

**ECONOMIC IMPACT ANALYSIS
FOR THE
FINAL COMPREHENSIVE PROCUREMENT GUIDELINE IV**

April 2004

Contents

I.	Requirements Under Executive Order 12866	3
II.	Unfunded Mandates	3
III.	Background	4
IV.	General Provisions of CPG IV	5
V.	Summary of Benefits 5	
VI.	Summary of Costs	6
VII.	Affected Universe	8
VIII.	Cost Analysis Methodology	11
IX.	Product Cost	24
X.	Regulatory Flexibility Analysis	24
XI.	Limitations	25
	Appendix 1--Summary of Costs to Federal Agencies	A-1
	Appendix 2--Summary of Costs to State Governments	A-2
	Appendix 3--Summary of Costs to Local Governments	A-3
	Appendix 4--Summary of Costs to Contractors	A-4

This document presents the final Economic Impact Analysis (EIA) associated with the Comprehensive Guideline for Procurement of Products Containing Recovered Materials IV final rule, henceforth, the Comprehensive Procurement Guideline IV or CPG IV. This document presents the following information: 1) Environmental Protection Agency (EPA) analytical requirements under Executive Order 12866, 2) EPA requirements under the Unfunded Mandates Reform Act of 1995, 3) background information on the regulations governing the CPG, CPG II, CPG III, and CPG IV, 4) general provisions of CPG, CPG II, CPG III, and CPG IV, 5) summary of benefits for CPG IV, 6) summary of costs for CPG IV, 7) universe of entities affected by the rule, 8) discussion of cost analysis methodology, 9) discussion of price differentials between recycled and virgin products, 10) regulatory flexibility analysis, and 11) limitations of the analysis.

This final EIA represents a revision from the draft EIA previously published with the CPC IV proposal. This revision was necessary to make adjustments to earlier impact estimates for the Major Federal Agencies, based on the final number of CPG items included in this action.

I. REQUIREMENTS UNDER EXECUTIVE ORDER 12866

Executive Order 12866 (54 FR 51735, October 4, 1993) requires Federal agencies to determine whether a regulatory action is "significant." The Order defines a "significant" regulatory action as one that is likely to result in a rule that may: (1) have an annual effect on the economy of \$100 million or more or adversely affect, in a material way, the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; (2) create serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

EPA estimates that the costs associated with CPG IV are below the \$100 million threshold. Nonetheless, to enable the Agency to evaluate the potential impact of CPG IV, EPA conducted the Economic Impact Analysis (EIA), discussed below.

II. UNFUNDED MANDATES

Under Section 202 of the Unfunded Mandates Reform Act of 1995, signed into law on March 22, 1995, EPA must prepare a statement to accompany any rule where the estimated costs to State, local, or tribal governments in the aggregate, or to the private sector, will be \$100 million or more in any one year. Under Section 205, EPA must select the most cost-effective and least burdensome alternative that achieves the objective of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly impacted by the rule.

EPA has determined that CPG IV does not include a Federal mandate that may result in estimated annualized costs of \$100 million or more to either State, local, or tribal governments in the aggregate, or to the private sector.

III. BACKGROUND

RCRA Section 6002(e) requires EPA to designate items that are or can be made with recovered materials and to recommend practices for the procurement of designated items by procuring agencies. Once EPA designates an item, Section 6002 requires any procuring agency that purchases \$10,000 or more of that item with appropriated Federal funds to develop an affirmative procurement program to assure that the designated item is purchased with the highest percentage of recovered materials practicable. RCRA 1004(17) defines a procuring agency as "any Federal agency, or any State agency or agency of a political subdivision of a State which is using appropriated Federal funds for such procurement, or any person contracting with any such agency with respect to work performed under such contract."

E. O. 13101 establishes the procedures EPA must follow when implementing RCRA section 6002(e). Section 502 of the Executive Order directs EPA to issue a Comprehensive Procurement Guideline (CPG) that designates items that are or can be made with recovered materials. At the same time EPA promulgates the CPG, the Agency must publish its recommended procurement practices for entities that purchase designated items in a related Recovered Materials Advisory Notice (RMAN). These practices must also provide recommendations for the content of recovered materials in the designated items. The Executive Order also directs EPA to update the CPG every 2 years and to issue RMANs periodically to reflect changing market conditions.

The first CPG (CPG I) was published on May 1, 1995 (60 FR 21370). It established eight product categories, designated 19 new items in seven of those categories, and consolidated five earlier item designations.¹ At the same time, EPA also published a notice of availability of the first RMAN (RMAN I) (60 FR 21386). On November 13, 1997, EPA published CPG II (62 FR 60962), which designated an additional 12 items. At the same time, EPA published an RMAN II notice (62 FR 60975). Paper Products RMANs were issued on May 29, 1996 (61 FR 26985) and June 8, 1998 (63 FR 31214). On January 19, 2000, EPA published CPG III (65 FR 3070), which designated an additional 18 items. At the same time, EPA published an RMAN III notice (65 FR 3082).

¹Between 1983 and 1989, EPA issued five guidelines for the procurement of products containing recovered materials, which were previously codified at 40 CFR parts 248, 249, 250, 252, and 253. These products include cement and concrete containing fly ash, paper and paper products, re-refined lubricating oils, retread tires, and building insulation.

On August 28, 2001, EPA published a proposed CPG IV (66 FR 45256), which proposed to designate an additional 11 items—including cement and concrete containing cenospheres and silica fume—and revise two other previously designated items.² At the same time, EPA published a draft RMAN IV notice (66 FR 45297), which provided draft recommendations on purchasing the proposed designated items. (For more information on CPG, go to the EPA Web site at <http://www.epa.gov/cpg/>.) On April 30, 2004, EPA published the CPG IV final rule (69 FR 24028), which designated 7 new items and revised the designations for 3 items.

This Technical Background Document provides estimated economic impacts upon Federal, State, and local governments, as well as private contractors, for the 10 new and revised items designated under CPG IV.

IV. GENERAL PROVISIONS OF CPG IV

CPG IV finalized 7 new items and revised 3 previously designated items, that are or can be made with recovered materials.³ These items are as follows:

Newly Designated Items

Bike Racks
Blasting Grit
Modular Threshold Ramps
Nonpressure Pipe
Office Furniture
Rebuilt Vehicular Parts
Roofing Materials

Revised Designated Items

Cement and Concrete
Polyester Carpet
Railroad Grade Crossing Surfaces

These items can also be further organized under the following four categories:

- Vehicular Products - rebuilt vehicular parts;
- Construction Products - cement and concrete, modular threshold ramps, nonpressure pipe, polyester carpet, railroad crossing surfaces, and roofing materials;
- Nonpaper Office Products - office furniture; and
- Miscellaneous Products - bike racks, and blasting grit.

