

Title 18
ENVIRONMENTAL SUSTAINABILITY PROGRAMS
(formerly ENERGY MANAGEMENT)

Chapters:

- 18.17** Green Building Program.
- 18.20** Recycled Product Procurement Program.
- 18.50** Reporting.

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Chapter 18.17
GREEN BUILDING PROGRAM

- 18.17.010 Definitions (Expires December 31, 2013).
- 18.17.020 Policy (Expires December 31, 2013).
- 18.17.030 Support - management - grant requirements (Expires December 31, 2013).
- 18.17.040 Lighting purchases - energy-efficient-outdoor light pollution reduction.

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18.17.010 Definitions (Expires December 31, 2013). The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

A. "Capital project" refers to a project with a scope that includes one or more of the following elements: acquisition of a site or acquisition of an existing structure, or both; program or site master planning; environmental analysis; design; construction; major equipment acquisition; reconstruction; demolition; or major alteration of a capital asset. A capital project shall include: a project program plan; scope; budget by task; and schedule.

B. "County green building team" or "green building team" means a group that includes representatives from county agencies with capital project or building management staff including, but not limited to, the department of transportation, the department of natural resources and parks, the department of executive services, the department of development and environmental services, the department of public health and the historic preservation program in the office of business relations and economic development. The members represent staff with expertise in project management, construction management, architecture, landscape architecture, environmental planning, design, engineering, historic preservation and resource conservation, public health, building energy systems, building management, budget analysis and other skills as needed. The green building team provides assistance and helps to disseminate information to project managers in all county agencies.

C. "Facility" means all or any portion of buildings, structures, infrastructure, sites, complexes, equipment, utilities and conveyance lines.

D. "GreenTools program" means the support team located within the solid waste division of the department of natural resources and parks that provides green building technical assistance to county divisions, cities and the general public within King County.

E. "Integrated design process" means an approach to project design that seeks to achieve high performance on a wide variety of well-defined environmental and social goals while staying within budgetary and scheduling constraints. It relies on a multidisciplinary and collaborative team whose members make decisions together based on a shared vision and a holistic understanding of the project. It is an iterative process that follows the design through the entire project life, from predesign through operation.

F. "Leadership in Energy and Environmental Design" or "LEED" means a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. A LEED certification is available for: new construction and major renovation projects, which is LEED-NC; existing building operations, which is LEED-EB; commercial interior projects, which is LEED-CI; and core and shell projects, which is LEED-CS. LEED certifications that are in the pilot phase now include LEED for Homes and LEED for Neighborhood Development.

G. "LEED-eligible building" means a new construction project larger than five thousand gross square feet of occupied or conditioned space as defined in the Washington state energy code, which is chapter 51-11 WAC, or a major building remodel or renovation project.

H. "Major remodel or renovation" means work that demolishes space down to the shell structure and rebuilds it with new interior walls, ceilings, floor coverings and systems, when the work affects more than twenty-five percent of a LEED-eligible building's square footage and the affected space is at least five-thousand square feet or larger.

I. "Minor remodel or renovation" means any type of remodel or renovation that does not qualify as a major remodel or renovation.

J. "New construction" means a new building or structure.

K. "Present value" means the value on a given date of a future payment or series of future payments, discounted to reflect the time value of money and other factors such as investment risk.

L. "Retrocommissioning" is a detailed, systematic process for investigating an existing building's operations and identifying ways to improve performance. The primary focus is to identify operational improvements to obtain comfort and energy savings.

M. "Sustainable development practices" means whole system approaches to the design, construction and operation of buildings and infrastructure that help to mitigate the negative environmental, economic, health and social impacts of construction, demolition, operation and renovation while maximizing the facilities' positive fiscal, environmental and functional contribution. Sustainable development practices recognize the relationship between natural and built environments and seek to minimize the use of energy, water and other natural resources while providing maximum benefits and contribution to service levels to the system and the connecting infrastructures.

N. "Sustainable infrastructures" means those infrastructures and facilities that are designed, constructed and operated to optimize fiscal, environmental and functional performance for the lifecycle of the facility. Sustainable performance of infrastructure shall be determined through an integrated assessment, one that accounts for fiscal, environmental and functional costs and benefits, over the life of the facility. (Ord. 17166 § 4, 2011; Ord. 16147 § 2, 2008. Formerly K.C.C. 2.95.005).

