

National Compensation Matrix (NCM)

Instructions

A. Introduction

Engineering consultants are responsible for demonstrating that claimed compensation costs are reasonable, and otherwise allowable, in compliance with FAR 31.205-6, as interpreted and clarified by the ASBCA in the *Techplan*,¹ *Information Systems*,² and *J.F. Taylor*³ cases. To meet this burden, consultants may either: (a) prepare an executive compensation analysis in accordance with procedures set forth in Section 7.5 of the *AASHTO Uniform Audit & Accounting Guide*,⁴ or (b) use the NCM, a tool that establishes compensation amounts presumed reasonable for certain executive positions based on an engineering consultant's gross revenue levels.

The options described above are mutually exclusive. Thus, for example, in preparing a compliant compensation analysis, it would *not* be permissible for an engineering consultant to combine data from two nationally-published surveys with data from the NCM being used as a third survey source.

Note: If an engineering consultant prepares a compensation analysis using multiple survey sources, and the analysis is otherwise fully compliant with the criteria discussed in Section 7.5 of the Guide, then State DOTs will be required to accept the consultant's analysis. The NCM may *not* be used by a State DOT or other auditor as a basis, or benchmark, to refute, question, or otherwise disallow compensation for a consultant that has performed an appropriate, compliant compensation analysis in accordance with Section 7.5 of the Guide.

B. Position Descriptions

The following position descriptions apply to the NCM:

1. **Chairman (non-CEO)**. This position represents the executive in the firm who functions in the role of Chairman of the Board, in firms that have a separate Chief Executive Officer (CEO) position. Day-to-day responsibility for managing the firm is passed to the CEO. Typically, the Chairman (non-CEO) is responsible for the overall direction of the business and for achieving maximum return on invested capital. Often, however, the position focuses on one area of the firm, such as marketing or strategic growth, rather than overall firm management. In firms where the Chairman and CEO roles are combined in one position, the CEO/President position description should be used.
2. **CEO/President**. This is the top ranking executive in most firms; the principal organization leader, who plans, develops and establishes policies and objectives of the organization in accordance with board directives. Typically, this position is responsible for the overall direction of the business. The CEO/President coordinates the efforts of senior executives and members of the board and works with them to develop current and long-range objectives, policies, and

¹ *Techplan Corporation*, ASBCA Nos. 41470, 45387, and 45388, 1996 ASBCA LEXIS 141. *Techplan* is the seminal case that established a methodology for applying the reasonableness provisions of FAR 31.205-6 to compensation issues.

² *Information Systems and Networks Corporation*, ASBCA No. 47849, 1997 WL 381263 (A.S.B.C.A.), 97-2 BCA P 29132.

³ *J.F. Taylor, Inc.*, ASBCA Nos. 56105, 56322 (January 18, 2012).

⁴ 2012 Edition. Hereinafter referred to as "the AASHTO Guide" or "the Guide."

procedures for the organization. Titles used among companies vary; depending on the organization, the position may have the title of Chairman of the Board & Chief Executive Officer, Chief Executive Officer, Chief Executive Officer & President, President, or similar titles. This position reports to Board of Directors and often is a member of the board, or may preside over the Board of Directors. Because the NCM was developed using a compilation of surveys representing companies with a single CEO, **the CEO position should be mapped only to a single executive.** Engineering consultants with unique ownership and compensation structures that do not fit the NCM model should prepare their own executive compensation studies in accordance with the procedures recommended in the *AASHTO Uniform Audit & Accounting Guide*.

3. **Executive Vice President / Chief Operating Officer (EVP/COO)**. This is typically the second-highest operating executive in organizations that do not have a separate Chairman (non-CEO). This position typically reports directly to the CEO. The EVP/COO may function in the role of Chief Operating Officer; in such role, the EVP/COO directs, coordinates, and administers all aspects of organization operations through subordinates. The EVP/COO assists in the development of organization policies that encompass such areas as personnel, financial performance, and organization expansion. This position will direct and coordinate a broad range of activities and functions to ensure effective operations and the achievement of organization objectives. This position also develops strategic short and long-range plans to cover operations, human resources, financial performance and growth. The most common titles include Chief Operating Officer, COO, Top Operations Officer, or Vice President of Operations.
4. **Senior Vice President (SVP)**. This is typically the third-highest operating executive in most firms that do not have a separate Chairman (non-CEO). The SVP usually reports directly to the CEO or the Executive Vice President. The SVP often is responsible for a segment of a firm's practice, such as a design discipline, business unit, geographic region or project type. The SVP may be responsible for day-to-day operations of a defined geographic area, discipline, or business function, such as finance, legal, or human resources. Large firms may have more than one SVP. The position has more authority than most firms' principals, and may supervise various principals who report to the SVP. As titles vary among organizations, this position may be called Executive Vice President, Senior Vice President, Business Unit General Manager, or similar variations, depending on the organization.
5. **Vice President (VP)**. The VP may report directly to the SVP, CEO/President, or EVP/COO. The VP directs and coordinates activities in functional areas such as engineering, operations, regional area, sales, or major division of business organization through subordinate managers/directors. This position participates in formulating and administering organization policies. The VP develops long-range goals and objectives as well as analyzes costs, activities, operations, and forecasts data to determine departmental or divisional progress toward stated goals.
6. **Chief Financial Officer (CFO)**. This is the top financial officer and has full responsibility for the firm's financial operations including accounting, budgeting, tax, insurance, credit, and treasury functions. This executive typically will be the third- or fourth-highest ranking position in the firm. The CFO directs activities associated with the security and investment of the organization's assets and funds. The CFO normally has the ability to commit the firm's resources or bind the firm to financial commitments. The CFO is responsible for formulating financial policy and plans to meet organization's short and long-term objectives and regulatory body requirements. This position may be called Chief Financial Officer, Top Financial Officer, Vice President of Finance, Controller, Comptroller, Treasurer, or similar titles.