²EPA now considers that two of the items that it proposed for designation (cement and concrete containing cenospheres and silica fume) were in actuality proposed revisions to the existing designation for cement and concrete containing coal fly ash and ground granulated blast furnace slag.

³Although a revised item designation is likely to result in fewer economic impacts than a new item designation, EPA conservatively assumes the impacts of them to be the same for the purposes of this EIA.

As a result of CPG IV, procuring agencies are required to perform several activities. For purposes of this analysis, EPA is dividing these activities as follows: rule review and implementation; estimation, certification, and verification; and, for Federal agencies, record-keeping and reporting. The rule review and implementation subsection is further subdivided into three subgroup activities, including Initial review; Policy development, distribution, and implementation; and Specification revision. These requirements are discussed in further detail in Section VIII.

V. SUMMARY OF BENEFITS

EPA anticipates that CPG IV will result in increased opportunities for recycling and waste prevention. Waste prevention can reduce the nation's reliance on natural resources by reducing the amount of materials used in making products. This may result in a commensurate reduction in energy use, as well as reductions in the generation and release of air and water pollutants associated with manufacturing. Additionally, waste prevention leads to a reduction in the environmental impacts of mining, harvesting, and other extraction processes.

Recycling can effect the more efficient use of natural resources. For many products, the use of recovered materials in manufacturing may result in lower energy and material input costs than when virgin raw materials are used. Aluminum recycling, for instance, can save up to 97 percent of the energy requirements for making new aluminum, as compared to the use of bauxite. Use of recovered materials can also reduce the generation and release of air and water pollutants often associated with manufacturing (including air emissions that contribute to ozone depletion and the generation of "greenhouse gases"). Air pollutant reductions of nearly 25 percent have been associated with the manufacture of glass from recovered materials. When recovered materials are used instead of raw materials, reductions from the manufacture of steel and aluminum can be as high as 85 percent and 95 percent, respectively. Additionally, when recovered materials are used, water pollutant reductions in the manufacture of steel and aluminum can be as high as 75 percent and 95 percent, respectively. Using recovered materials also reduces the environmental impacts of mining, harvesting, and other extraction of natural resources, while conserving non-renewable resources for future use. Recycling can also divert large amounts of materials from landfills, conserving increasingly valuable space for the management of materials that truly require disposal. This reduces the need to expand existing or site new disposal facilities, allowing local government officials to devote more attention to health, education, and safety issues.

By purchasing products made with recovered materials, government agencies will increase opportunities for realizing these benefits. On a national and regional level, CPG IV will help in expanding and strengthening markets for additional materials diverted or recovered through public and private collection programs. Also, since many State and local governments, as well as private enterprises, reference EPA guidelines when purchasing designated items, CPG IV will result in further increased purchasing of recycled products locally, regionally, and nationally.

Finally, the purchase and use of recycled products by government agencies will also spur private sector development of new technologies, creating business and employment opportunities that enhance local, regional, and national economies. Technological innovation associated with the use of recovered materials translates into economic growth which makes American industry more competitive in the global economy. Please note that the benefits of CPG IV, as qualitatively noted above, have not been quantified or monetized for inclusion in this CPG IV Economic Impact Analysis.

VI. SUMMARY OF COSTS

As shown in Table 1 below, EPA estimates that the annualized costs of CPG IV range from \$5.0 to \$9.7 million, with costs being spread across all procuring agencies (i.e., Federal, State, and local agencies that use appropriated Federal funds to procure designated items) and their contractors (i.e., Federal, State and local government contractors involved with the procurement of designated items). These costs are annualized over a 10-year period at a three percent discount rate. Because there is considerable uncertainty regarding several of the parameters that drive the costs, EPA conducted sensitivity analyses to identify the range of potential costs of CPG IV. Thus, high-end and low-end estimates are presented along with the best estimate. The primary parameters affecting the range of cost estimates are the number of products each procuring agency is assumed to procure each year.

Table 1. -- Summary of Annualized Costs of CPG IV to All Procuring Agencies

Procuring Agency	Total Annualized Costs (\$1000)	BEST ESTIMATE Total Annualized Costs (\$1000)
Federal Agencies	\$2,853 - \$5,707	\$5,707
States	\$542 - \$1,085	\$1,085
Local Governments	\$1,556 - \$2,762	\$2,159
Contractors	\$34 - \$101	\$68
Total	\$4,985 - \$9,655	\$9,019

RCRA Section 6002(g) requires the Office of Federal Procurement Policy (OFPP) to report to Congress every two years on the actions taken by Federal agencies to comply with RCRA Section 6002. In developing this report, OFPP requests information and data from Federal agencies regarding their affirmative procurement programs and related activities. Table 2 below presents the estimated annualized costs to Federal agencies, including (1) specification revision and affirmative procurement program modification/implementation costs,

and (2) record-keeping and reporting costs. The record-keeping and reporting costs presented below are the costs likely to be incurred by Federal agencies to maintain and compile information and complete the annual OFPP information request using the existing OFPP reporting format (i. e., the format used to collect information for fiscal years 1993 and 1994).

Table 2. -- Summary of Best Estimate Annualized Costs of CPG IV to Federal Agencies

Federal Agency	Specification Revision and APP Costs (\$1000)	Record-keeping and Reporting Costs (\$1000)	Total Annualized Costs (\$1000)
Civilian Agencies	\$738	\$1,157	\$1,895
Defense Agencies	\$1,383	\$2,429	\$3,812
Total	\$2,121	\$3,586	\$5,707

Many Federal agencies have stated that the current OFPP format is overly burdensome and costly to complete. To address these concerns, the Office of the Federal Environmental Executive formed a workgroup which includes representatives from OFPP and several Federal agencies to examine methods of streamlining the current reporting format. Based on information and data submitted by two Federal agencies, EPA estimates that if OFPP revised the current format to request data on purchases made at and above the small purchase threshold and only anecdotal information on small purchases and bank-card acquisitions, Federal record-keeping and reporting costs could be reduced by 75 percent.

