

ACCOUNTING

PRIMER

FOR

ENGINEERS

Prepared by State Aid Finance
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General responsibilities of your Accountant/Office Staff

The listing below is not inclusive and varies by county. Details and processes should be discussed with your Accountant and documented with internal procedures.

Daily processes

- Supervise clerical staff
- Timecard verification (employee and equipment) and entry
- Accounts Payable
 - Verification of vendor invoices and statements
 - Entry and posting of purchase information
 - Voucher processing for Engineers approval
- Customer interaction
 - Answer questions from the public, vendors, contractors, etc.
 - Sale of materials, maps, plans to contractors
 - Permit transactions (moving, utility, field access, etc.)
- Process & deliver daily mail

Weekly/Bi-Weekly processes

- Payroll processing
 - Update and maintain personnel files
 - Interface or data entry to county payroll system
- Accounts Payable
 - Interface or data entry to county financial system
- Construction
 - Bid preparation and advertisement
 - Process contract paperwork, contracts, bonds, insurance verification
 - Contracts Payable
 - Daily/weekly diary forms
 - Partial payment preparation
 - Interface certified work to costing system and interface payment to county financial.
 - Prepare State Aid & Federal Aid Payment request forms
- Enter receipts in costing system for cash and A/R sales
- Reconcile and prepare deposits and receipt report for county treasurer's office.
- Supervise billings for supplies and services to other departments and government entities.

Monthly processes

- Accounts Receivable
 - Verify customer costs & process invoices
 - Follow up on past due receivables
 - Calculate and bill contract penalties on past due accounts
- Inventory management
 - Verify additions and withdrawals

- Fuel reports, meter readings
- Monitor unit prices for inventory
- Sales and fuel tax reports preparation
 - Sales & Use Tax, special fuels tax, PTO refund, Federal Excise refund
- Budget
 - Manage cash position
 - Prepare revenue and expenditure comparison to budget report for engineer
- Monthly reconciliations
 - Cash to the auditors financial system
 - Account receivables to customer detail
 - Accounts payable to the vendor detail
 - State Aid receivable and allotments
 - Salaries/wages payable to the auditors financial/payroll system
 - Comp time payable
 - State Aid receivables to State Aid Status Report
 - State Aid allotments to State Aid Status Report

Annual processes

- Township mileage reporting
 - Data collection
- Inventory
 - Physical inventory
 - Reconcile physical inventory to costing system inventory
 - Enter variances
- Fixed Assets
 - Calculate depreciation
 - Update equipment (new, sold, traded, disposed)
 - Calculate rental rates for new year
- Manage Infrastructure
 - Add construction costs to county infrastructure
- Verification of year end accruals
 - Taxes receivable, accounts payable, salaries & wages payable, etc.
- Unallocated Costs
 - Spread to appropriate cost centers
- Needs preparation
 - After the Fact ROW
 - Credit for Local Effort
- Verification and preparation of 1099 forms
- Year end close on costing system
- Budget
 - Assist in budget preparation

Annual reports

- Annual Summary of Highway Information Report
- Local Highway Finance Report (FHWA 536)

- Annual Report - full version (optional)

Expectations

Monthly

Monthly reconciliation and closing should occur each month by the 15th of the following month.

- Monthly reconciliations
 - Cash to the auditors financial system
 - Account receivables to customer detail
 - Accounts payable to the vendor detail
 - State Aid receivable and allotments
 - Salaries/wages payable to the auditors financial/payroll system
 - Comp time payable
 - State Aid receivables to State Aid Status Report
 - State Aid allotments to State Aid Status Report

Monthly reports can be run to ensure reconciliations by the accountant are up to date. Currently with the ACS, reports for the current month must be printed prior to the closing process. With Costrite these reports can be run after the closing.

The engineer should request a Balance Sheet (ACS) or a Trial Balance (Costrite) from the accountant. The engineer should also obtain a Treasurer's Cash Trial Balance (IFS) for the same month from the auditor's office. The cash balance from each report should be equal; this will ensure cash has been reconciled.

Obtain a Status Report for the same month from the SAAS. Ensure encumbrances on the Status Report are equal to the State Aid Receivables on the Balance Sheet (ACS) or Trial Balance (Costrite). If they are not in balance, ensure the differences can be reconciled to over/under runs on projects. Also ensure that the Available Balance on the Status Report are equal to the Sate Aid Allotment balances Balance Sheet (ACS) or Trial Balance (Costrite).

