100 of value.

- PREMIUM TAX — Each state collects a premium tax on all premiums charged within the state. This is expressed as a percentage.

- RETROSPECTIVE RATING PLAN WORKERS' COMPENSATION — Retrospective rating provides for an adjustment of the premium at the end of the policy term based on the actual loss experience sustained during the policy period. In its simplest form, retrospective rating is nothing more than code plus insurance. The cost is represented by the basic premium that is added to the losses plus loss adjustment expense. This total is then subject to the state premium tax, and the entire sum is subject to the agreed-upon maximum and minimum premiums.

- UNALLOCATED LOSS ADJUSTMENT EXPENSE — Expense in adjusting loss which applies to all claims, not just a particular loss, such as rent and utilities.

- WORKERS' COMPENSATION INSURANCE — Coverage for the financial obligations of an employer under state workers' compensation laws for any employee who sustains an occupational injury.