RULES AND REGULATIONS GOVERNING COMPENSATION FOR BASIC SERVICES OF CONSULTING ENGINEERS, ARCHITECTS AND LANDSCAPE ARCHITECTS USING A PERCENTAGE OF ESTIMATED CONSTRUCTION COST AS THE BASIS FOR NEGOTIATIONS

I. General

These rules and regulations are adopted pursuant to Section 7-20-5 of the Revised Ordinances of Albuquerque, New Mexico, 1974 (Compensation for Services of Consulting Engineers, Architects and Landscape Architects), as amended, which Section provides for promulgation of rules and regulations by the Mayor for determining compensation for the Basic Services of consulting engineers, architects and landscape architects, hereafter referred to as "Consultant"; using a percentage of the estimated construction cost as the basis for negotiations.

- A. Prolonged negotiations of the part of the Consultant to obtain a higher fee than the City deems warranted by the scope of services and thereby cause fee negotiations to exceed 60 calendar days will constitute unreasonable delay and unreasonable cost and will be cause for formal termination of negotiations as defined in the Selection Advisory Committee Ordinance, Section 7-17-6.
- B. The percentage of estimated construction cost method is widely used to determine the compensation of Consultants on assignments where the principal responsibility is the design and the preparation of drawings, specifications and other contract documents necessary for the description of facilities to be constructed. This method, with due consideration to the variance of facilities, is helpful in establishing median compensation for Basic Services. In order for the method to be successful the scope of work and the project definition must be sufficiently complete so that a preliminary estimation of construction cost can be prepared. Compensation may vary from what has otherwise been provided herein depending on negotiation following detailed discussion of the scope of services, project description and the elements of the cost of providing professional services.
- C. For certain projects, additional engineering, architectural or landscape architectural considerations may be required for special studies, resolving unique problems associated with scheduling and construction interfaces required on facility renovation and alterations, coordination with State and Federal permit and regulatory requirements, and to facilitate operation and maintenance of facilities during construction. Such additional considerations reflect an increased level of effort not usually associated with the compensation for basic services on new construction obtainable from the percentages of estimated construction cost shown in Attachments 1, 2, and 3.
- D. For those projects such as studies and investigations, not having construction costs, or projects having restrictions by funding authorities prohibiting compensation based on a percentage of estimated construction cost, compensation shall be determined by using other methods of negotiation.
- E. A biennial review shall be accomplished of the percentages of estimated construction cost to be used as a basis for negotiating compensation for consulting engineers, architects, and landscape architects for basic services, and adjustments shall be made as required.

F. Estimated construction cost means the total estimated cost for the construction of a project excluding fees, taxes and costs for legal and engineering/architectural/landscape architectural services, right-of-way and land acquisition, administrative services, City project contingency funds, all costs which are the responsibility of the City and other costs which required no design effort by the Consultant. This definition may be modified as a result of negotiation. Consultants shall not be compensated twice for the same service.

II. <u>Engineer's Compensation</u>

Figures 1 and 2 (attachments 1 and 2) present median compensation values for Basic Services as percentages of construction costs for various size minimums unless so stated in the Legal Notice. The Exhibit attached to the Standard Engineering Services Agreement titled, "Engineer's Scope of Services", shall be the sole determinant of what is included in Basic Services. Although Figures 1 and 2 (Attachments 1 and 2) are excerpted from the 1981 edition of the American Society of Civil Engineers (ASCE) Manual 45, nothing in that edition of Manual 45 nor in any edition of Manual 45 is applicable to these Rules and Regulations.

Attachment 1 presents median compensation for projects of above average complexity. Typical examples of such projects are:

- A. Water and Wastewater Plants
- B. Bridges which are asymmetric or otherwise complicated
- C. Large dams or complicated small dams
- D. Grade crossing eliminations
- E. Pump stations and lift stations (excluding package type facilities)
- F. Complicated utility installations
- G. Urban interchanges

Attachment 2 presents median compensation for projects of average complexity. Typical examples of these less complex projects are as follows:

- A. Industrial type buildings, warehouses, parking structures, hangers and comparable structures
- B. Bridges and other structures of conventional design
- C. Roads, streets and arterials
- D. Conventional levees, flood walls and retaining walls
- E. Small dams
- F. Channel lining and structures
- G. Airports, except terminal facilities
- H. Package type lift stations
- Storm sewers, sanitary sewers and water lines of normal complexity.
- J. In-place pipe lining projects

Basic Services usually required on civil engineering projects, where both design and some City representation during construction are included, may encompass the following project phases:

- Study and Report Phase
- Preliminary Design Phase
- Final Design Phase
- Bidding Phase
- Construction Phase

As further described in the Exhibit attached to the Standard Engineering Services Agreement titled "Engineer's Scope of Services".