18.17.020 Policy (Expires December 31, 2013).

A. The intent of this policy is to ensure that the design, construction, maintenance and operation of any King County-owned or financed capital project is consistent with the latest green building and sustainable development practices.

B. This policy applies to all King County-owned or lease-to-own capital projects, excluding projects that have already completed thirty percent of the design phase by June 23, 2008.

C. All capital projects to which this chapter applies shall utilize relevant LEED criteria to implement sustainable development practices in planning, design, construction and operation as set forth in this chapter.

D. All LEED-eligible new construction and major remodels and renovations shall be registered through the United States Green Building Council and should plan for and achieve a LEED Gold certification, as long as a Gold certification can be achieved with no incremental cost impact to the current expense fund over the life of the asset and an incremental cost impact of no more than two percent to other funds over the life of the asset, as compared to a project that is not seeking a LEED rating. At or before the project has reached thirty percent of the design phase, the project team shall conduct an analysis that determines the incremental costs for achieving a LEED Gold rating as compared to a building that is not seeking a LEED rating. The analysis shall include the up-front incremental construction costs, the up-front costs of registration and certification and the present value of operations and maintenance cost savings over the life of the asset. For the purposes of this analysis, operations and maintenance cost savings shall be comprised of projected costs the county will incur over the life of the asset. The costs included in this analysis shall be quantifiable, documented and verifiable by third-party review upon project completion and thereafter.

At thirty percent of the design phase, the project team shall also provide a summary discussion of the LEED points that the project will achieve and the LEED points that are technically infeasible for the project to obtain.

For projects achieving a LEED rating, the project team shall ensure that energy efficiency is given the highest priority. Project teams shall submit a completed LEED checklist, which documents which LEED points the project team expects to achieve, to the green building team, initially at the schematic or thirty percent design phase of the project and then at the completion of the project.

If it is determined that costs are too high to achieve a LEED Gold rating, or that the project is unable to achieve that rating for technical reasons, projects shall achieve the highest rating possible with no incremental cost impact to the current expense fund over the life of the asset and an incremental cost impact of no more than two percent to other funds over the life of the asset as compared to a project not achieving a LEED rating. There may be extenuating circumstances for some LEED-eligible projects that make it cost prohibitive to achieve any level of LEED certification. These projects must submit a written summary to the director of the department managing the project for approval, documenting the reasons why the project is not getting a LEED certification.

E. All capital projects, where the scope of the project or type of structure limits the ability to achieve LEED certification, shall incorporate cost-effective green building and sustainable development practices based on relevant LEED criteria and other applicable sustainable development goals and objectives. These projects shall use a project scorecard that is to be developed by the green building team, along with guidelines for using the scorecard. The project scorecard and guidelines will be developed by the green building team in conjunction with divisions that have capital project or building management staff and the GreenTools technical support team. Project teams shall submit a completed project scorecard to the green building team, initially at the schematic or thirty percent design phase of the project and then at the completion of the project. For small, related capital projects with construction costs of less than seven hundred and fifty thousand dollars each that are implemented as part of a program, the project scorecard and reporting requirements may be done for the program rather than for each individual small project.

F. For those projects which only involve making either renewable energy improvements or energy efficiency improvements, or both, at or before the project has reached thirty percent of the design phase, the project team shall conduct an analysis that determines the incremental costs of making such improvements. The costs to be included in this analysis shall include the up-front incremental construction costs and the present value of the operations and maintenance cost savings over the life of the asset. For the purposes of this analysis, operations and maintenance cost savings shall be comprised of projected costs the county will incur over the life of the asset. The costs included in this analysis shall be quantifiable, documented and verifiable by third-party review upon project completion and thereafter.

G. To help achieve a standard level of green building operations in existing buildings, the green building team, in coordination with divisions that have capital project or building management staff and the GreenTools technical support team, shall develop a set of both mandatory and recommended green building operational guidelines for divisions to incorporate into their facility operations procedures. The guidelines shall provide direction on the use of green practices in minor remodels and renovations, water and energy conservation, waste reduction and recycling expectations, green cleaning standards and retrocommissioning to improve a facility's operating performance.

