



OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON DC 20301-3000

March 16, 2001

MEMORANDUM FOR HOUSING PRIVATIZATION POINTS OF CONTACT

SUBJECT: Draft Revised Housing Privatization Life Cycle Cost Policy

Attached is the draft revised housing privatization life cycle cost (LCC) policy for your review. The aim of the revised policy is to provide a methodology for analyzing costs which is simple, accurate, and consistent across the military services, particularly as it relates to O&M costs. In lieu of looking to programmed budget costs or historic costs (which may not capture all incurred costs) this methodology will look to what the market would spend if it were maintaining the same type of housing. The source of the data will be residential O&M data published by the Institute of Real Estate Management (IREM).

IREM cost data is published yearly and is provided on a national, regional, and local level. Preparation of life cycle analyses will require the use of an IREM publication by the Services. (An advertisement for various IREM publications is enclosed for your information.) The draft LCC methodology adjusts the data to reflect both the differences in the type of units owned by the Services and they way they are operated.

We intend to form a working group from the Services' program and financial management offices responsible for economic analyses to assist in finalizing the policy. If you have any questions concerning the methodology, please contact Bob Helwig (703-602-9867). We will contact you soon to set up a working group meeting.

Sincerely,

Joseph K. Sikes
Director, Competitive Sourcing
and Privatization

Attachment
Life Cycle Costs Analysis



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Military Housing Privatization Initiative**

Life-Cycle Cost Analysis

1. Introduction

A life-cycle cost (LCC) comparison is a required step in the MHPI project approval process. Preparation of a cost-benefit analysis in compliance with OMB Circular A-94 and other applicable regulations is the responsibility of the Military Services. However, OSD concept and award approvals are concerned solely with a life-cycle cost comparison of two alternatives, privatization and identical MILCON. Full cost-benefit analyses may be used to assist Service decision-making; however, benefits and sensitivity analyses are not required for OSD approval.

2. Alternatives Considered

Two specific alternatives must be presented for OSD concept approval: the proposed privatization project and a military construction project of identical scope, quality, amenities, and duration to the privatization alternative. For example, if the privatization alternative analyzes the cost of improving 300 units and constructing 500 new units, the MILCON alternative must analyze the cost of the same number of improved and new units.

3. Assumptions

- Constant Dollar Analysis
- Discount Rate
- Inflation
- Base Year of Analysis
- Period of Analysis
- Cohen Initiative on Increased Allowances

All economic analyses submitted to OSD must be performed in constant (real) dollars, measuring life cycle costs in units of stable purchasing power.

OMB Circular A-94, Appendix C and Department of Defense Instruction (DoDI 7041.3) require the use of a discount rate based on the Treasury Department cost of borrowing funds. The discount rate is prepared annually by the Office of Management and Budget (OMB) and generally is provided to agencies in February or March.

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Nominal or inflated dollars should not be used for the life cycle cost analysis. The life-cycle cost analysis should be accomplished using constant or real dollar values, i.e. by measuring costs in units of stable purchasing power.

The base year of the analysis should be the first year in which there would be a difference in expenditures among the two alternatives, generally the first year of the project. This may require an adjustment from the year in which the actual costs are based to the base year of the analysis.

For the purpose of comparison, significant elements of the two alternatives must be made identical. The MILCON alternative must be adjusted using the tri-service cost model to reflect differences such as amenities included in the privatization alternative. The period of analysis must be identical to compare alternatives. Where alternatives have different economic lives, the longest is used as the basis for the comparison and an adjustment is made for the unequal life by computing the costs of extending the alternative with the shorter life.

DOD has committed to gradually increasing housing allowances to completely eliminate average out-of-pocket housing costs for Service members by the year 2005. The life cycle cost analysis must first reflect the proposed increases in the basic allowance for housing and second reflect the Services' recoupment of the enhanced increase in allowances as return to the government.

4. Cost Analysis

Costs associated with each alternative must be quantified, supported, and sourced. All costs of the project that may be incurred over the life of both alternatives, except sunk costs, are included in the cost analysis. (Sunk costs, including government-owned land and improvements are expenditures incurred before project approval and would not be recovered regardless of the alternative selected.) Project planning and design costs are considered sunk if they are obligated or expended before selecting an alternative. For the MILCON alternative, the total cost to the Government includes identifying costs and sources for such items as:

- Construction – Based on construction project data (e.g. DD Form 1391)
- Renovation – Based on construction project data
- Demolition – Based on construction project data
- Design – Based on construction project data

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- Out-year Revitalization – Based on developer requirements in RFP and awarded proposal
- Operations and Maintenance (O&M) – Methodology to be used is provided in Appendix 1 of this section.
- Utilities and Services – Included in O&M methodology
- Relocation (Drayage) – Based on actual historic costs
- School Impact Aid – Based on actual costs
- BAH paid to members for unoccupied units – Based upon calculated BAH for average vacant MILCON. A small percentage of MILCON housing at any point in time is unoccupied, with the designated nonoccupant member receiving a housing allowance.