III. Architect's Compensation

Attachment 2, with general notes appended, presents median compensation for Basic Services as percentages of estimated construction costs for various facilities. Appropriate compensation percentages for any given assignment may vary above or below the values shown.

IV. <u>Landscape Architect's Compensation</u>

All compensation for basic services shall be negotiated.

V. <u>Method of Determining Compensation for Basic Services Using a Percentage of the Estimated Construction Cost as the Basis for Negotiations</u>

A. Engineers

- 1. The City shall determine an initial estimate of the construction cost for the project.
- 2. The City shall determine the design complexity of the project as the basis for selecting the appropriate curve to use.
- The City shall determine an initial fee for the project, derived from the curve, based on a
 percentage of estimated construction cost. Appropriate adjustments of the fee may be made
 if the City determines that the Engineer's scope of services warrant such adjustments.
- 4. Upon agreement on the Basic Services fee, the City shall divide the fee into appropriate percentages to be paid the Engineer and shall establish a schedule of payment of these fee amounts.
- 5. The initial fee for basic services may be established by lump sum fixed fee. This type of fee may be established regardless of the initial method of negotiating the fee. In the event any portion of the design phase service be reduced or enlarged, the City shall have the right to make a corresponding adjustment in the fixed fee and this shall be the only adjustment of the fee for Basic Services; provided, however that in the event any phase of services is eliminated, the Engineer shall not be entitled to payment for that portion of the Basic Services fee designated for the applicable phase. In the event the construction phase services are reduced by the City, the portion of the Basic Services fee designated for the construction phase shall be reduced by a corresponding amount. The fixed Basic Services fee shall not be adjusted on the basis of any changes in the estimated construction cost or the amount of the construction contract.
- In the alternative, total fee for Basic Services may be adjusted based on the City approved Engineer's Estimate of Construction Cost, provided however that such adjustment shall be made only on the City approved estimate calculated upon completion of the final design phase of services.

7. Special Assessment Districts utilize Attachments 1 and 2, as applicable, to determine compensation for Basic Services including the aforementioned steps, except that additional compensation is allowed for assessments engineering.

B Architects

- 1. Negotiations begin with an understanding of the description of the project, the anticipated scope of services and the estimated cost of construction derived from the amount specified in the Legal Notice. Any one of those items could change during negotiations.
- 2. Based on the forgoing, an estimated cost of construction is stated in the original agreement as well as stating the percentage to be used in determining the architect's initial compensation for Basic Services, based on Attachment 3.
- 3. The initial fee for Basic Services may be established by lump sum fixed fee. This type of fee may be established regardless of the initial method of negotiating the fee. In the event any portion of the design phase services be reduced or enlarged, the City shall have the right to make a corresponding adjustment in the fixed fee and this shall be the only adjustment of the fee for Basic Services; provided, however that in the event any phase of services is eliminated, the Architect shall not be entitled to payment for that portion of the Basic Services fee designated for the applicable phase. In the event the construction phase services are reduced by the City, the portion of the Basic Services fee designated for the construction phase shall be reduced by a corresponding amount. The fixed Basic Services fee shall not be adjusted on the basis of any changes in the estimated construction cost or the amount of the construction contract.
- 4. In the alternative, total fee for Basic Services may be adjusted based on the City approved Architect's Estimate on Construction Cost, provided however that such adjustment shall be made only on the City approved estimate calculated upon completion of the final design phase of services.

B. <u>Landscape Architects</u>

- Negotiations begin with an understanding of the description of the project, the anticipated scope of services, and the estimated cost of construction derived from the amount specified in the Legal Notice. Any one of those items could change during negotiations.
- 2. Based on the foregoing, an estimated cost of construction is stated in the original agreement.
- 3. Landscape Architect's fees will be negotiated on a manhour or number of sheets of drawings estimate. This fee will be compared to a percentage of estimated construction cost and the corresponding fee curves from attachments, 1, 2, and 3.

These rules and regulations were effective on <u>January 18</u>, 1991, and are filed in the office of the City Clerk.