Annual

Reconciliations should be completed by April 1st of the following year.

- Fixed Assets
 - Calculate depreciation
 - Update equipment (new, sold, traded, disposed)
 - Calculate rental rates for new year
- Manage Infrastructure
 - Add construction costs to county infrastructure
- Verification of year end accruals

- Taxes receivable, accounts payable, salaries & wages payable, etc.
- Unallocated Costs
 - Spread to appropriate cost centers
- Year end close on costing system

Other Annual

- Inventory
 - Due by December 31st of current year.
 - Physical inventory
 - Reconcile physical inventory to costing system inventory
 - Enter variances
- Needs preparation
 - Due by July 1st of the following year.
- Verification and preparation of 1099 forms
 - Due by Jan 31st of following year
- Budget
 - Assist in budget preparation
 - Process starts in June and a preliminary budget is generally done by the end of August for review by the Board
- Township mileage reporting
 - Data collection
 - Due in November of each year.

Annual reports

- Annual Summary of Highway Information Report
 - Completed by June 1st of the following year.
 - Due in Mn/DOT by August 1st
- Local Highway Finance Report (FHWA 536)
 - Due in Mn/DOT by December 31st of the following year
- Annual Report - full version (optional)
 - Completed by June 1st of the following year

Useful reports

Monthly or annually, the accountant will be able to provide you with any one of the reports listed below. Each report can help to answer various questions from the engineer and supervising staff. Sample questions are listed below each report.

Fixed Asset, Equipment Cost Detail, Equipment Revenue

- Should we purchase or lease a piece of equipment?
- What does it cost us to operate a piece of equipment?
- What equipment rental rates should be charged for reimbursement of services to individuals and other government entities?
 - Are we recovering the costs of our equipment through our rental rates?
 - Do rental rates need to be adjusted?
 - Should rental rates be charged by the hour or by the mile?

- Managing equipment costs
 - Which vehicle is consuming the most fuel?
 - Which vehicle is the most economical?
 - Which is costing more in repairs?
- Utilization of equipment.
 - How much do we use it?
 - Should we own it or rent it if we don't use it much?

Summary of Routine Maintenance & Summary of Maintenance - by Road/system

- Should we grade or pave a road section using cost comparisons?
- What is the cost per mile for maintenance on a road?
- How much money was spent in each county district on road maintenance?
- How much did the last snow storm cost the county?
- Which roads require greater maintenance dollars based on ADT?
- Is a new method of maintenance reducing costs over all for a segment of road?
- Has daily time been posted to the correct road/system?

- Trends & historical information
 - Why does it cost us more money to do maintenance compared to 5 years ago?
 - What are the contributing factors to increased costs?

- Unallocated costs.
 - Are unallocated costs being spread appropriately to maximize the cost in each road system?
 - Should I be spreading my costs by labor versus miles, intersection versus miles, etc?

Project Cost Analysis, Project Cost Guideline & Project Cost Detail Ledger

- What is the total cost of a project?
- What is the cost of each component of a project? (bridges, approaches, culverts, grading, surfacing, etc.)
- Should we execute a maintenance contract or use county forces for a project?
- Is the contract on track based on percentage of work completed versus expenses incurred?
- What is the total cost of cleaning up after a major weather event? (Should a state of federal disaster be declared this information is very valuable.)

Inventory of Supplies and Materials, Inventory Additions, Inventory Withdrawals

- What are my road supply costs in detail?
- How much salt and sand did we use last winter?
- What is my remaining supply of major inventory?
- How many 15" culverts are in stock and what is my reorder point?
- Are my inventory controls adequate?

Cost Account Ledger – Summarized or Detail

- Should we improve an existing facility or build new?
- What was the total cost (labor, equipment and material) to sealcoat a road?

Customer Cost Detail & Customer Cost Analysis

- What are my actual costs for each customer?
- Are customer revenues keeping up with the costs?
- Am I recovering my overhead costs?
- What portion of the dust control costs are recovered through customer sales?

Hiring a new Accountant

Review the accountant's job description to make sure it is up to date and matches the responsibilities, functionality and education requirements of the position. Consider your organizational chart and dynamics of your office to ensure a good professional fit. Talk to your neighboring accountant or Accounting Task Force Representative from your district for suggestions. Consider them for participation on an interview panel or for input on interview questions.