VII. AFFECTED UNIVERSE

RCRA Section 6002 applies to procuring agencies that use at least a portion of Federal funds to procure over \$10,000 worth of a designated product in a given year. Based on these criteria, EPA estimates that CPG IV would apply to 35 Federal agencies, all 56 States and territories and 1900 local governments. EPA's assumptions on the number of local entities that would be impacted were based on information regarding the amount of Federal funds that are dispersed to specific local governments. In addition, EPA assumed that between 200 and 1,000 contractors may be affected.

A. Federal Agencies

RCRA Section 6002 provides that Federal agencies that procure at least \$10,000 annually of a designated item in a given year are subject to the CPG, CPG II, CPG III, and CPG IV. For purposes of this analysis, EPA assumed that 35 agencies would be affected. EPA based this assumption on the amount of contract money spent per annum by each Executive agency, as reported in the Federal Procurement Data System (FPDS). The FPDS tracks Federal contract actions and dollars by department and agency. The Federal Procurement Report for Fiscal Year 92 lists 62 agencies in the Executive branch. Of these agencies, 35 spent more than \$10 million on contracts in 1992. Of the remaining agencies, 26 spent less than \$2 million.

In developing its assumption for the number for Federal agencies involved in specification-writing, EPA assumed that 11 of the 35 agencies would actually write specifications for one or more of the designated items. These 11 agencies are the Department of Defense (DoD), Government Services Administration (GSA), Department of the Interior (DOI), Housing and Urban Development (HUD), Environmental Protection Agency (EPA), Department of Transportation (DOT), National Aeronautics and Space Administration (NASA), Department of Energy (DOE), Department of Veterans Affairs (DVA), Tennessee Valley Authority (TVA), and United States Department of Agriculture (USDA). A list of the number of Federal “ specification-writing” agencies potentially affected by the different CPG IV product categories is presented in Table 3 below.

Table 3. -- Number of Federal Specification-Writing Agencies Potentially Affected by CPG IV

Product Category	Agencies Potentially Affected	Total Number of Agencies Potentially Affected
Miscellaneous Products	DoD, DOT	2
Construction Products	GSA, DoD, DOI, HUD, EPA, DOT, NASA, DOE, DVA, TVA	10
Non-Paper Products	GSA	1
Vehicular Products	GSA, DoD, DOT, NASA	4

B. State Governments

RCRA Section 6002 provides that State agencies that receive appropriated Federal funds and that use these funds to procure designated items in quantities of \$10,000 or more in

a given year are subject to the CPG, CPG II, CPG III, and CPG IV. RCRA Section 1004(31) defines a "State" to include all 50 States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Virgin Islands.

For purposes of this analysis, EPA assumed that 56 State and territorial governments would be affected, the full universe of State and territorial governments. EPA does not have information as to whether all of these states use appropriated Federal funds to purchase more than \$10,000 of one or more items designated in CPG IV. However, for purposes of this analysis, EPA assumed that all 56 State and territorial governments would procure at least some of the 10 designated items in quantities costing at least \$10,000 per year.

C. Local Governments

RCRA Section 6002 provides that local agencies that receive federal funds and that use these funds to procure designated items in quantities of \$10,000 or more annually are subject to CPG IV. For purposes of this analysis, EPA assumed that 1900 local governments would be affected. Because EPA does not have direct information to indicate the number of local governments that currently would fit this criteria, the Agency based its assumption on the amount of Federal funds dispersed to local governments, as reported in the Consolidated Federal Funds Report for Fiscal Year 1992.

The Consolidated Federal Funds Report provides information on the distribution of Federal funds. The report lists that 1900 local governments received over \$10 million in Federal assistance funding in fiscal year 1992. Of the remaining local governments, 3,125 received \$1 million or less in Federal funds. For purposes of this analysis, EPA assumed that the 1900 local governments receiving over \$10 million would procure at least some of the 10 designated items in quantities of more than \$10,000 annually. For its best estimate, EPA assumed that the number of designated items a local government would purchase in any given year to be half of those designated by CPG IV (i.e.; 50% of 10, or approximately 5 products). EPA recognizes that this estimate may over estimate or under estimate the number of governments actually affected.

D. Contractors

As part of fulfilling their contractual requirements, RCRA Section 6002 provides that contractors to Federal, State or local agencies that use appropriated Federal funds to procure a designated item, purchase such items with recovered materials content when purchasing \$10,000 or more of that item in a given year. EPA believes that there will be a minor cost to these contractors as a result of CPG IV. However, EPA believes it is appropriate to allocate some contractor costs. Therefore, EPA assumed that 1,000 contractors would be affected. Since the number of designated items a contractor would purchase in any given year is also

uncertain, EPA assumed a range of items per contractor of two items to four items with three being the best estimate.

VIII. COST ANALYSIS METHODOLOGY

This section discusses EPA's methodology for developing its cost estimates for CPG IV. In estimating costs, EPA assumed an average loaded cost of \$39.40 per labor hour, which represents a mid-level specialist, at a GS-12 grade level for the Federal government.⁴ Subsection A discusses the general methodology for estimating costs. Subsection B discusses categories of costs, in general, that are expected to be incurred by procuring agencies.

A. General Methodology

Once EPA designates an item, each procuring agency is required to establish an affirmative procurement program within one year of the item designation. RCRA Section 6002(i) requires that an affirmative procurement program contain the following four elements: a recovered materials preference program; a promotion program; a program for requiring vendors to estimate, certify, and, where appropriate, reasonably verify the recovered materials contained in their product; and a program to monitor and annually review the effectiveness of the affirmative procurement program. In addition, RCRA Section 6002(d)(2) requires Federal agencies responsible for drafting or reviewing specifications to revise their specifications to require the use of recovered materials to the maximum extent practicable. These revisions must be completed within one year of the final designation of an item.

In the CPG, EPA recommended that each procuring agency establish one overall affirmative procurement program that allows for the integration of new items as they are designated. According to the information provided in the FY 93 affirmative procurement program status reports submitted to the Office of Management and Budget's Office of Federal Procurement Policy, Federal agencies are already following this approach for the previously-designated items. For the items designated in CPG IV, EPA anticipates that Federal and other procuring agencies will continue this practice and simply incorporate both the newly-designated and revised items into their existing affirmative procurement programs. Although revising an items designation is likely to result in fewer economic impacts than the designation of a new item, EPA conservatively assumes them to be same for the purposes of this EIA. Furthermore, since most procuring agencies already have established affirmative procurement programs, EPA is not attributing the full costs associated with establishing these programs to CPG IV. Rather, EPA believes that procuring agencies will revise certain elements of their affirmative procurement programs, which may cause them to incur additional costs.