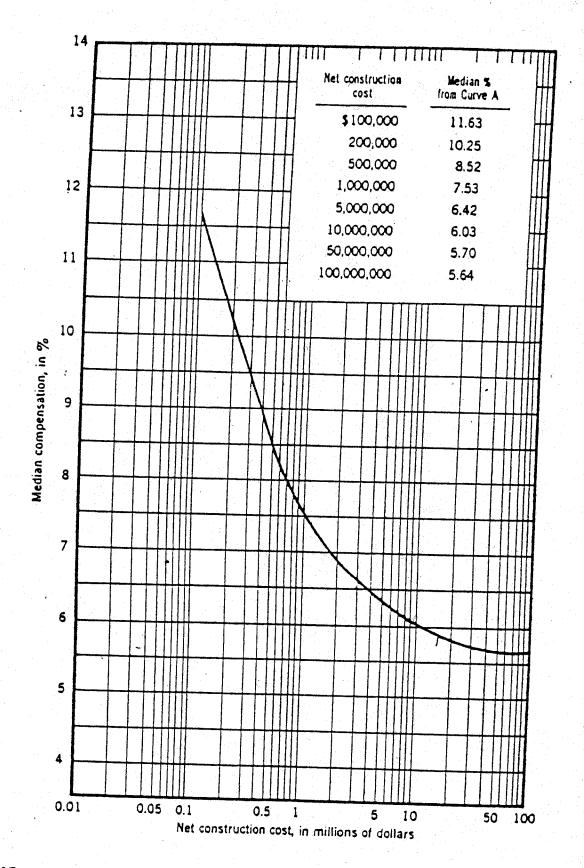


FIG. 1.—CURVE A. MEDIAN COMPENSATION FOR BASIC SERVICES EXPRESSED AS A PERCENTAGE OF NET CONSTRUCTION COST FOR PROJECTS OF ABOVE-AVERAGE COMPLEXITY

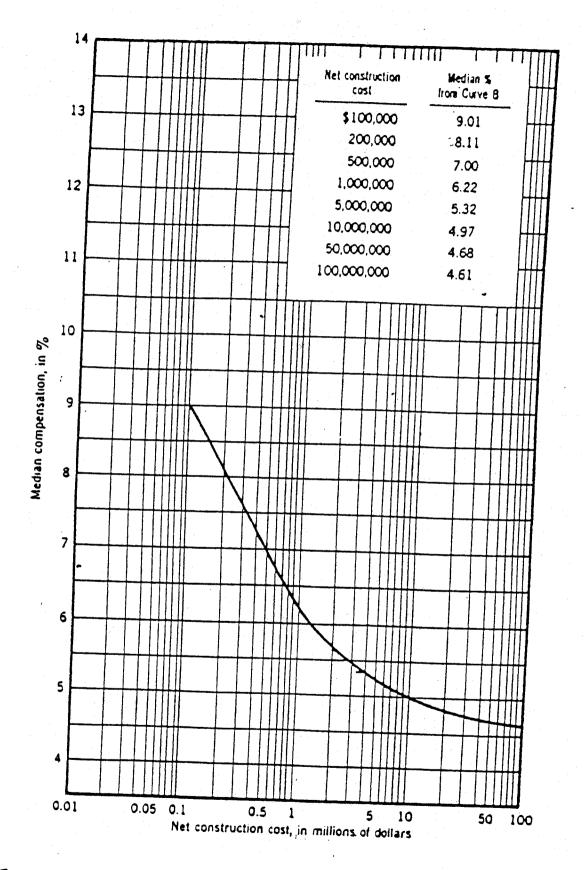


FIG. 2.—CURVE B. MEDIAN COMPENSATION FOR BASIC SERVICES EXPRESSED AS A PERCENTAGE OF NET CONSTRUCTION COST FOR PROJECTS OF AVERAGE COMPLEXITY

