



PURCHASING - RISK ANALYSIS
FCS06-0001-2000

Snohomish County
Performance Audit Division

Report - Risk Assessment

Issued to:

PERFORMANCE AUDIT COMMITTEE

January 30, 2001

Issued By:

Performance Audit Division



Snohomish County
Auditor's Office
Performance Audit Division

To: Performance Audit Committee
From: Dean Ritchhart
Date: January 30, 2001
Subject: Purchasing - Risk Assessment

Bob Terwilliger
County Auditor

Carolyn Ableman
Chief Deputy Auditor

M/S #505
3000 Rockefeller Avenue
Everett, WA 98201-4059
(425) 388-3006
FAX (425) 259-2777

This report by Martin T. Stadel presents the results of our review and analysis of Purchasing - Risk Analysis (FCS06-0010-2000). As defined by the January 6, 2000 Performance Committee meeting minutes, the primary project objective was... "focus on doing a Risk Analysis report in the general areas of purchasing to identify areas for further study or auditing."

Our approach was to review current County code and budgeted and actual expenditures for supplies during the past several years, and to research and provide a risk assessment as it pertains to the purchasing function.

We are providing the Committee four recommendations of areas which merit further consideration for additional reviews. In addition, we are providing two recommendations for increased Performance Audit Division involvement. Reviews such as this provide the Performance Audit Committee quantifiable risk assessments, and allow the Committee additional knowledge so they can best utilize limited audit resources.

Finally, we wish to acknowledge the efforts of the Purchasing Manager and Budget and Finance staff who provided assistance in our data collection requirements.



Table of Contents

Management Letter	i
Introduction	1
1. Project Objectives and Scope	2
2. Questions to be Answered.....	2
Background	3
Managing Risk in Purchasing.....	6
1. Definition of Risk	6
2. Risk Management Responsibility	6
3. Preconditions Necessary to Manage Purchasing Risk	6
4. Risk Assessment Responsibility.....	7
5. Risk Assessment Process - Auditable Activities	7
6. Risk Assessment Process - Classifying Priorities	7
7. Risk Assessment Process - Identify Review Areas	8
Findings and Conclusions.....	8
1. County Purchasing Code.....	8
2. Corrections and Juvenile Services Best Practices.....	8
3. Departmental Budgeting Practices.....	8
Areas for Further Consideration.....	10
1. Update Snohomish Code - SCC 3.04.....	10
2. Public Works.....	10
3. Corrections and Juvenile Services.....	10
4. Auditor and Information Services.....	11
5. Formal Role for the Performance Audit Division.....	11
6. Review of County-Wide Budgeting Process	11

Table of Exhibits


Exhibit 1	Initial Risk Assessment	1
Exhibit 2	Organization Chart - Snohomish County	3
Exhibit 3	General Fund Expenditures 1997 - 2001.....	4
Exhibit 4	Supplies Budgeted (General and Non-General) 1997 - 2001.....	4
Exhibit 5	Budgeted Supplies by Department (1998 - 2000 All Funds).....	5
Exhibit 6	General Fund Purchases - Actual vs. Adopted Budget (1995 - 1999)...	9
Exhibit 7	Non-General Fund - Actual vs. Adopted Budget (1995 - 1999).....	9
Exhibit 8	Dollar and Percentage Difference Between Actual and Adopted Budgets (1995 - 1999)	10



I. Introduction

As an ongoing process, the Performance Audit Division conducts risk assessments to identify and prioritize potential areas for review which, if approved by the Performance Audit Committee, are subsequently incorporated in our annual audit plan. While developing its year 2000 work plan in April 1999, the Performance Audit Division conducted an initial risk assessment of County purchasing practices and potential risk exposure. This assessment (below) indicated a potential risk which merited additional review.