As stated in Section VII, EPA assumed that 35 Federal agencies, all 56 States and territories, 1900 local governments, and 1000 contractors would be affected by CPG. EPA received detailed cost estimates from six Federal agencies who commented on the proposed

⁴ EPA estimated the labor rate using a step 1, GS-12 (\$51,204) salary and a government overhead factor of 1.6.

cost estimates for the CPG. These estimates included the likely costs of amending these agencies' existing affirmative procurement programs to include the newly-designated items.

In developing its estimates for the potential impact of CPG IV on Federal agencies, EPA again relied on the information submitted by these six agencies. EPA then used this information in estimating costs to the remaining 29 Federal agencies. EPA's methodology for developing these estimates is presented in the individual cost category discussions below. For some cost categories, EPA based its estimates for the remaining 29 Federal agencies on population data. In doing so, EPA determined that the average number of employees in each of the 29 remaining agencies is about 42,800 employees.

A few States commented that EPA's proposed estimates of the costs of implementing the "buy recycled" requirements of the CPG were understated. However, none of these State agencies provided information on their likely costs or information that would enable EPA to assess the reasonableness of the estimates made at the time of proposal. EPA became convinced in its discussions with Federal agencies that States would indeed incur higher costs than EPA's proposed estimates. Therefore, EPA relied on the information submitted by the Federal agencies to estimate costs likely to be incurred by State and local governments. In developing its estimates for State governments, EPA assumed that, for most cost categories, each State would incur costs similar to each Federal agency because each State would have to conduct activities similar to those required of Federal agencies. The exceptions are recordkeeping and reporting and specification revision. There is no statutory requirement for States to report their purchases of designated items or to revise their specifications to include recovered materials content requirements. However, EPA believes that, for some items, State governments will need to revise their specifications in order to comply with the CPG IV requirements and has allocated costs to State governments for this activity.

EPA did not receive comments regarding its proposed estimates of local government costs for implementing the CPG. However, EPA believed it was appropriate to revise its cost estimates for local governments based on information received from and discussions with Federal agencies. For this reason, EPA redefined its methodology for estimating costs to local governments. EPA again uses this redefined methodology for local governments, as discussed below, for CPG IV.

EPA did not receive comments regarding its estimates of contractor costs presented in the technical background document for the proposed CPG. EPA reviewed the methodology it used to develop cost estimates for contractors presented in the technical background document for the proposed CPG and concluded that the affirmative procurement program modification and verification activities were appropriately identified. For this reason, EPA's methodology for estimating contractor costs remained generally unchanged from that used at proposal. EPA again uses this methodology for estimating contractor costs for CPG IV.

B. Cost Components

EPA is dividing costs to procuring agencies into three major subsections. These subsections relate to the affirmative procurement program requirements of RCRA Section 6002(i). They are 1) rule review and implementation, 2) estimation, certification, and verification, and 3) recordkeeping and reporting. A summary of each requirement is presented below.

Some cost components (e.g., initial review) are incurred in the first year only, while others (e.g., verification and recordkeeping and reporting) are incurred on an annual basis. In presenting the total cost estimates for CPG IV, all costs have been annualized over a 10-year period at a three percent discount rate. Formulas presented below demonstrate EPA's methodology for developing best estimates for each procuring agency.⁵

Cost estimates to procuring agencies are presented in the following appendices to this document: Federal agencies - Appendix 1; State governments - Appendix 2; local governments - Appendix 3; and contractors - Appendix 4.

1. Rule Review and Implementation

Rule review and implementation activities include reading and assessing CPG IV; modifying an agency's affirmative procurement program; incorporating new requirements into existing agency policy documents; and executing these new policies. In presenting costs related to these activities, EPA further divided the rule review and implementation subsection into four areas: a) initial review; b) policy development, distribution, and implementation; c) training; and d) specification revision.

a. Initial Review.

Initial review activities include reading CPG IV and developing a strategy for implementing its requirements. EPA estimates that total costs to procuring agencies to complete their initial review would be \$951,000. These costs are one-time costs and would be incurred in the first year only. Costs presented are the incremental costs of developing an implementation strategy for the CPG IV items only. Costs to develop an overall procurement guideline implementation strategy for all guideline items, including previously-designated items, are not allocated to CPG IV. EPA's estimates for procuring agencies to complete initial review activities are as follows: Federal agencies - \$356,000 and State governments - \$596,000. Costs to local governments for initial review are included in the costs for policy development, distribution, and implementation presented in Subsection 1.b below.

⁵In some instances, the cost estimates and associated formulas reflect cost estimates based on a total of 11 rather than 10 designated items. This is because the final number of items designated under CPG IV dropped from 11 to 10 well after the CPG IV cost estimates were fully developed. Since using 11 items in the cost estimates results in more conservative estimates of the total costs, developing revised cost estimates was deemed unwarranted.

i) Federal Agency Costs

EPA assumed that all 35 Federal agencies would incur costs for initial review. For the six agencies that provided data, EPA estimates that total initial review costs would be

\$47,000. For the remaining 29 agencies, EPA estimates \$309,000 in total initial review costs. To estimate costs for the remaining 29 Federal agencies, EPA developed the following formula:

$$270 \text{ hours per agency} \times 29 \text{ agencies} \times \text{labor rate } \$39.4 \text{ per hour} = \$309,000.$$

The number of hours per agency was developed by averaging the hourly estimates submitted by the Federal agencies that provided data.

ii) State Government Costs

EPA assumed that all 56 State governments would incur costs for initial review. EPA used the following formula in developing initial review costs to State governments:

$$(\text{Total costs of } \$309,000 \text{ for non-reporting Federal agencies} / 29 \text{ non-reporting Federal agencies}) \times 56 \text{ State governments} = \$596,000.$$

iii) Local Government Costs

Costs to local governments for initial review are included in the costs for policy development, distribution, and implementation presented in Subsection 1.b below.

iv) Contractor Costs

For contractors and vendors, EPA anticipates that the initial review costs are negligible since affected government agencies would include requirements in their solicitations and contract documents for procurement of CPG IV items. Contractors would review those requirements while reviewing all other solicitation requirements.

b. Policy Development, Distribution, and Implementation.

Policy development, distribution, and implementation activities include 1) modifying an agency's affirmative procurement program; 2) developing and distributing policies implementing CPG IV to affected activities; and 3) incorporating requirements to purchase designated items into existing agency documents.