Software

The majority of counties use two software vendors, Affiliated Computer Services (ACS) and Computer Professionals Unlimited (CPU-Costrite). For more information about these applications, contact ACS or Computer Professionals.

Training

Training on State Aid processes, accounting procedures and reports is available from State Aid Finance (SAF). The training topics and schedule are tailored to meet your needs. A member of the SAF team is available to assist you or your accountant either on site and/or work via telephone.

Training includes, but is not limited to, an overview of state aid requirements and processes for new accountants, annual reports, accounts payable & receivables, balance sheet accounts, deferred revenues, depreciation, fixed assets, general overview of state aid/cost accounting, inventory, payroll, payments, reconciliations, unallocated costs and year end adjustments. Many data entry forms, worksheets and applications are available from the State Aid Finance website.

A training request form can be downloaded from the State Aid Finance Website at www.dot.state.mn.us/safinance . Click on Training Information.

Internal Operations Manual

Each county should develop an Internal Operations Manual covering their unique office procedures. State Aid Finance has developed some basic guidelines for processes that are common amongst most counties; these are included in the New Accountants Guide.

Acronyms

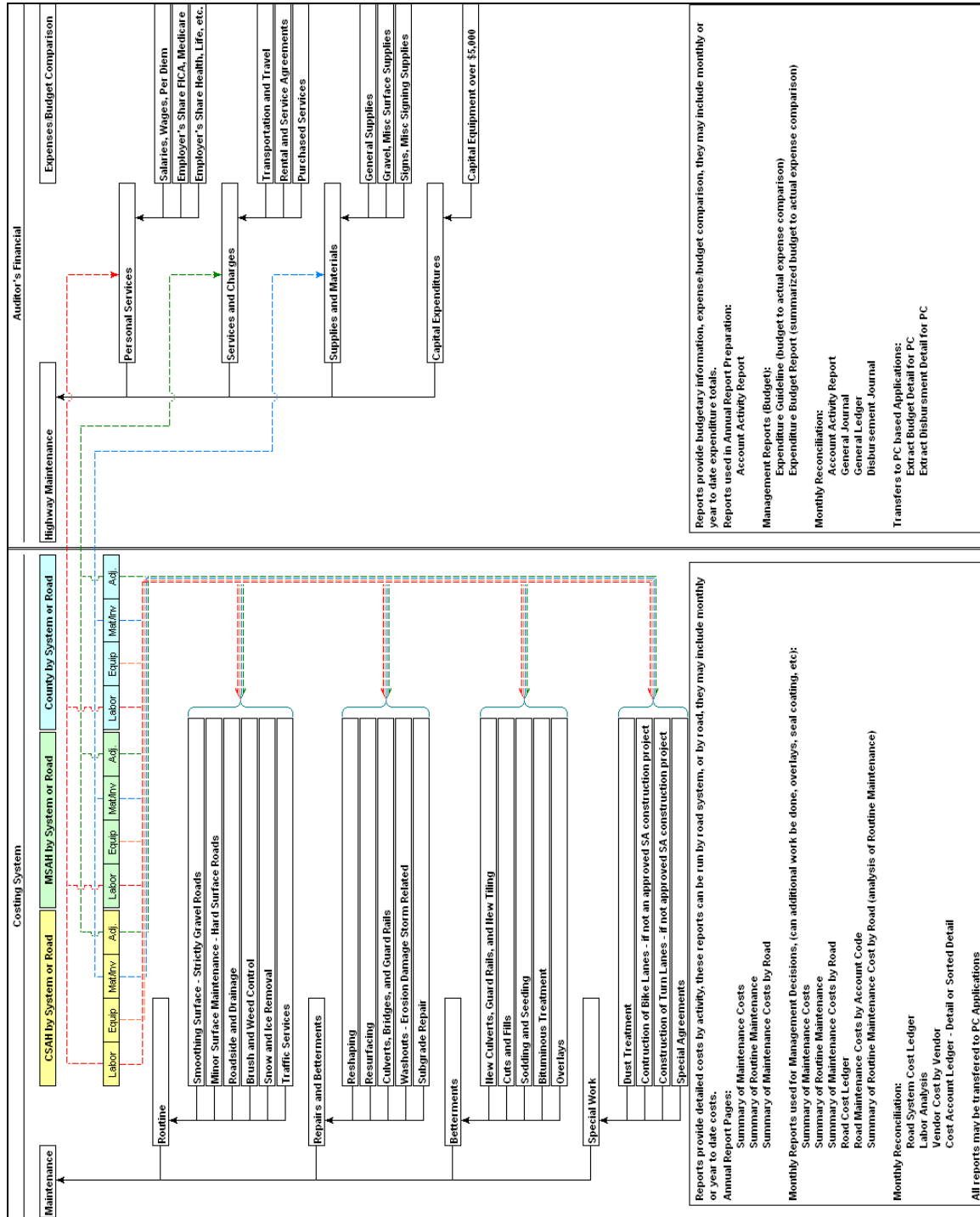
Below is a list of acronyms used in the guide. A complete list of acronyms can be obtained from the SAF website.