Exhibit 1: Initial Risk Assessment



**Proposal to Review Snohomish County
Policies/Procedures on Purchasing**

- **The 1999 County Adopted Budget is \$494M; \$18.8M planned to buy supplies**
 The Snohomish County Adopted Budget shows the 1999 General Fund to be \$129 million of which the county is budgeted to spend \$4.1 million on supplies and \$363 thousand for small-capitalized items. The 1999 non-general fund totals \$365 million of which \$14.4 million are for supplies and small-capitalized items. In total, the county will spend \$18.8 million for general supplies and small-capitalized items.
- **Supply buys are now decentralized; may be duplicate/unnecessary purchasing**
 Several years ago, the county converted from a central stores purchasing of supplies to a more efficient and cost effective decentralized approach. However, supplies are purchased within department/divisions independently and perhaps with little coordination either within or between departments. While departments have direct control, this approach increases the likelihood of duplicate purchasing resulting in greater inventoried quantities than normal operations require.
- **County supply purchasing code is outdated**
 Decentralized purchasing is more efficient than the central stores concept, but county code is still written using a central store concept. At a minimum, County policy should be reviewed and updated to reflect current policies and procedures.
- **Might save 5% a year; annual savings of \$900 thousand**
 In any expenditure review, there exists an opportunity to examine procedures and recommend small changes which might reduce costs. Assuming 5% improvement through improved efficiency, reduction of redundant inventory and better processes would translate into annual savings of \$900 thousand.
- **Supply Purchasing Breakdown**

<i>\$Millions</i>	
General Fund - Supplies	\$ 4.1
General Fund - Small Capitalized Items	.4
Road Fund	7.4
Solid Waste	.8
Surface Water Management	.1
Equipment Rental & Replacement	5.5
Airport	.3
Planning & Development Services	.2
Total	<u>\$18.8</u>



Original project objectives were developed and initially submitted to the Performance Audit Committee on August 19, 1999 recommending a complete purchasing audit. After review and ongoing deliberation, the Committee at its January 6, 2000 meeting revised the project scope and designated a purchasing risk assessment analysis.

Due to this change in project scope, the original, more detailed project objectives and questions appeared to be in conflict with the revised project's purpose. The January 6th meeting minutes note the Committee resolved that conflict as they state, "It was decided to focus on doing a Risk Analysis report in the general area of purchasing to identify areas for further study or auditing."

During the meeting, the Committee authorized review of the County's purchasing practices and procedures, and delineated the following study purpose:

During the Performance Audit Committee meeting held on January 6, 2000, it was disclosed that "Snohomish County's 1999 Adopted Budget totaled \$494 million; purchasing of supplies and minor equipment accounted for \$18.8 million. Review County's policies and procedures to identify levels of risk and if and where audit effort should be focused."

Project Objectives and Questions To Be Answered were as follows:

PROJECT OBJECTIVES AND SCOPE:

- To review, test and evaluate purchasing policies, systems, and practices, and their related accounts payable processes (sample basis).
- To review and evaluate adequacy of current internal controls (sample basis).
- Determine if the County appears to be in compliance with current codes and regulations.
- Estimate risk exposure and determine if closer monitoring activities (audit projects or control systems) could result in benefits to the county.

QUESTIONS TO BE ANSWERED:

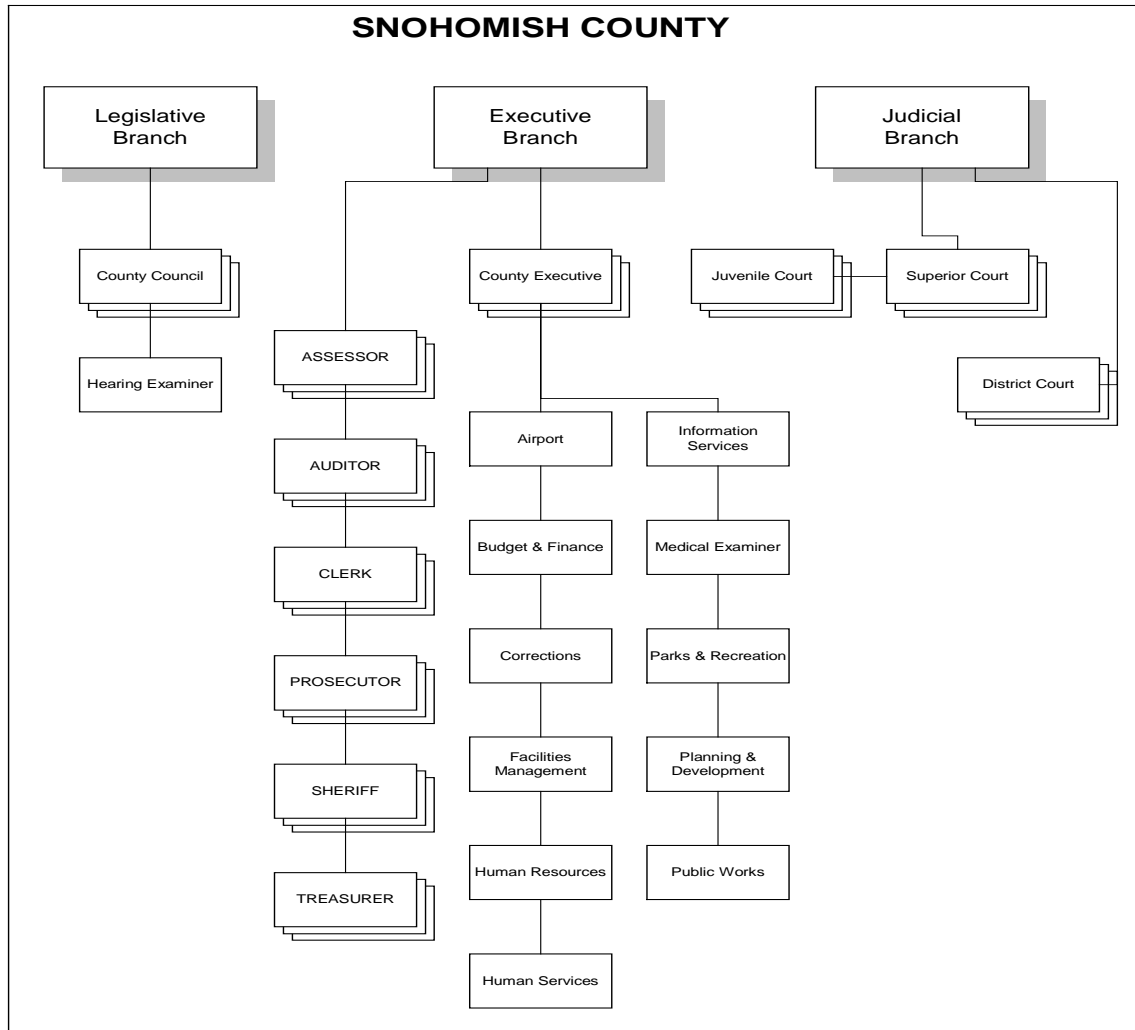
- Are the County's policies and procedures reasonably documented and current?
- Do current practices reflect County code?
- Who (organizationally) is responsible for monitoring vendor contract compliance?
- What security measures are in the system and who is authorized to set up or change vendor information?
- Are the internal controls documented and how do they impact the decentralized purchasing systems?

As requested by the Committee, this risk analysis report is being submitted to the Committee to aid them in determining appropriate audit focus. The report is not a complete subject area audit, but it does identify areas for further review.

II. Background

The following chart depicts Snohomish County's organization and reporting structure.