CONSTRUCTION COST	CURVE A	CURV
\$100,000	41.00%	
\$110,000	11.63%	9.01%
\$120,000	11.45%	8.89%
\$130,000	11.27%	8.76%
\$140,000	11.11%	8.66%
\$150,000	10.96%	8.56%
\$160,000	10.82%	8.48%
\$170,000	10.69%	8.39%
\$180,000	10.57%	8.32%
\$190,000	10.46%	8.24%
\$200,000	10.35%	8.18%
\$210,000	10.25%	8.11%
\$220,000	10.16%	8.05%
\$230,000	10.07%	7.99%
\$240,000	9.99%	7.94%
\$250,000	9.91%	7.88%
\$260,000	9.84%	7.83%
\$270,000	9.76%	7.78%
\$280,000	9.70%	7.74%
\$290,000	9.63%	7.69%
\$300,000	9.57%	7.65%
\$310,000	9.51% 9.45%	7.60%
\$320,000	9.39%	7.56%
\$330,000	9.34%	7.52%
\$340,000	9.28%	7.49% 7.45%
\$350,000	9.23%	7.45%
\$360,000	9.17%	7.38%
\$370,000	9.12%	7.35%
\$380,000	9.07%	7.32%
\$390,000	9.01%	7.29%
\$400,000	8.96%	7.26%
\$410,000	8.91%	7.23%
\$420,000	8.86%	7.20%
\$430,000	8.76%	7.18%
\$440,000	8.71%	7.15%
\$450,000	8.67%	7.13%
\$460,000	8.63%	7.10%
\$480,000	8.59%	7.05%
\$490,000	8.55%	7.03%
\$500,000	8.52%	7.00%
\$600,000	8.25%	6.79%
\$700,000	8.02%	6.61%
\$800,000	7.82%	6.46%
\$900,000	7.66%	6.33%
\$1,000,000	7.52%	6.22%
\$1,100,000	7.41%	6.13%
\$1,200,000	7.31%	6.05%
\$1,300,000	7.23%	5.98%
\$1,400,000	7.17%	5.92%
\$1,500,000	7.11%	5.88%

CONSTRUCTION COST	CURVE A	CUR
\$1,600,000	7.06%	
\$1,700,000	7.02%	<u>5.84</u>
\$1,800,000	6.99%	5.80
\$1,900,000	6.95%	5.77
\$2,000,000	6.92%	5.75
\$2,100,000	6.89%	5.72 5.70
\$2,200,000	6.87%	5.68
\$2,300,000	6.84%	5.66
\$2,400,000	6.81%	5.64
\$2,500,000	6.79%	5.63
\$2,600,000	6.76%	5.61°
\$2,700,000	6.74%	5.59°
\$2,800,000	6.71%	5.579
\$2,900,000	6.68%	5.55%
\$3,000,000	6.66%	5.53%
\$3,100,000	6.64%	5.52%
\$3,200,000	6.61%	5.50%
\$3,300,000	6.59%	5.489
\$3,400,000	6.57%	5.46%
\$3,500,000	6.56%	5.45%
\$3,600,000	6.54%	5.43%
\$3,700,000	6.53%	5.42%
\$3,800,000	6.52%	5.41%
\$3,900,000	6.52%	5.40%
\$4,000,000	6.51%	5.39%
\$4,100,000	6.51%	5.38%
\$4,200,000	6.51%	5.38%
\$4,300,000	6.51%	5.37%
\$4,400,000	6.51%	5.37%
\$4,500,000	6.51%	5.36%
\$4,600,000	6.50%	5.35%
\$4,700,000	6.49%	5.34%
\$4,800,000	6.48%	5.34%
\$4,900,000 \$5,000,000	6.46%	5.33%
\$5,500,000	6.42%	5.32%
\$6,000,000	6.38%	5.27%
\$6,500,000	6.33%	5.22%
\$7,000,000	6.28%	5.17%
\$7,200,000	6.23%	5.13%
\$7,400,000	6.21%	5.11%
\$7,500,000	6.19%	5.10%
\$7,600,000	6.18% 6.17%	5.10%
\$7,800,000		5.09%
\$8,000,000	6.16% 6.14%	5.07%
\$8,200,000	6.13%	5.06%
\$8,400,000	6.12%	5.05%
\$8,500,000	6.12%	5.04%
\$8,600,000	6.10%	5.04% 5.03%
\$8,800,000	6.09%	5.03%