H. No later than January 31 of each year, all divisions responsible for capital improvement projects or building management shall submit a report to the department of natural resources and parks, detailing the green building and sustainable development accomplishments for the previous year. Information to be submitted shall include, but not be limited to:

1. The total number of capital projects a division is responsible for; number of LEED projects and other sustainable development projects, such as historic restoration and adaptive reuse, and their status;
2. The additional costs associated with achieving LEED certification;
3. The total number of non-LEED projects that have completed a sustainable development scorecard;
4. The green strategies employed;
5. The operations and maintenance costs for all completed projects incorporating green building principles and practices and projects incorporating renewable energy or energy efficiency components, as well as the operations and maintenance costs that were projected before construction;
6. The reductions in greenhouse gas emissions;
7. The construction waste recycled; renewable resources used;
8. The green materials used; and
9. The fiscal performance of all projects incorporating green building principles and practices including an accounting of all project costs and benefits that can be quantified, documented and verified.

I. The executive shall report on the progress of implementing K.C.C. 18.17.020 in accordance with K.C.C. 18.50.010.

J. The green building team shall coordinate and share information about the use of sustainable development practices countywide and, with assistance from the GreenTools program, develop tools and training for project managers to implement this legislation. Its role includes:

1. Helping to assess regionally appropriate green building and sustainable development practices;
2. Developing regionally appropriate building and infrastructure design standards and guidelines;
3. Developing tools and procedures for assessing life-cycle fiscal, environmental and functional costs and benefits;
4. Convening and facilitating sustainable development planning and charrette workshops;
5. Evaluating performance of projects and facilities, including conducting post occupancy surveys, energy and water use audits and evaluating benefits realized; and
6. Tracking and reporting progress on implementation of green building and sustainable development practices.

K. Each division with capital project or building management staff shall designate one or more green building team member or members. The team member is expected to regularly attend meetings and actively participate in disseminating sustainable development practices information back to the respective division. Green building team members should also receive either specialized training or additional training, or both, in green building design and should be encouraged to achieve the LEED Accredited Professional designation, as appropriate.

L. County capital improvement project managers that are currently managing or will manage projects that fit the criteria in subsections D. and E. of this section are responsible for attending appropriate LEED and sustainable development training and annual refresher courses. Trainings shall be coordinated by the green building team.

M. The GreenTools program shall provide technical support for the county green building team and to cities and the general public in the county as appropriate, including, but not limited to, training on LEED and other green building and sustainable development technologies, research, project review, assisting with budget analysis and convening groups to develop strategies and policies relating to green buildings and sustainable infrastructures.

N. The preservation, restoration and adaptive reuse of existing buildings is an important green building strategy because historic preservation is, in itself, sustainable development. As part of the county green building strategy, the county shall preserve and restore the historic landmarks and properties eligible for landmark designation that are owned by the county, except in cases where a certificate of appropriateness is granted by the King County landmarks commission. Projects involving designated landmarks or properties that are eligible for landmark designation shall seek to maximize green building strategies such as natural daylighting and passive ventilation. However, the King County landmarks commission or other applicable regulatory body may waive requirements of this section upon issuing findings that strict compliance with this chapter would adversely affect the historic character of the resource in question, or that there are no feasible alternatives for preservation. (Ord. 17166 § 6, 2011; Ord. 16147 § 3, 2008. Formerly K.C.C. 2.95.015).

18.17.030 Support - management - grant requirements (Expires December 31, 2013).

A. The department of natural resources and parks shall continue the green building grant program established to provide incentives to the private sector, nonprofit organizations and suburban cities to adopt green building and sustainable development practices.

B. Grant funding shall be supported by the solid waste division, the water and land resources division and the wastewater treatment division. Other county department and divisions may also participate in the grant program. Grant funding shall be identified annually, consistent with approved funding of each division's annual budget.

C. Grant funds shall be managed by the GreenTools program in cooperation with the wastewater treatment and water and land resources divisions.

D. Green building grant funding may go to residential or commercial projects that meet a discrete set of eligibility requirements, are in the service area of the division providing the grant funding and are selected in a competitive award process. Grant projects must provide educational opportunities to the public to increase the awareness and benefits of green building and sustainable development in King County. (Ord. 17166 § 8, 2011; Ord. 16147 § 4, 2008. Formerly K.C.C. 2.95.025).