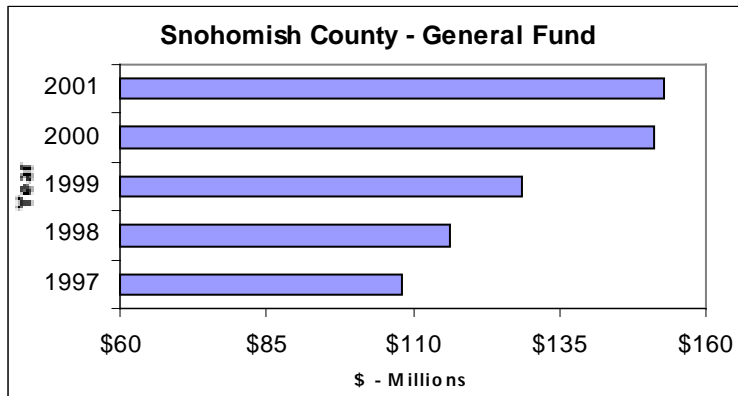
Exhibit 2: Organization Chart - Snohomish County



Total County expenditures have increased steadily over the past five years. The Adopted Budget for the General Fund has grown from \$108 million in 1997 to the proposed Adopted Budget of \$153 million for 2001. The majority of the increases have been to fund the Law & Justice portion of the budget, and Law & Justice expenditures increased from 57% of the General Fund (1997) to its current 2001 projection of 66%.



Exhibit 3: General Fund Expenditures 1997 - 2001



During this same period, expenditures for supplies (Adopted Budget-General Fund) ranged from \$2.9 million for 1997 to a high of \$4.7 million for 2000. However, the 2001 adopted budget shows a decline to \$3.6 million. (See Exhibit 4.)

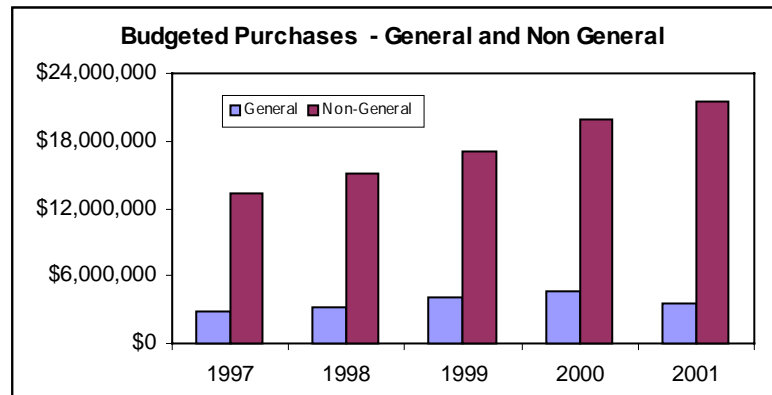
Source: Snohomish County Adopted Budgets 1997 - 2001

The majority of these purchases are for everyday supplies such as paper, pens etc. Per discussions with the Finance Department, the increase between 1999 to 2000 results from Corrections restocking of their operations.

The majority of supplies are expended for Public Works construction projects. The magnitude of these expenditures can be viewed by looking at supplies budgeted in General and Non-General Funds.

Exhibit 4: Supplies Budgeted (General and Non-General) 1997 -2001

While General Fund supply purchases remained relatively flat, supplies for Non-General funds show a budgeted increase from \$13.3 million in 1997 to a 2001 projection of \$21.5 million.



Source: Snohomish County Adopted Budgets 1997 - 2001

Each County operations department consumes supplies to perform their assigned functions. For example, in Public Works, supplies directly correlate with the amount of construction projects. In the Auditor's office, supplies correlate with the number of elections held. One approach to determine risk is to review the magnitude of expenditures. The following table shows all supplies budgeted by department for all funds for 1998 through 2000.