EPA estimates that total costs to procuring agencies for policy development, distribution, and implementation in the first year would be \$4.79 million. These costs are one-time costs and would be incurred in the first year only. These costs are the incremental costs

of modifying the agency's affirmative procurement program and developing and incorporating requirements and procedures for purchasing the CPG IV items only. Costs to develop an agency's overall affirmative procurement program and general procurement guideline implementing policies are not allocated to CPG IV. EPA's estimates for procuring agencies to complete policy development, distribution, and implementation activities are as follows: Federal agencies \$906,000; State governments - \$662,000; local governments - \$3.06 million; and contractors - \$158,000.

i) Federal Agency Costs

EPA assumed that all 35 Federal agencies would incur costs for policy development, distribution, and implementation. For the six agencies that provided data, EPA estimates that the total costs for policy development, distribution, and implementation activities would be \$563,000. For the remaining 29 agencies, EPA estimates \$343,000 in total policy development, distribution, and implementation costs. Information provided by Federal agencies indicated that the estimated costs of this activity tended to increase with the size and the number of field components characteristic of the agency. To estimate costs for the remaining 29 Federal agencies, EPA developed the following formula:

$$(0.007 \text{ hours per employee}) \times (29 \text{ agencies} \times \text{an Average of } 42,836 \text{ employees per agency}) \times (\text{labor rate of } \$39.4 \text{ per hour}) = \$343,000.$$

This component uses agency population as a surrogate for size and complexity of Federal agencies. The number of hours per employee was developed by adding the hourly estimates submitted by the six Federal agencies that provided EPA with detailed cost estimates. This total was then divided by the total number of employees from those agencies.

ii) State Government Costs

EPA assumed that all 56 State governments would incur costs for policy development, distribution, and implementation. EPA used the following formula in developing policy development, distribution, and implementation costs to State governments:

$$(\text{Total costs of } \$343,000 \text{ for non-reporting Federal agencies} / 29 \text{ non-reporting Federal agencies}) \times 56 \text{ State governments} = \$662,000.$$

iii) Local Government Costs

EPA assumed that all 1900 local governments would incur costs for initial review, policy development, distribution, and implementation, and specification review. In calculating these costs for local governments, EPA assumed that a national organization representing local governments would prepare a CPG IV implementation package for use by local government officials in implementing the CPG IV requirements. This CPG IV implementation package would contain a synopsis of the requirements of the CPG IV, sample policies and affirmative

procurement programs, and references to national and other specifications that would facilitate the implementation of the CPG IV requirements by local governments. EPA estimated costs for preparing this package using the following formula:

$[270 \text{ hours for initial review} \times \text{labor rate of } \$39.4 \text{ per hour}] + [283 \text{ hours for specification revisions} \times 6 \text{ CPG items} \times \text{labor rate of } \$39.4 \text{ per hour}] + [2000 \text{ hours for specification revisions} \times 0 \text{ road-related construction product} \times \text{labor rate of } \$39.4 \text{ per hour}] = \$78,000.$

Currently, under a grant from EPA, the U.S. Conference of Mayors provides information to assist local government officials in purchasing the previously-designated items. In the short-term, EPA will provide the U.S. Conference of Mayors with the necessary materials to enable it to provide its constituents with information on the newly-designated items. EPA will also work with other national organizations representing local officials in preparing information packages for their members. EPA also may work through a grantee to develop such a package and make it available to local officials through its RCRA Hotline. Should EPA provide the funding for developing this information package, EPA estimates that the costs presented in this section could be reduced.

In addition to the above costs, EPA estimates an additional 40 hours per local government will be required to tailor this package to meet the needs of their local agencies. In estimating these costs, EPA used the following formula:

$(40 \text{ hours per local government} \times 1900 \text{ local governments}) \times \text{labor rate of } \$39.4 \text{ per hour} = \2.99 million.

iv) Contractor Costs

EPA assumed that all 1000 contractors would incur costs for policy development, distribution, and implementation. EPA estimates that each contractor would require two hours per item for this task. EPA used the following formula in calculating policy development, distribution, and implementation costs to contractors:

$(2 \text{ hours per contractor} \times 1000 \text{ contractors} \times 2 \text{ items}) \times \text{labor rate of } \$39.4 \text{ per hour} = \$158,000.$

c. Training

Training activities include training affected personnel on new policies and procedures developed to implement the CPG IV. EPA estimates that total costs to procuring agencies to conduct training would be \$19.4 million. These costs are one-time costs. Based on discussions with Federal agencies, EPA believes that training would likely be conducted over a period of five years. These costs are the incremental costs of training appropriate personnel on the newly-designated items only. Costs to train personnel on overall affirmative procurement

policies and procedures or pollution prevention programs are not allocated to the CPG IV. EPA's estimates for procuring agencies to complete training activities are as follows: Federal agencies - \$10.13 million; State governments - \$4.78 million; and local governments - \$4.49 million.

i) Federal Agency Costs

EPA assumed that all 35 agencies would incur costs for training. Using the detailed cost estimates of the six agencies that provided data for the original CPG, EPA estimated that the total costs for training activities under CPG IV to be \$7.65 million. For the remaining 29 agencies, EPA estimates \$2.48 million in total training costs. Information provided by Federal agencies indicated that the estimated costs of this activity tended to increase with the size of the agency. To estimate costs for the remaining 29 Federal agencies, EPA developed the following formula:

$$0.0046 \text{ hours per employee per item} \times 29 \text{ agencies} \times \text{Average number of } 42,836 \text{ employees per agency} \times 11 \text{ items} \times \text{labor rate of } \$39.4 = \$2.48 \text{ million.}^6$$

This component used agency population as a surrogate for size and complexity of Federal agencies. The number of hours per employee per item was developed by adding the hourly estimates submitted by the six Federal agencies who originally provided EPA with detailed cost estimates. This total was then divided by the total number of employees from those agencies, and again divided by 21 (i.e.; the number of items initially proposed for designation in the first CPG and upon which these six agencies based their estimates).

ii) State Government Costs

EPA assumed that all 56 State governments would incur costs for training. EPA used the following formula in developing training costs to State governments:

$$(\text{Total costs of } \$2.48 \text{ million for non-reporting Federal agencies} / 29 \text{ non-reporting Federal agencies}) \times 56 \text{ State governments} = \$4.78 \text{ million.}$$

iii) Local Government Costs

EPA assumed that local governments would incur costs for training. In calculating these costs for local governments, EPA assumed that one official in each of five departments within each local government would require training. EPA estimated that each official would