For the privatization alternative, the total cost to the Government includes identifying costs for such items as:

- Project Planning (including consultant costs) – Based on planned and actual costs
- Construction Inspection – Based on planned or actual inspection contract costs
- Basic Allowance for Housing (BAH) – Based on calculated BAH for members living in privatized housing units adjusted to reflect the Cohen initiative increase in allowances
- Credit Scored Amount – Based on modeled or final scored amount
- School Impact Aid – Based on actual expected costs under privatization
- Unreimbursed Government Services Provided – Includes additional governmental costs incurred for such services as snow and ice removal
- Relocation (Drayage) – Based on expected costs (if authorized)

Privatization costs should be offset by expected returns to the government including:

- Rents or Proceeds from the conveyance of property – Based on modeled or contracted costs, including any government returns from the enhanced increase in housing allowances
- Expected Return on Investments in Nongovernmental Entities- Based on modeled or contracted costs, including government returns from the enhanced increase in housing allowances
- Other government returns from the enhanced increase in allowances
- Reductions in Housing Personnel- Based on planned reductions

APPENDIX 1

Operations and Maintenance Cost (O&M) Calculation Methodology

The following has been developed in an effort to provide the Services with a standardized methodology for calculating Operating and Maintenance (O&M) expenses for the Life Cycle Cost analysis. The methodology is designed to provide consistent and reasonable numbers with a minimum of effort for use in evaluating housing privatization projects. Upon final issuance, this methodology will be adhered to in the calculation of MILCON O&M expenses for all future OSD privatization project concept approval submissions.

1. Use the most recent annual Institute of Real Estate Management (IREM) Federally Assisted Apartment income/expense analysis publication as the basis for calculating O&M costs for MILCON units. (copies of the publication can be purchased from the Institute at 430 North Michigan Avenue, Chicago, IL 60611)
2. From the IREM publication table of contents, identify if your installation is located in one of the Metropolitan Area Reports provided. If it is, proceed to step #4.
3. If the installation is not located in one of the Metropolitan Area Reports provided, identify (from the Map of Income/Expense Analysis Regions in the IREM publication) in what IREM region the installation is located
4. In the IREM publication's table of contents, identify the page number where the most relevant income/expense information is located for the project. The major report priority of relevance to be used is as follows:
 - A. Metropolitan Area
 - B. RegionWithin these reports, the priority of relevant property and occupancy types are:
 - a. Garden Buildings (All Family/non-elderly)
 - b. Garden Buildings
 - c. Garden Buildings (Section 236)
 - d. Garden Buildings (Section 8 - Family)
 - e. Garden Buildings (Section 8 - Elderly/Handicapped)
 - f. Low Rise Buildings
 - g. Elevator Buildings
5. On the identified page and under the most relevant category, identify the median dollars per square foot (\$/sq. ft.) "Total All Expense" number (third row up from the bottom).
6. To provide an equivalent military housing expense number, multiply the expense number identified in Step 5 above by the unit Adjustment Factor provided by the Office of Competitive Sourcing and Privatization (OSD/CS&P). (The adjustment factor takes into account how the Military Family Housing program differs from the IREM collected information including such items as the unit type being built, actual Service utility usage, cost of outsourcing services, etc.)
7. Multiply the number obtained in Step 6 above by the total square footage of the units to be privatized to calculate the yearly MILCON Operations and Maintenance (O&M) expense to be used in the installation's Life Cycle Cost comparison.

The following is a brief example to demonstrate this methodology:

Project Data:

Location of installation – Dallas, TX

Number of units being privatized – 300

Average size (Square footage) of privatized units – 1,200

Calculation Steps:

1. Most recent annual IREM Federally Assisted Apartment income/expense analysis publication was acquired.
2. Dallas, TX was identified to have a separately listed Metropolitan Area Report in the publication.
3. Step three is skipped. (Don't need to identify a region if a relevant Metropolitan Area Report is identified.)
4. In the Dallas, TX Metropolitan Area Report, the most relevant property and occupancy type is "Garden Buildings". (Information on Garden Buildings (All Family/non-elderly) was not included)
5. The median (Med) dollars per square foot (\$/SQFT) number listed under "Garden Buildings" for "Total All Expense" is 3.96.
6. The military unit Adjustment Factor provided by OSD/CS&P is 1.14. Multiplying 1.14 times 3.96 \$/SQFT, provides an adjusted total all expense number for military housing in Dallas, TX of 4.51 \$/SQFT.
7. The total square footage of units to be privatized is 300 units times 1,200 SQ FT/unit or 360,000 SQ FT. In multiplying 360,000 SQ. FT. times the adjusted total all expense number calculated in item 6 above (4.51 \$/SQFT) the yearly MILCON O&M expense number for the installation's Life Cycle Cost comparison is achieved (\$1,623,600).

Note-The Income/Expense Analysis Program of the Institute of Real Estate Management has been providing annual residential expense information to real estate professionals, government agencies, private investors, and researchers across the country for over forty years. IREM's in-depth regional and metropolitan area yearly expense information will not only save the Services valuable research time but should eventually provide future data benchmark "should be" cost information.