Exhibit 5: Budgeted Supplies by Department (1998 - 2000 All Funds)

Fund	Department	1998	1999	2000	2000 FTE	Supplies/FTE
01	Executive	\$ 11,518	\$ 11,518	\$ 10,680	15.000	\$ 712
02	Legislative	\$ 13,625	\$ 13,625	\$ 23,552	21.900	\$ 1,075
03	Board of Equalization	\$ 3,033	\$ 3,033	\$ 3,033	2.875	\$ 1,055
04	Human Services	\$ 158,861	\$ 163,629	\$ 163,828	126.579	\$ 1,294
05	Planning	\$ 190,821	\$ 195,427	\$ 212,222	228.625	\$ 928
06	Public Works	\$ 12,027,114	\$ 14,028,253	\$ 16,877,961	629.250	\$ 26,822
07	Hearing Examiner	\$ 4,881	\$ 4,881	\$ 5,081	3.750	\$ 1,355
08		\$ -	\$ -	\$ -	-	\$ -
09	Parks & Recreation	\$ 340,412	\$ 368,665	\$ 425,302	64.850	\$ 6,558
10	Assessor	\$ 122,000	\$ 72,000	\$ 68,000	69.000	\$ 986
11	Auditor	\$ 581,224	\$ 907,135	\$ 1,084,135	49.750	\$ 21,792
12	Budget & Finance	\$ 32,785	\$ 32,785	\$ 38,985	39.875	\$ 978
13	Human Resources	\$ 37,252	\$ 40,154	\$ 27,854	19.875	\$ 1,401
14	Information Services	\$ 1,946,391	\$ 2,009,541	\$ 2,035,710	84.400	\$ 24,120
15		\$ -	\$ -	\$ -	-	\$ -
16	Nondepartmental	\$ 1,250	\$ 1,250	\$ 1,250	6.000	\$ 208
17	Debt Service	\$ -	\$ -	\$ -	-	\$ -
18	Facilities Management	\$ 127,867	\$ 165,758	\$ 180,492	33.000	\$ 5,469
19		\$ -	\$ -	\$ -	-	\$ -
20	Pass Through Grants	\$ -	\$ -	\$ -	-	\$ -
21	Airport	\$ 330,000	\$ 330,000	\$ 350,000	41.000	\$ 8,537
22	Treasurer	\$ 81,422	\$ 67,422	\$ 70,422	31.500	\$ 2,236
23		\$ -	\$ -	\$ -	-	\$ -
24	District Court	\$ 88,265	\$ 94,085	\$ 112,636	84.000	\$ 1,341
25		\$ -	\$ -	\$ -	-	\$ -
26		\$ -	\$ -	\$ -	-	\$ -
27		\$ -	\$ -	\$ -	-	\$ -
28		\$ -	\$ -	\$ -	-	\$ -
29		\$ -	\$ -	\$ -	-	\$ -
30	Sheriff	\$ 308,663	\$ 297,073	\$ 314,967	303.000	\$ 1,039
31	Prosecuting Attorney	\$ 139,434	\$ 180,159	\$ 278,246	167.000	\$ 1,666
32		\$ -	\$ -	\$ -	-	\$ -
33	Medical Examiner	\$ 22,500	\$ 22,500	\$ 40,000	13.000	\$ 3,077
34		\$ -	\$ -	\$ -	-	\$ -
35	Superior Court	\$ 86,757	\$ 93,590	\$ 91,590	57.000	\$ 1,607
36	Juvenile Services	\$ 113,364	\$ 118,339	\$ 134,151	163.600	\$ 820
37	Clerk	\$ 119,160	\$ 96,671	\$ 97,971	83.275	\$ 1,176
38	Corrections	\$ 1,326,008	\$ 1,879,188	\$ 2,017,212	246.700	\$ 8,177
	Totals	\$ 18,214,607	\$ 21,196,681	\$ 24,665,280	2,584.804	\$ 9,542

Source: Adopted Budgets

Exhibit 5 shows the following departments made the majority of supply purchases budgeted for 2000:

<u>Department</u>	<u>Amount</u>	<u>Percent of Total</u>
Public Works	\$16,877,961	68.43%
Information Services	2,035,710	8.25
Corrections	2,017,212	8.18
Auditor	1,084,135	4.40



Based on the supply purchase amounts, a risk assessment was deemed necessary. Generally speaking, it is good practice to identify potential risks in daily work operations, be it contracting, law & justice, recording, or purchasing, and manage those risks. Risk assessment aids risk management and results in improved decision making that maximizes opportunities and minimizes losses associated with specific work activities.