⁶In some instances, the cost estimates and associated formulas reflect cost estimates based on a total of 11 rather than 10 designated items. This is because the final number of items designated under CPG IV dropped from 11 to 10 well after the CPG IV cost estimates were fully developed. Since using 11 items in the cost estimates results in more conservative estimates of the total costs, developing revised cost estimates was deemed unwarranted.

require approximately two hours of training per designated item. Therefore, EPA used the following formula in calculating training costs for local governments:

(2 hours per item x 1900 local governments x 5 departments x 1 local official per department) x 6 items x labor rate of \$39.4 per hour = \$4.49 million.

iv) Contractor Costs

For contractors and vendors, EPA anticipates that the training costs are negligible since affected government agencies would include requirements in their solicitations and contract documents for procurement of designated items. Contractors would review those requirements while reviewing all other solicitation requirements.

d. Specification revision (including testing and evaluation)

Specification revision activities include reviewing and revising agency specifications to incorporate recovered materials content requirements. This includes 1) identifying and locating affected specifications for items designated in CPG IV; 2) conducting performance reviews, in advance of an actual procurement, to determine if products containing recovered materials meet existing performance requirements (i.e., any costs incurred to compare recycled product performance to current performance requirements (specifications), including any necessary testing and evaluation); 3) revising specification provisions, as appropriate; and 4) completing the revision process.

EPA estimates that total costs to procuring agencies to review their specifications and incorporate the requirements of CPG IV would be \$2.65 million. These costs are one-time costs only. Based on discussions with Federal agencies, EPA believes that specification revision would be conducted over a period of five years. These costs are the incremental costs of reviewing and revising specifications for the CPG IV items only. Costs to review and revise specifications to remove requirements specifying virgin materials only or excluding the use of recovered materials are not allocated to CPG IV. Pursuant to RCRA Section 6002(d)(1), these revisions were to have been completed prior to issuance of the CPG (and, of course, CPG II, CPG III, and CPG IV). As recommended by commenting Federal agencies, costs to qualify vendors were not allocated to the CPG, CPG II, CPG III or CPG IV. EPA's estimates for procuring agencies to complete specification revision activities are as follows: Federal agencies \$1.8 million, and State governments - \$840,000.

i) Federal Agency Costs

Of the 35 Federal agencies that could be significantly impacted by the CPG IV, EPA estimates that 11 agencies will revise their specifications to incorporate recovered materials content requirements. For the six agencies that provided data, EPA estimates that total specification revision costs would be \$1,371,000. For the remaining 29 agencies, EPA estimates \$435,000 in total specification revision costs, based on the following assumptions.

For most product categories, EPA estimates the potential time for a Federal specification-writing agency to review and revise its product specifications would average 280 hours per product based on actual specification revision activities performed by one of the agencies commenting on the CPG. For road related construction products, the estimate is about 2,000 hours per product for review and revise product specifications. Table 4 below presents a breakdown of potential costs associated with the non-reporting Federal agencies for reviewing and revising specifications.

Table 4. -- Potential Specification Revisions for Non-Reporting Federal Agencies

Product Category	Number of Items	Total Number of Agencies Potentially Affected	Specification Review and Revision Time per Item (In Hours)	Total Category Costs
Miscellaneous Products	2	1	283	\$11,000
Construction Products(non-road)	6	6	283	\$401,000
Non-Paper Office Products	1	0	283	\$0
Vehicular Products	2	1	283	\$22,000

Costs in Table 4 attributable to non-reporting Federal Agencies (1 agency for miscellaneous products, 6 for non-road construction products, and 1 for vehicular products) total \$435,000.

ii) State Government Costs

Although the statute does not require State governments to review and revise their specifications for designated items, EPA believes that for some items, State governments will need to revise their specifications in order to comply with CPG IV requirements. EPA anticipates that these costs would be the incremental cost of incorporating these additional requirements into existing documents where procurement of designated items is a concern.

EPA assumed that all 56 State governments would incur costs for specification revision. EPA used the following formula in developing specification revision costs to State governments:

(Total costs of \$435,000 for non-reporting Federal agencies / 29 non-reporting Federal agencies) x 56 State governments = \$840,000.

iii) Local Government Costs

As with State governments, the statute does not require local governments to review and revise specifications for designated items. However, EPA believes that local governments may need to revise some specifications in order to meet CPG IV requirements, and, as explained previously, included these costs in the cost estimates for policy development, distribution, and implementation presented in Subsection 1.b above.

iv) Contractor Costs

The statute does not require contractors to review and revise specifications. EPA did not estimate costs to perform these activities. For contractors and vendors, EPA anticipates that the specification revision costs are negligible since affected government agencies would include requirements in their solicitations and contract documents for procurement of newly-designated items. Contractors would review those requirements while reviewing all other solicitation requirements.

2. Estimation, Certification, and Verification

RCRA Section 6002(i)(C)(2) requires procuring agencies to establish procedures for estimating, certifying, and, where appropriate, verifying the amount of recovered materials utilized in the performance of a contract. RCRA Section 6002(c)(3) further provides "the contracting officer shall require that vendors (A) certify that the percentage of recovered materials to be used in the performance of the contract will be at least the amount required by applicable specifications or other contractual requirements and (B) estimate the percentage of the total materials utilized for the performance of the contract which is recovered materials."

a. Estimation and Certification.

Section 903 of Executive Order 12873 requires the elements of an affirmative procurement program to be included into the Federal Acquisition Regulation, including guidance on agency programs for estimation and certification. Therefore, EPA does not anticipate that there would be a cost to Federal agencies for establishing procedures for estimating and certifying the amount of recovered materials utilized in the performance of a contract. In addition, EPA anticipates that State and local governments and contractors would also adopt the estimation and certification procedures established in the Federal Acquisition Regulation, once they are finalized, and, therefore, would incur minimal incremental costs in implementing this requirement.