7. **Top Engineering Executive.** The Top Engineering Executive directs, plans, develops, and coordinates all engineering practices, policies, programs, and procedures of an organization. This position directs project managers in their efforts in planning, design, cost estimates, and specifications. The position reviews and approves engineering efforts consistent with the organization's long- and short-term objectives, and oversees the preparation of engineering operating budgets and reports on efficiency of engineering programs. The Top Engineering Executive also ensures compliance with all engineering regulatory and safety standards. This position may be called Top Engineering Executive, Senior Vice President, Engineering Director, Vice President of Engineering, Chief Engineering Officer, Director of Professional Services, or similar titles.
8. **Human Resources Director (HR Director).** The Human Resources Director directs and develops the implementation and administration of human resources functions and carries out policies and procedures related to all phases of human resources activities. Responsibilities for this position include establishment of personnel rules and regulations, staffing, employee education and training, management development, labor relations, affirmative action, workers compensation administration, benefits administration, and salary administration. The HR Director oversees recordkeeping of insurance coverage, pension plan, and personnel transactions, such as hires, promotions, transfers, and termination. This position may also be called Human Resources Director, Director of Personnel, Personnel Manager, or similar titles.
9. **Director of Business Development.** This position has been temporarily eliminated from the National Compensation Matrix due to insufficient data. The position will be reevaluated for inclusion in future versions of the NCM if survey data can support it. Please review remaining positions for the best possible alternative mapping.

Note Regarding Position Mapping: Engineering consultants and their CPA firms performing indirect cost rate audits should evaluate the distribution of executive positions for reasonableness in relation to firm size and other relevant factors. A distribution of executive positions that appears unusual should be examined further. Job descriptions of each executive should be evaluated for proper mapping to the NCM positions in the context of the firm and the normal and customary business practices of similar-sized firms in the engineering industry.

C. Evaluating Compensation

When applying the NCM, State DOTs, engineering consultants, and auditors should use the following steps:

Step 1. Prepare a schedule listing all components of executive compensation, including the amounts paid or accrued for work performed by each executive during the year under review. Compensation includes, but is not limited to, wages, salary, bonuses, incentive compensation, deferred compensation, and employer contributions to defined contribution pension plans.

Step 2. Job description and duties of each executive must be matched to the NCM position descriptions. Note that matching positions based solely on job titles may result in an inaccurate comparison. Therefore, an executive's actual job duties must be compared against his or her formal job title. In cases where a difference exists between the job title and the actual duties described in the NCM job descriptions, the substantive duties performed by the executive will determine the proper classification for purposes of the NCM.

Step 3. Examine all elements of each executive’s compensation, and eliminate all expressly unallowable compensation elements⁵ and costs associated with unallowable activities.⁶ The NCM amounts should be compared only to the net amount of total allowable forms of compensation attributable to the allowable business activities that each executive participated in during the year.

Step 4. Access the NCM tool from the AASHTO web site.⁷ Enter the engineering consultant’s gross revenue for the year under review, and transfer the resulting NCM total compensation amounts for each executive’s position onto the schedule created in Step 1.⁸

Step 5. For each executive, compare the compensation amount determined in Step 3⁹ to the total compensation amounts generated by the NCM for each position. In cases where an executive’s compensation exceeds the amount generated by the NCM, compensation for that executive must be limited to the compensation amount from the NCM.¹⁰

Note 1: The NCM is comprehensive; accordingly, no further adjustments should be made for mid-year conversions, range of reasonableness, or geographic differentials. Additionally, the NCM is not designed to be used when engineering firms are claiming superior performance. Companies that wish to claim superior performance must complete their own appropriate, compliant compensation analysis.