18.17.040 Lighting purchases - energy-efficient-outdoor light pollution reduction.

A. King County shall purchase the most cost-effective and energy-efficient lighting feasible and seek available financial incentives from appropriate entities, including but not limited to utilities.

B. All lighting purchases for the county for which there is a federal efficiency standard established in 10 CFR Sec. 430.32 (2009) shall meet or exceed those energy efficiency standards to the maximum extent feasible. The department director or designee shall make the determination as to whether it is feasible to meet these standards. In making a determination concerning the feasibility of installing lighting that complies with the federal efficiency standards, the department director or designee shall consider:

1. The life-cycle cost effectiveness of the lighting
2. The compatibility of the lighting with existing equipment;
3. Whether use of the lighting could result in interference with productivity or safety, and
4. The aesthetics relating to the use of the lighting.

C. Any new outdoor lighting installed on a county facility, that has output greater than one thousand eight hundred lumens must be fully shielded, except as exempted in subsection E. of this section. For the purposes of this section, "fully shielded" means the outdoor lighting fixture is one in which all light rays are projected below a horizontal plane running through the lowest point on the fixture where light is emitted.

D. Beginning July 1, 2015, all replacement lighting with output greater than one thousand eight hundred lumens on county facilities must be fully shielded, except as exempted in subsection E. of this section.

E. An action for reducing light pollution shall not be implemented if it is determined by the department director or designee that the action will reduce lighting deemed necessary for public safety. Further, the following lighting categories are exempted from this section:

1. Temporary lighting for construction projects;
2. Temporary emergency lighting used by police, fire departments or other emergency services;
3. Hazard warning lights required by federal law and regulatory agencies;
4. Seasonal and decorative lighting displays that use multiple low wattage bulbs
5. Navigation lights used for marine and aviation safety;
6. Historical buildings that meet the requirements of RCW 19.27.120
7. Road lighting if shielded lighting is in conflict with state or federal requirements;
8. Ball field lights, but only if the department of natural resources and parks has taken steps to minimize glare and light trespass; and
9. Exit signs, lighting for stairs and ramps. (Ord. 17166 § 8, 2011; Ord. 16769 1, 2010. Formerly K.C.C. 2.95.035).

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Chapter 18.20
RECYCLED PRODUCT PROCUREMENT POLICY

Sections:

- 18.20.010 Purpose.
- 18.20.020 Policies.
- 18.20.030 Double-sided printing - responsibility for setting defaults.
- 18.20.040 Rules and regulations for procurement of paper products.
- 18.20.050 Computer and electronic equipment recycling by departments - standards.
- 18.20.060 Rules and regulations for procurement of lubricating and fuel oils.
- 18.20.070 Responsibilities of departments.
- 18.20.080 Solid waste division responsibilities.
- 18.20.090 Procurement and contract services section responsibilities.
- 18.20.100 Exemptions.

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18.20.010 Purpose. The purpose of this chapter is to ensure that King County agencies purchase recycled and other environmentally preferable products whenever the products meet the price and performance requirements of the county. (Ord. 17166 § 10, 2011: Ord. 14811 § 26, 2003: Ord. 9240 § 1, 1989. Formerly K.C.C. 10.16.010).

18.20.020 Policies.

- A. Departments shall buy recycled and other preferable products whenever practicable.
- B. The county shall require its contractors and consultants to use recycled and other environmentally preferable products whenever practicable.
- C. The county shall promote the use of recycled and other environmentally preferable products by publicizing its environmental purchasing policy and its implementation, consistent with this chapter. (Ord. 17166 § 10, 2011: Ord. 15912 § 29, 2007: Ord. 14811 § 27, 2003: Ord. 9240 § 2, 1989. Formerly K.C.C. 10.16.020).

18.20.030 Double-sided printing - responsibility for setting defaults.

- A. The office of information resource management is responsible for assisting executive departments in setting printers and printing preferences to double sided as the default setting.
- B. Information technology service units in non-executive departments are responsible for assisting their respective departments in setting printers and printing preferences to double sided as the default setting. (Ord. 17166 § 10, 2011: Ord. 17074 § 1, 2011. Formerly K.C.C. 10.16.055).