The actual costs for performing this activity would be the costs incurred by vendors to provide the estimates and certifications required in solicitations and contract documents,

which, as described below, EPA believes would be minimal. The CPG IV requires that vendors estimate the amount of recovered materials used to manufacture a designated item and certify that their product meets or exceeds the procuring agency's minimum recovered materials content standard as specified in a solicitation. Vendors that respond to solicitations and/or are awarded contracts that require them to supply designated items containing recovered materials incur an incremental cost of completing the additional information and documentation required in the solicitation or contract document. Because vendors currently must certify that their products meet all of the other Federal specifications and requirements contained in a bid package or contract document, EPA anticipates that the incremental effort to certify this one additional requirement would be minimal. In addition, the potential impact of the estimation requirement is expected to be minimal because EPA anticipates that vendors would be knowledgeable about the recovered materials content of their products. Therefore, EPA believes that the costs for vendors to estimate and certify the recovered materials content of their products is negligible and therefore, vendors costs were not included in this analysis.

b. Verification.

EPA anticipates that each procuring agency, when establishing its verification procedures, will adopt "reasonable procedures," as specified in the statute, such as requesting written documentation from contractors or relying on submission of third party certifications that state the percentage of recovered materials contained in a designated item. It is possible that a procuring agency could decide to visit a manufacturer to verify the recovered materials content reported in its product. EPA believes that, based on the actions taken by procuring agencies with regard to the existing procurement guidelines, this would occur infrequently, if at all, and, therefore, has not included inspection costs in its estimates.

Federal agencies reported that their verification activities would generally occur in three year cycles. EPA estimates that the total costs to procuring agencies to comply with the verification requirements of CPG IV would be \$8.14 million every three years. These costs include the costs incurred by a procuring agency to reasonably verify the amount of recovered materials utilized in the performance of its contracts. These costs are the incremental costs of verifying compliance with recovered materials content requirements in contracts for CPG IV items only. Costs to verify overall contract compliance are not allocated to CPG IV. EPA's estimates for procuring agencies to complete verification activities are as follows: Federal agencies - \$2.35 million; State governments - \$1.14 million; local governments - \$4.49 million; and contractors \$158,000. Verification costs would be incurred annually starting in Year 2.

i) Federal Agencies Costs

EPA assumed that all 35 Federal agencies would incur verification costs. Using the detailed cost estimates of the six agencies that provided data for the original CPG, EPA estimated that the total costs for the verification activities under CPG IV to be \$1.76 million. For the remaining 29 agencies, EPA estimates verification costs would be \$592,000 every

three years. Information provided by Federal agencies indicated that the estimated costs of this activity tended to increase with the size of the agency. EPA used the following formula in developing verification costs for the remaining 29 Federal agencies:

0.0011 hours per employee per item every three years x 29 agencies x Average of 42,836 employees per agency x 11 items x labor rate of \$39.4 per hour = \$592,000 every three years.⁷

This component uses agency population as a surrogate for size and complexity of Federal agencies. The number of hours per employee per item was developed by adding the hourly estimates submitted by the six Federal agencies. This total was then divided by the total number of employees from those agencies, and again divided by 21 (i.e.; the number of items initially proposed for designation in the first CPG and upon which these six agencies based their estimates).

ii) State Government Costs

EPA assumed that all 56 State governments would incur verification costs. EPA used the following formula in developing verification costs to State governments:

(Costs of \$592,000 every three years for non-reporting Federal agencies / 29 non-reporting Federal agencies) x 56 State governments = \$1.14 million every three years.

iii) Local Government Costs

EPA assumed that local governments would incur verification costs. In calculating these costs for local governments, EPA assumed that local governments would complete their verification requirements by sampling. EPA assumed that each local government would sample one contract in each of five departments for each EPA-designated item every three years. EPA estimated that each contract would require approximately two hours to verify compliance with the CPG-related requirements of the contract. Therefore, EPA used the following formula in calculating verification costs to local governments:

2 hours per employee x 1900 local governments x 5 departments x 1 employee per department x 1 contract per department every three years x 6 items x labor rate of \$39.4 per hour = \$4.49 million every three years.

iv) Contractor Costs

⁷In some instances, the cost estimates and associated formulas reflect cost estimates based on a total of 11 rather than 10 designated items. This is because the final number of items designated under CPG IV dropped from 11 to 10 well after the CPG IV cost estimates were fully developed. Since using 11 items in the cost estimates results in more conservative estimates of the total costs, developing revised cost estimates was deemed unwarranted.

EPA assumed that contractors would incur verification costs. EPA estimates that each contractor would require two hours for this task and that verification would occur every three years, consistent with the three year cycle indicated by Federal agencies. EPA used the following formula in developing verification costs to contractors.

2 hours per contractor x 1000 contractors x 2 items every three years x labor rate of \$39.4 per hour = \$158,000 every three years.

3. Recordkeeping and Reporting

Recordkeeping and reporting requirements apply to Federal agencies only. Activities include obtaining or maintaining data on agency purchases of newly-designated items and annually reporting such data to the Office of Federal Procurement Policy and the Federal Environmental Executive. RCRA Section 6002(g) requires the Office of Federal Procurement Policy to report to Congress every two years on the actions taken by Federal agencies to comply with RCRA Section 6002. In developing this report, OFPP requests information and data from Federal agencies regarding their affirmative procurement programs and related activities. The recordkeeping and reporting costs presented below are the likely costs that would be incurred by Federal agencies to maintain and compile information for and complete the annual OFPP information request using the existing OFPP reporting format (i.e., based on the format used to collect information for fiscal years 1993 and 1994).

EPA estimates that annual costs to Federal agencies to perform recordkeeping and reporting activities would be \$3.59 million. These costs are annual costs and would be incurred starting in Year 2. These costs are the incremental costs of maintaining records and reporting on the items designated in CPG IV only. Total costs to report on an agency's compliance with Executive Order 12873 or general requirements of RCRA Section 6002 or total costs to report on an agency's overall affirmative procurement activities are not allocated to CPG IV.

a. Federal Agency Costs

EPA assumed that all 35 agencies would incur recordkeeping and reporting costs. Using the detailed cost estimates of the six agencies that provided data for the original CPG, EPA estimated that the total costs for the recordkeeping and reporting activities under CPG IV to be \$2.72 million. For the remaining 29 agencies, EPA estimates \$861,000 in annual recordkeeping and reporting costs. Information provided by Federal agencies indicated that the estimated costs of this activity tended to increase with the size of the agency. To estimate training costs for the remaining 29 Federal agencies, EPA used the following formula:

0.0016 hours per employee per item x 29 agencies x Average of 42,836 employees per agency x 11 items x labor rate of \$37.5 per hour = \$861,000.