III. Managing Risk in Purchasing

DEFINITION OF RISK

The fundamental definition of risk is "the chance of something happening that will have an impact upon objectives." This can be seen as:

$$\text{RISK} = \text{Consequence} \times \text{Probability}$$

- **Consequence:** defined as the outcome of an event or situation.
- **Probability:** defined as the likelihood of a specific outcome happening.

As stated earlier, the impact upon objectives may be potential loss, physical damage, injury or delays. Normally, impacts relate to adverse elements, but impacts can also be positive.

Risk is inherent in most work related activities. These activities range from managing a project to buying equipment or working with contractors and vendors. Benefits from implementing a risk management program range from saving lives to reducing injury, saving money, minimizing uncertainty, reducing employee stress, and developing more efficient operations.

RISK MANAGEMENT RESPONSIBILITY

Managing risk associated with the purchase of goods and services is part of the broader risk management strategy management is required to develop. Without proper management oversight, the potential for poor purchasing decisions can adversely impact a department's operations. Risk management is a tool which helps make better purchasing decisions and controls.

PRECONDITIONS NECESSARY TO MANAGE PURCHASING RISKS

To have a successful risk management system for purchasing, the following areas should be developed and incorporated:

- Risk management integrated into the purchasing process.
- A systematic approach on assessing risks for each purchase.
- A move from a reactive to proactive management approach.
- A supportive infrastructure for all levels of management.
- A culture of risk management thinking.
- A documented process to show progress and facilitate sharing of information.



In essence, successful management that reduces risk requires having trained people use good judgement, work within a management supported system, and use well documented and understood procedures.

RISK ASSESSMENT RESPONSIBILITY

Risk Assessment is an audit responsibility, and is the act or practice of identifying the risk drivers and their magnitude. It requires the auditor to review and identify risks that may adversely affect a department or organization. The risk assessment process requires a disciplined approach and enhances the audit process by identifying, analyzing, and assessing the likelihood of risk occurrence and consequences; estimating an organization's inherent risk exposure and possible impacts; and determining an acceptable risk level. As a component of pre-audit analysis, risk assessment uses previous audits and planning assessments to rank risk impact of a department or organization.

RISK ASSESSMENT PROCESS - AUDITABLE ACTIVITIES

The first step in a risk assessment is to "identify and catalog the auditable activities." In the broad category of purchasing, the following auditable areas can be identified:

Supplies for ongoing operations: Included in this category, are general purchases ranging from pens, paper, and specialized forms to small equipment (generally less than a specified amount such as \$1,000), and it includes specific supply needs to meet the department's operational requirements.

Contracts - personal service and capital improvements: Included in this category are personal services provided by individual(s) performing a unique onetime service, to long term agreements such as custodial or gardening functions. This area also includes capital improvements which can range from HVAC (heating ventilation and air conditioning), through a complete remodel, to new construction.

Supplies/Equipment (large dollar) for ongoing operations or capital improvements: Included in this category are purchases ranging from automobiles and heavy equipment for road projects to large dollar purchases for information systems.

RISK ASSESSMENT PROCESS - CLASSIFYING PRIORITIES

While a well-defined risk management approach should concern itself with all purchasing in general, the best approach to minimize risk is focusing on those risk areas with the highest possibility of occurrence and greatest dollar exposure. While there are no rules when a more formal/documented analysis should take place, documented analysis should always take place in high-risk areas. Examples of high priority risks are:

- When purchasing services such as consultants;
- When the value of the purchase is high;
- When the purchase (contract) is complex;
- When the consequence of a failure adversely impacts County operations or service delivery.



The majority of County purchases are classified as low risk due to their low value. However, the Capital Improvement, Construction Project and Budgeting Process recommendations which follow are classified as high risk.

When developing a risk management approach dealing with high risk, the costs associated with the identification and assessment should be weighed against potential losses to minimize overall costs.