18.20.040 Rules and regulations for procurement of paper products.

- A. Beginning on or before January 1, 2012, and continuing thereafter, departments shall buy one-hundred-percent recycled paper for copy paper useage and purchase one-hundred-percent recycled paper for other printing needs whenever practicable, as determined by the department of executive services considering relevant factors, including availability and pricing.
- B. Departments shall use recycled paper for all imprinted letterhead paper and business cards.
- C. Departments shall publicize the county's use of recycled paper by including a recycling logo and an indication of recycled content on all printed material, to the extent practicable.
- D. Departments shall set printers and copiers to double-sided as the default setting and ensure that personal computer printing preferences also default to double-sided printing, and begin implementation of other paper conservation strategies by January 1, 2012, in an effort to achieve a twenty percent reduction in copy paper usage in 2013 as compared to 2010 usage.
- E. Departments shall require all contractors or consultants submitting proposals, reports and invoices to use recycled paper and use both sides of sheets of paper whenever practicable, when paper copies are required. (Ord. 17166 § 10, 2011: Ord. 17074 § 2, 2011: Ord. 15912 § 31, 2007: Ord. 14811 § 30, 2003: Ord. 9830 § 2, 1991: Ord. 9240 § 6, 1989. Formerly K.C.C. 10.16.060).

18.20.050 Computer and electronic equipment recycling by departments - standards.

A. Departments shall use recyclers that meet the Basel Action Network e-Stewards Standard for Responsible Recycling and Reuse of Electronic Equipment or comparable standard for all their nonworking computer and electronic equipment. These standards must include, but are not limited to:

1. Demonstrating that no hazardous e-waste is exported to a country that is not a member of the Organisation for Economic Cooperation and Development for refurbishment or recycling;
2. No prison or child labor are used in the recycling process;
3. Safe on-site handling of hazardous e-waste and monitoring of workplace toxins; accountability for the entirety of toxic materials throughout the downstream recycling chain; and
4. Provision of site-closure plans for those sites associated with recycling processes where potentially hazardous processing technologies have been used.

B. For the purposes of this section, computers and electronic equipment includes, but is not limited to, monitors, televisions, central processing units, circuit boards, power supplies, laptop computers, peripherals, video cassette recorders, digital video discs, cables, keyboards, mice, fax machines, printers, cell phones, telephones and stereos.

C. The procurement and contract services section of the department of executive services will ensure that an electronics recycling contract is available for all King County agencies to use. In preparing such an electronics recycling contract, the procurement and contract services section shall assure that standards other than the e-Stewards standards used by recyclers have been determined by the solid waste division of the department of natural resources and parks to be comparable. (Ord. 17166 § 10, 2011: Ord. 17085 § 2, 2011. Formerly K.C.C. 10.16.075).

18.20.060 Rules and regulations for procurement of lubricating and fuel oils.

A. Departments shall purchase environmentally preferable oils whenever practicable.

B. When department specify rerefined lubricating oil in procurements, they shall purchase rerefined oil if the price is no more than ten percent higher than the price of nonrerefined oil. (Ord. 17166 § 10, 2011: Ord. 14811 § 31, 2003: Ord. 9240 § 9, 1989. Formerly K.C.C. 10.16.090).

18.20.070 Responsibilities of departments. All departments are responsible for:

A. Assigning appropriate personnel to evaluate opportunities for buying recycled and other environmentally preferable products reflected in federal guidance or communicated by the procurement and contract services section;

B. Purchasing recycled and other environmentally preferable products whenever practicable; and

C. Reporting evaluation results and purchases of recycled and other environmentally preferable products to the procurement and contract service section by February 28 of each year

D. Educating employees in paper conservation practices and implementing paper reduction strategies, such as increasing use of electronic drafts, and reducing the standard number of document copies wherever practicable.

E. Working with the appropriate information technology service units and copier service providers to ensure printing and copying preferences are set to double sided as the default setting. (Ord. 17166 § 10, 2011: Ord. 17074 § 3, 2011: Ord. 15912 § 32, 2007: Ord. 14811 § 32, 2003: Ord. 9240 § 16, 1989. Formerly K.C.C. 10.16.160).