ENGINEER'S COMPENSATION SCHEDULE

CONSTRUCTION COST		
CONSTRUCTION COST	CURVE A	CURVE B
\$9,000,000	6.08%	E 048/
\$9,200,000	6.06%	5.01%
\$9,400,000	6.05%	5.00%
\$9,500,000	6.04%	4.99% 4.99%
\$9,600,000	6.04%	******
\$9,800,000	6.03%	4.98%
\$10,000,000	6.03%	4.98%
\$10,500,000	6.01%	4.97%
\$11,000,000	6.00%	4.96%
\$11,500,000	5.99%	4.96%
\$12,000,000	5.97%	4.95%
\$12,500,000	5.96%	4.94%
\$13,000,000	5.95%	4.89%
\$13,500,000	5.94%	4.90%
\$14,000,000	5.93%	4.90%
\$15,000,000	5.90%	4.91%
\$16,000,000	5.88%	4.90%
\$17,000,000	5.87%	4.88%
\$18,000,000	5.85%	4.87% 4.86%
\$19,000,000	5.84%	4.85%
\$20,000,000	5.82%	4.84%
\$22,000,000	5.80%	4.82%
\$24,000,000	5.78%	4.81%
\$26,000,000	5.77%	4.79%
\$28,000,000	5.75%	4.78%
\$30,000,000	5.74%	4.77%
\$35,000,000	5.73%	4.74%
\$40,000,000	5.72%	4.72%
\$45,000,000	5.71%	4.70%
\$50,000,000	5.70%	4.68%
\$55,000,000	5.70%	4.66%
\$60,000,000	5.69%	4.64%
\$62,000,000	5.69%	4.64%
\$64,000,000	5.69%	4.63%
\$66,000,000	5.68%	4.63%
\$68,000,000	5.68%	4.62%
\$70,000,000	5.68%	4.62%
\$80,000,000	5.67%	4.61%
\$100,000,000	5.64%	4.61%

ARCHITECT'S COMPENSTATION SCHEDULE FOR BASIC SERVICES

- 1. Basic Services consist of the Schematic Design Phase, Design Development Phase, Construction Documents Phase, Bidding Phase and the Construction Phase as set forth in the City of Albuquerque's Standard Architectural Services Agreement which includes such services as a drainage report, life cycle cost analysis and other services which may be specified in the services agreement.
- 2. The following building types have been placed in Groups A, B, C & D for the purpose of determining complexity of design. For example these building types shown in Group A are considered to be more difficult to design than building types in the other Groups and therefore the percentages of the estimated construction cost to determine compensation are greater.

BUILDING TYPE	GROUP	BUILDING TYPE	GROUP
Administration	C	Laboratory	Α
Airport Hanger	D	Library (Branch)	C
Animal Control Facility	В	Library (Main)	B
Band Shell	B .	Museum	Ā
Clinic	В	Parking Structure (Open Air)	D
Concert Hall	A	Parking Structure (Closed)	В
Community Center	C	Police Station	B
Convention Center	Ā	Recreational	Ç
Court House	A second	Senior Center	B
Detention Facility	Ā	Storage (Hazardous)	C
Fire Station	В	Storage (Ordinary)	. D
Garage (No repair work)	$ar{\mathbf{c}}$	Swimming Pool (enclosed)	В
Garage (Repairs)	В	Swimming Pool (open)	Ç
Housing (Multi-Unit)	D	Stadiums	Č
Housing (Single-Unit)	$ar{\mathbf{c}}$	Transportation Terminal	B
7 (2.1.310 01111)		Zoo	В

- 3. As shown in the accompanying "Architect's Compensation Schedule", Table 1, When the dollar magnitude of project construction cost increases, economics in cost of architectural services are reflected in the lower percentages scheduled. These vary with project type, but higher percentages than those in the schedule are reasonable for unusual character of structure, complex electrical or mechanical facilities, or other special requirements.
- 4. When project construction cost falls between the tabular limits, percentages are determined by a straight line interpolation.
- 5. When project construction cost exceeds \$10 million, the fee is subject to individual negotiation, since there may be many variables in a project of this magnitude. Fees for projects under \$100,000 shall be individually negotiated.
- 6. Percentages for building types not listed should be determined by the percentages indicated for structures of similar design complexity.
- 7. When a building or project includes several types of uses, the compensation schedule applies to each type individually and negotiation is appropriate.

- 8. An alteration is far more complex than a renovation which is usually associated with remedial repairs. Alterations to structures involve many unforeseeable conditions that complicate and extend the normal Basic Services. Percentages for altered structures in all categories could be increased up to 25%. An alteration is defined as any change, architectural, structural, mechanical, or electrical, made to an existing building, and includes portions of buildings altered as results of a new wing extension of such buildings, excluding restoration. Restoration (historical) usually implies alterations involving services which are in excess of Basic Services.
- 9. Where multi-contract or fast-track construction contracts are deemed to be in the best interest of the City (and are authorized in writing by the City) negotiation of an increase in the fee may be appropriate. Multi-contract or fast-track projects, as a general rule, require higher levels of coordination, additional personnel, increased levels of construction observation, and accelerated time schedules, all of which may increase the cost of services.
- 10. For projects whose major design elements are repetitive, basic fee compensation may be reduced to reflect the repetitive nature of the project. Any reduction of the basic fee compensation because of repetitive design should be limited to projects where identical design units comprise a considerable part of the project cost. No reduction in compensation for the construction phase is generally applicable to repetitive design.
- 11. On projects not requiring full Basic Services (such as fixtures, equipment, furnishings, interior displays, memorials, reroofing, etc.,) when not a part of an overall building, the Architect's fee shall be negotiated on a cost-based compensation basis by individual project.