Note 2: The predictive value of the NCM is accurate in revenues ranges from \$1.5 million to \$500 million. In the event a revenue amount below the \$1.5M floor is entered, the logarithmic equations use \$1.5 million as the input revenue, by default; accordingly, engineering consultants with less than \$1.5 million of actual revenue are given the benefit of \$1.5 million revenue for purposes of the NCM computations. Engineering consultants with revenues in excess of \$500 million may use the NCM, but are limited to compensation levels applicable to the \$500 million revenue level.

Note 3: The Bipartisan Budget Act of 2013 established a cap on compensation (direct and indirect) for all employees of \$487,000, to be applied to contracts executed on or after June 24, 2014. This cap has subsequently been increased; the applicable limit for 2018 compensation is \$525,000, applied to compensation earned during the calendar year. The cap is no longer based on contract execution date. In the event a firm’s revenue amount creates computed compensation in excess of this limit, the NCM will produce a message noting the limit.

⁵ For example, unallowable elements of compensation include, but are not limited to: compensation incidental to business acquisitions (FAR 31.205-6(l)); distributions of profits to owners of closely-held companies (FAR 31.205-6(a)(6)(ii)(B)); and compensation based on changes in the prices of corporate securities or corporate security ownership, such as stock options, stock appreciation rights, phantom stock plans, and junior stock conversions (FAR 31.205-6(i)).

⁶ Unallowable activities include, but are not limited to, time spent on advertising, lobbying, entertainment, and charitable activities. For more details, see Chapter 7 of the AASHTO Guide, FAR 31.205-6, and other related FAR cost principles.

⁷ <http://audit.transportation.org/Pages/default.aspx>.

⁸ **Note:** The NCM was designed to produce results specifically tailored to each company, based on data entered on the “**NCMTool**” tab of the NCM spreadsheet.

⁹ This is the net amount of total allowable forms of compensation attributable to the allowable business activities that each executive participated in during the year.

¹⁰ Normally, executives are not part of a class of employees; accordingly, executives should be evaluated individually, with no offsets permitted among the various executive positions.

D. Example: Applying the NCM

Firm X earned \$8,250,000 in revenue from engineering consulting services during Year 2011. Firm X has elected to apply the NCM to determine the reasonableness of compensation paid to its six executives. The executives have tracked time spent on all types of activities during the year and were able to estimate adjustments required for unallowable activities. The company also identified and removed all unallowable forms of compensation. Figure 1, shown below, illustrates these adjustments and provides a recommended format for demonstrating compliance with the NCM.

Figure 1: NCM Compliance Schedule

Company name.....	Firm X
Date prepared.....	5/15/2012
For costs incurred during fiscal year ended.....	12/31/2011
Gross revenue from engineering consulting services.....	\$8,250,000 (revenue applicable to general engineering, and related, services)

Position (Match to NCM Job Descriptions)	(Steps 1 & 2)		(Step 1)		Total Compensation	Adjustment for Unallowable Activities & Unallowable Forms of Compensation	Compensation Subject to Reasonable- ness Test	NCM Amount	Adjustment: Amount in Excess of NCM	Total Required Adjustment
	Salary	Bonus	Deferred Compensation	Other Compensation						
Chief Executive Officer	\$ 255,000	\$ 55,000	\$ 32,000	\$ 23,000	\$ 365,000	\$ (18,500)	\$ 346,500	\$ 343,721	\$ (2,779)	\$ (21,279)
Chief Financial Officer	204,000	22,000	18,000	28,000	272,000	(17,500)	254,500	200,695	(53,805)	(71,305)
Senior Vice President	195,840	29,376	17,000	2,584	244,800	(10,500)	234,300	227,273	(7,027)	(17,527)
Vice President	146,250	35,100	12,000	1,650	195,000	(7,100)	187,900	197,340	-	(7,100)
Vice President	146,250	38,500	9,000	1,250	195,000	(7,100)	187,900	197,340	-	(7,100)
Human Resource Director	165,000	8,000	10,000	5,000	188,000	(8,500)	179,500	120,463	(59,037)	(67,537)
TOTALS	\$ 1,112,340	\$ 187,976	\$ 98,000	\$ 61,484	\$ 1,459,800	\$ (69,200)	\$ 1,390,600	\$ 1,286,832	\$ (122,648)	\$ (191,848)

I hereby certify that, to the best of my knowledge, this schedule is complete and accurate:

[Redacted Signature Box]

Name and Title (printed or typed)

[Redacted Signature Box]

Signature

[Redacted Signature Box]

Date

(Note: This schedule should be certified by a Company officer/executive.)