RISK ASSESSMENT PROCESS - IDENTIFY REVIEW AREAS

The review objective was to identify areas for potential further reviews. The following section outlines the findings and conclusions from the risk assessment of the purchasing area.

IV. Findings and Conclusions

Our basic findings have not changed significantly since our initial preliminary risk analysis performed in April 1999. However, our more in-depth analysis of practices, systems and controls combined with the projected costs of the County's future capital projects suggests the need for a more direct and active role by the Performance Audit Division.

County Purchasing Code: Since the conversion to a decentralized supply approach, the County Code that mandated a central stores concept has not been updated. The move to a decentralized approach may be cost effective and efficient. With same-day and next-day delivery by various office supply vendors, the County has transferred inventory holding costs from the County to the vendor. In addition, vendor competition may result in lower purchase costs for basic office supplies. We concluded that, while the possibility of duplicated purchases by separate decentralized departments exists, risks appear to be low due to dollar volume and the value of supplies purchased. However, County Code currently does not approve the decentralized supply approach.

Corrections and Juvenile Services Best Practices: There appears to be possible cost savings if Correction's and Juvenile Service's approach to purchasing was evaluated using a best practices comparison. The Adopted Budget for 2000 shows Corrections budgeted \$2.0 million for purchases while Juvenile Services budgeted \$134 thousand. Since these two functions have some similarity, further analysis appears warranted.

Departmental Budgeting Practices: Exhibit 4, (see page 4) shows the original Adopted Budget for County supplies. During 1997 - 1999, budgeted purchases were as follows:

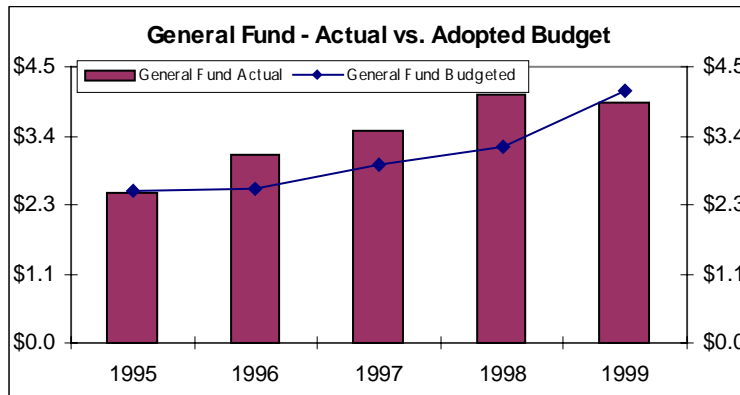
	General	Non-General	Total
1997	\$2,905,387	\$13,323,896	\$16,229,283
1998	\$3,183,508	\$15,031,099	\$18,214,607
1999	\$4,107,337	\$17,089,344	\$21,196,681

However, actual expenditures for supplies for the same years were:

	General	Non-General	Total
1997	\$3,458,763	\$11,767,129	\$15,225,892
1998	\$4,048,283	\$11,795,674	\$15,843,957
1999	\$3,923,730	\$11,615,703	\$15,539,433

Exhibit 6 and 7 show budgeted vs. actual expenditures for supplies broken down between general fund and non-general funds. These charts show actual supplies purchased ranged from 95.52% to 127.16% of the Adopted Budget (General Fund). For non-general funds, the range is 63.02% to 88.32% of the Adopted Budget. In all years 1995 - 1999, actual supplies non-general were significantly less than budgeted expenditures. See Exhibit 8.