This component uses agency population as a surrogate for size and complexity of Federal agencies. The number of hours per employee per item was developed by adding the hourly estimates submitted by the six Federal agencies that provided EPA with detailed cost estimates. This total was then divided by the total number of employees from those agencies, and again divided by 21 (i.e.; the number of items initially proposed for designation in the first CPG and upon which these six agencies based their estimates).

Based on information and data submitted by two Federal agencies, EPA estimates that if OFPP revised the current format to request data on purchases made at and above the small purchase threshold and request only anecdotal information on small purchases and bankcard acquisitions, Federal recordkeeping and reporting costs could be reduced by 75 percent.

b. State and Local Government and Contractor Costs

The statute does not require State and local governments or contractors to file reports on their purchases of products containing recovered materials. These entities, however, may be required to report on their compliance with all of the requirements of individual contracts and assistance agreements, perhaps including requirements to purchase designated items. Relative to the overall burden to report on compliance with all aspects of the contracts and assistance agreements, EPA anticipates that the incremental effort to report on compliance with the requirements to buy designated items would be negligible.

IX. PRODUCT COST

Another potential cost of CPG IV is the possible price differential between an item made with recovered materials and an equivalent item manufactured using virgin materials. As discussed in the proposed CPG (59 FR 18859), relative prices of recycled products compared to prices of comparable virgin products vary. In many cases, recycled products may be less expensive than their virgin counterparts. In other cases, virgin products may have lower prices than recycled products. However, other factors can also affect the price of virgin products. For example, temporary fluctuations in the overall economy can create oversupplies of virgin products, leading to a decrease in prices for these items. Under RCRA Section 6002(c), procuring agencies are not required to purchase a product containing recovered materials if it is only available at an unreasonable price. However, the decision to pay more or less for such a product is left to the procuring agency.

X. REGULATORY FLEXIBILITY ANALYSIS

The primary purpose of the Regulatory Flexibility Analysis is to identify if there is an adverse impact to small businesses that are directly regulated by CPG IV and to examine regulatory alternatives that fall within the scope of the statutory requirements that would reduce impacts to small businesses, small organizations, or small governmental jurisdictions

subject to the regulation. The RCRA procurement requirements apply to procuring agencies that procure more than \$10,000 of a designated item. No exemption is included in the statute for small businesses. Therefore, EPA has decided that alternative regulatory approaches for small businesses are not appropriate for CPG IV.

With regard to possible impacts to small businesses, there may be both positive and negative impacts to individual businesses. EPA anticipates that CPG IV will provide additional opportunities for small recycling businesses to begin supplying recovered materials to manufacturers and products made from recovered materials to procuring agencies. In addition, other small businesses that do not directly contract with procuring agencies may be affected positively by the increased demand for recovered materials. These include small businesses involved in materials recovery programs and materials recycling. Municipalities that run recycling programs are also expected to benefit from the increased demand for certain recovered materials.

EPA is unable to determine the number of small businesses that may be adversely impacted by CPG IV. It is possible that if a small business that currently supplies products to a procuring agency uses virgin materials only, CPG IV may reduce its ability to compete for future contracts. However, CPG IV will not affect existing purchase orders, nor will it preclude businesses from adapting their product lines to meet new specification or solicitation requirements for products containing recovered materials. Thus, many small businesses that market to procuring agencies have the option to adapt their product lines to meet specifications.

XI. LIMITATIONS

As stated above, EPA did not have specific data from which to develop its cost estimates for State and local governments and contractors. Although several States commented on the proposed CPG that EPA's proposed estimates of the costs of implementing the CPG were understated, none of these commenters provided data supporting their comments. In addition, no comments were submitted by potentially-affected local governments or contractors. Nor were any further supporting data submitted during the comment period for later CPG releases, either.

Based on its discussions with Federal agencies, EPA determined that State and local governments would most likely incur higher costs than EPA's proposed estimates. Therefore, EPA relied on the information submitted by the Federal agencies, Census data, and, in some instances, EPA's own judgement, in adjusting its estimating factors in order to determine the potential costs of CPG IV on State and local governments and contractors.

APPENDIX 1. -- SUMMARY OF COSTS TO FEDERAL AGENCIES

Costs to Federal Agencies			
Requirement	Reporting Defense Agencies	Reporting Civilian Agencies	Remaining Agencies
Initial Review (First Year Only)	\$21,906	\$25,908	\$308,502
Policy Development, Distribution, and Implementation (First Year Only)	\$434,582	\$128,286	\$342,611
Training (Total Over First 5 Years Only)	\$7,491,358	\$161,185	\$2,476,587
Specification Revision (Total Over First 5 Years Only)	\$349,163	\$1,022,272	\$434,858
Verification (Total Every 3 Years Beginning in Year 2)	\$1,655,233	\$106,932	\$592,227
Recordkeeping and Reporting (Annual Beginning in Year 2)	\$2,429,365	\$295,185	\$861,422

TOTAL ANNUALIZED COSTS WITHOUT RECORDKEEPING AND REPORTING

Defense Agencies - \$1,383,000
 Civilian Agencies - \$738,000

TOTAL ANNUALIZED COSTS WITH RECORDKEEPING AND REPORTING

Defense Agencies - \$2,429,000
 Civilian Agencies - \$1,157,000

APPENDIX 2. -- SUMMARY OF COSTS TO STATE GOVERNMENTS

Costs to State Governments	
Requirement	Costs
Initial Review (First Year Only)	\$596,000
Policy Development, Distribution, and Implementation (First Year Only)	\$662,000
Training (Total Over First 5 Years Only)	\$4,782,000
Specification Revision (Total Over First 5 Years Only)	\$840,000
Verification (Total Every 3 Years Beginning in Year 2)	\$1,144,000

TOTAL ANNUALIZED COSTS - \$1,085,000

APPENDIX 3. -- SUMMARY OF COSTS TO LOCAL GOVERNMENTS

Costs to Local Governments	
Requirement	Costs
Initial Review, Policy Development, Distribution, and Implementation, and Specification Revision (First Year Only)	\$3,072,000
Training (Total Over First 5 Years Only)	\$4,492,000
Verification (Total Every Three Years Beginning in Year 2)	\$4,492,000

TOTAL ANNUALIZED COSTS - \$2,159,000

APPENDIX 4. -- SUMMARY OF COSTS TO CONTRACTORS

Costs to Contractors	
Requirement	Costs
Policy Development, Distribution, and Implementation (First Year Only)	\$158,000
Verification (Total Every Three Years Beginning in Year 2)	\$158,000

TOTAL ANNUALIZED COSTS - \$68,000