18.20.080 Solid waste division responsibilities. The solid waste division is responsible for:

- A. Providing information and technical assistance to local governments, schools, colleges and other public and private organizations to increase their purchase of recycled and other environmentally preferable products;
- B. Preparing press releases and fact sheets publicizing the successes of the program;
- C. Assisting the procurement and contract services section in fulfilling its responsibilities under this chapter; and
- D. Providing technical assistance to county departments in evaluating paper reduction strategies and educating employees in implementing paper conservation measures. (Ord. 17166 § 12, 2011: Ord. 17074 § 4, 2011: Ord. 15912 § 33, 2007: Ord. 9240 § 17, 1989. Formerly K.C.C. 10.16.170).

18.20.090 Procurement and contract services section responsibilities. The procurement and contract services section is responsible for:

- A. Assigning appropriate personnel to fulfill the requirements of this policy;
- B. Preparing or revising bid documents and contract language where necessary to implement this chapter;
- C. Researching opportunities for procurement of recycled and other environmentally preferable products and communicating these to appropriate county departments for evaluation and purchase;
- D. Collecting data on purchases by departments of recycled and other environmentally preferable products; and
- E. Preparing information and staff support as necessary for the preparation of the report required in K.C.C. 18.50.010. (Ord. 17166 § 14, 2011: Ord. 17085 § 4, 2011: Ord. 14811 § 35, 2003: Ord. 9240 § 18, 1989. Formerly K.C.C. 10.16.180).

18.20.100 Exemptions. Nothing in this chapter shall be construed as requiring a department or contractor to procure products that do not perform adequately for their intended end use or are not available at a reasonable price in a reasonable period of time. (Ord. 17166 § 15, 2011: Ord. 9240 § 19, 1989. Formerly K.C.C. 10.16.190).

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**Chapter 18.50
REPORTING**

Sections:

18.50.010 Annual report.

18.50.010 Annual report. The executive shall transmit by June 30 of each year a report on the county's major environmental sustainability programs intended to reduce energy use, climate emissions and resource use. The executive shall transmit the report to council, filed in the form of a paper original and an electronic copy with the clerk of the council, who shall retain the original and provide an electronic copy to all councilmembers, the council chief of staff and the lead staff for the transportation economy and environment committee or its successor. The report shall cover the climate change, energy, green building and environmental purchasing programs. For each of these programs, the executive shall describe the major accomplishments and include a summary of performance relative to key environmental goals and indicators, challenges and opportunities and recommendations. The report shall be structured in a way that links actual performance to established goals and indicators and can guide policy choices, program priorities, and investments in capital projects. The report should address the following:

- A. The climate change program, including:
 - 1. The greenhouse gas emissions reduction targets for both county government operations and the county as a whole and actions to reduce operational and community scale greenhouse gas emissions; and
 - 2. Specific climate mitigation and adaptation strategies, performance measures and targets;
- B. The energy program, including energy targets established in the 2010 Energy Plan;
- C. The green building program, including:
 - 1. The total number of capital projects for which a division is responsible, and the number of LEED projects and other sustainable development projects, such as historic restoration and adaptive reuse, and their status;
 - 2. The additional costs associated with achieving LEED certification;
 - 3. The total number of non-LEED projects that have completed a sustainable development scorecard;
 - 4. The green strategies employed;
 - 5. The operations and maintenance costs for all completed projects incorporating green building principles and practices and projects incorporating renewable energy or energy efficiency components, as well as the operations and maintenance costs that were projected before construction;
 - 6. The reductions in greenhouse gas emissions;
 - 7. The construction waste recycled; renewable resources used;
 - 8. The green materials used; and
 - 9. The fiscal performance of all projects incorporating green building principles and practices including an accounting of all project costs and benefits that can be quantified, documented and verified; and
- D. The environmental purchasing program, including:
 - 1. Quantities, costs and types of recycled and other environmentally preferable products purchased, and quantities of computers and electronics recycled;
 - 2. A summary of savings achieved through the purchase of recycled and other environmentally preferable products;
 - 3. A summary of program promotional efforts; and
 - 4. Recommendations for changes in procurement policies. (Ord. 17166 § 2, 2011).

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