Exhibit 6: General Fund Purchases - Actual vs. Adopted Budget (1995 - 1999)

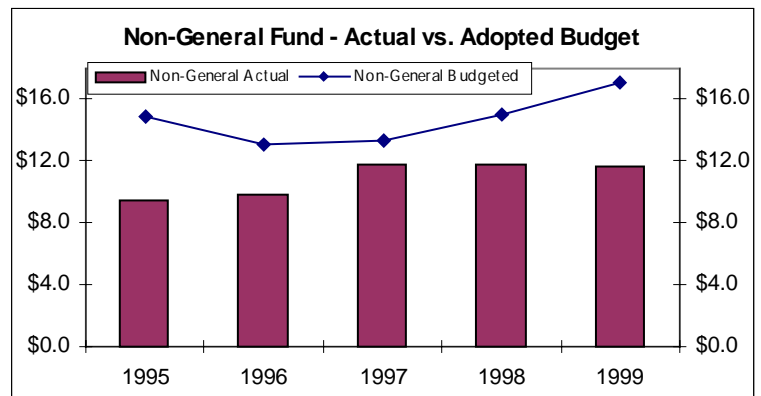


General Fund actual supplies expenditures ranged between 5 percent below budget to 27 percent above budget. Note that budget year estimates for 1996 - 1998 were lower than year actuals.

Source: Snohomish County Adopted Budgets 1996 - 2000

Exhibit 7: Non-General Fund - Actual vs. Adopted Budget (1995 - 1999)

Non-General fund actual supplies expended (primarily Public Works) ranged between 12% and 37% below Adopted Budget. This translates to an annual dollar impact between \$1.6 to \$5.5 million dollars.



Source: Snohomish County Adopted Budgets 1996 - 2000



Exhibit 8: Dollar and Percentage Difference Between Actual and Adopted Budgets (1995 - 1999)

	General	Non-General	Total
1995	(\$10,093)	(\$5,525,703)	(\$5,535,796)
1996	\$539,736	(\$3,187,253)	(\$2,647,517)
1997	\$553,376	(\$1,556,767)	(\$1,003,391)
1998	\$864,775	(\$3,235,425)	(\$2,370,650)
1999	(\$183,607)	(\$5,473,641)	(\$5,657,248)

	General	Non-General	Total
1995	99.59%	63.02%	68.20%
1996	121.38%	75.63%	83.03%
1997	119.05%	88.32%	93.82%
1998	127.16%	78.48%	86.98%
1999	95.53%	67.97%	73.31%

If departments used improved supply budgeting approach, it appears better and lower cost projections may result. More accurate budgeting may limit the County's needs to reduce or eliminate essential programs due to a mistaken belief adequate monies are not available.

V. Areas for Further Consideration

Please note this is a preliminary risk assessment, and we did not identify expenditures by fund (General and Non-General). The sole purpose of this analysis was to identify areas where additional reviews would be merited. **The following considerations are not presented in order of priority.**

1. Update Snohomish County Code - SCC 3.04:

We recommend the Purchasing Manager update the various sections of Snohomish County Code to reflect the current practice of decentralized purchasing vs. the central store concept outlined in the code.

2. Public Works:

Overall, Public Works is responsible for the majority of all supply expenditures. In most cases, these purchases are for construction projects. Due to the dollar amount, this area should be reviewed for internal controls, and various contract and change order processes on a regular basis.

3. Corrections and Juvenile Services:

We recommend a review of best practices be performed to determine if there are cost savings available. The cost per employee or inmate/juvenile appears significantly lower at Juvenile Services than at Corrections.



4. Auditor and Information Services:

Due to dollar volume of expenditures, we recommend further reviews of these two departments' supply purchases.

5. Formal Role for the Performance Audit Division in Capital Improvements and Construction Projects:

Over the next several years, Snohomish County will develop and enter into the largest construction projects in County history. (Cost estimates exceed \$100 million dollars.) To help provide the County with internal control insight and contract compliance, we recommend consideration be given for a formal Performance Audit Division role. Discussions with other County and City audit divisions, regarding their current and planned construction projects, have shown similar internal control concerns. Their management has requested and uses their audit functions for contract oversight.

6. Review of County-Wide Budgeting Process:

A finding resulting from our analysis pertains to the budget process for purchases. The need to accurately budget for expenditures is fundamental. Therefore, we recommend consideration be given to a future project which would review the budgeting process with special emphasis on purchases.