ARCHITECT'S COMPENSATION SCHEDULE

CONSTRUCTION COST	GROUP A	GROUP B	GROUP C	GROUP D
		10.700/	0.00%	0.0104
\$100,000	11.57%	10.78%	9.99%	9.21%
\$125,000	11.40%	10.61%	9.82%	9.03%
\$150,000	11.22%	10.43%	9.64%	8.85%
\$175,000	11.05%	10.26%	9.47%	8.68%
\$200,000	10.87%	10.08%	9.29%	8.50%
\$225,000	10.70%	9.91%	9.12%	8.33%
\$250,000	10.52%	9.73%	8.94%	8.15%
\$275,000	10.47%	9.68%	8.89%	8.10%
\$300,000	10.41%	9.56%	8.77%	7.98%
\$325,000	10.36%	9.57%	8.78%	8.00%
\$350,000	10.31%	9.52%	8.73%	7.94%
\$375,000	10.26%	9.47%	8.68%	7.89%
\$400,000	10.20%	9.42%	8.63%	7.84%
\$425,000	10.15%	9.36%	8.57%	7.78%
\$450,000	10.10%	9.31%	8.52%	7.73%
\$475,000	10.05%	9.26%	8.47%	7.68%
\$500,000	9.99%	9.21%	8,42%	7.63%
\$525.000	9.94%	9.15%	8.36%	7.57%
		9.10%	8.31%	7.52%
\$550,000	9.89%			
\$575,000	9.84%	9.05%	8.26%	7.47%
\$600,000	9.78%	8.99%	8.21%	7.42%
\$625,000	9.73%	8.94%	8.15%	7.36%
\$650,000	9.68%	8.89%	8.10%	7.31%
\$675,000	9.63%	8.84%	8.05%	7.26%
\$700,000	9.57%	8.78%	8.00%	7.21%
\$725,000	9.52%	8.73%	7.94%	7.15%
\$750,000	9.47%	8.68%	7.89%	7.10%
\$775,000	9.42%	8.63%	7.84%	7.05%
\$800,000	9.36%	8.57%	7.78%	7.00%
\$825,000	9.31%	8.52%	7.73%	6.94%
\$850,000	9.26%	8.47%	7.68%	6.89%
\$875,000	9.21%	8.42%	7.63%	6.84%
\$900,000	9.15%	8.36%	7.57%	6.79%
\$925,000	9.10%	8.31%	7.52%	6.73%
\$950,000	9.05%	8.26%	7.47%	6.68%
\$975.000	8.99%	8.21%	7.42%	6.63%
\$1,000,000	8.94%	8.15%	7.36%	6.58%
\$1,500,000	8.81%	8.02%	7.23%	6.44%
\$2,000,000	8.68%	7.89%	7.10%	6.31%
\$2,500,000	8.64%	7.85%	7.06%	6.27%
\$3,000,000	8.59%	7.80%	7.01%	6.22%
\$3,500,000	8.55%	7.76%	6.97%	6.18%
\$4,000,000	8.50%	7.71%	6.93%	6.14%
	8.46%	7.67%	6.88%	6.09%
\$4,500,000	8.42%	7.63%	6.84%	6.05%
\$5,000,000				
\$5,500,000	8.31%	7.52%	6.73%	6.00%
\$6,000,000	8.21%	7.42%	6.63%	5.94%
\$6,500,000	8.10%	7.31%	6.52%	5.89%
\$7,000,000	8.00%	7.21%	6.42%	5.84%
\$7,500,000	7.89%	7.10%	6.31%	5.79%
\$8,000,000	7.78%	7.00%	6.21%	5.63%
\$8,500,000	7.68%	6 89%	6.10%	5.47%
\$9,000,000	7.57%	6.79%	6.00%	5.31%
\$9,500,000	7.47%	6.68%	5.89%	5.15%
\$10,000,000	7.36%	6.58%	5.79%	5.00%