ACS	Affiliated Computer Services
A/R	Accounts Receivable
CPU	Computer Professionals Unlimited (Costrite)
FHWA	Federal Highway Administration
IFS	Integrated Financial System
Mn/DOT	Mn Dept. of Transportation
PTO	Power Take-Off
SAF	State Aid Finance

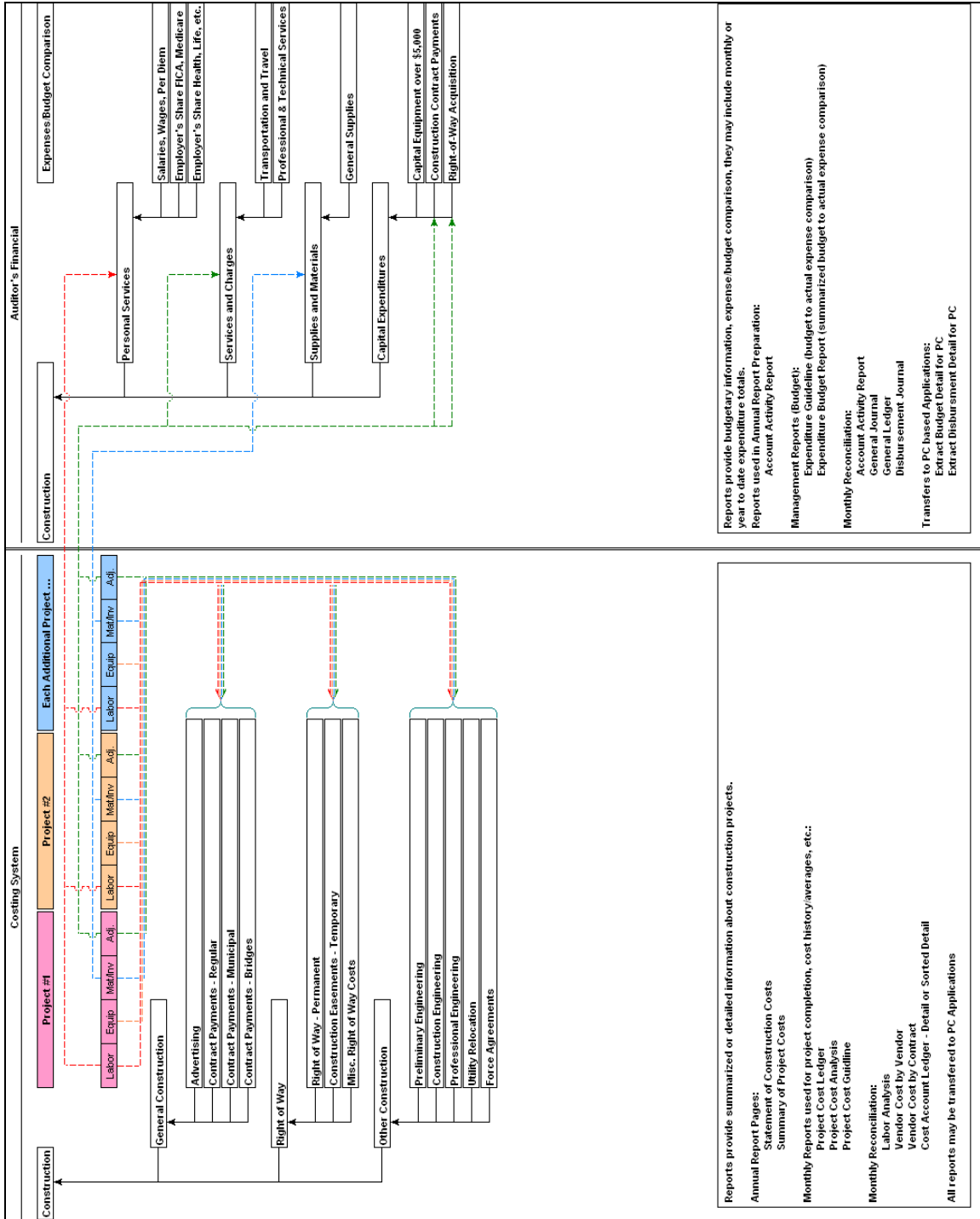
Appendix

Cost Accounting vs Financial System – comparison

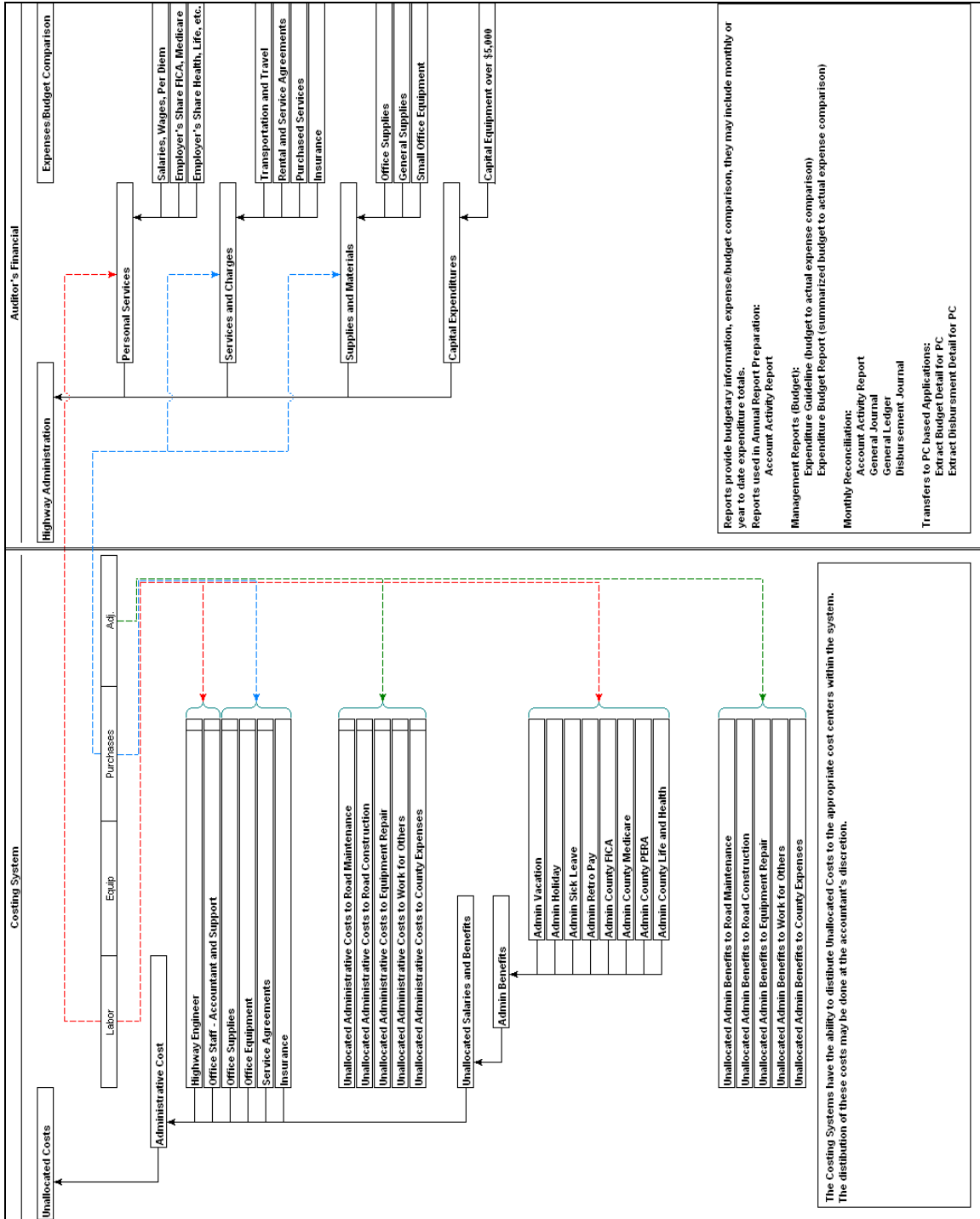
Road Maintenance



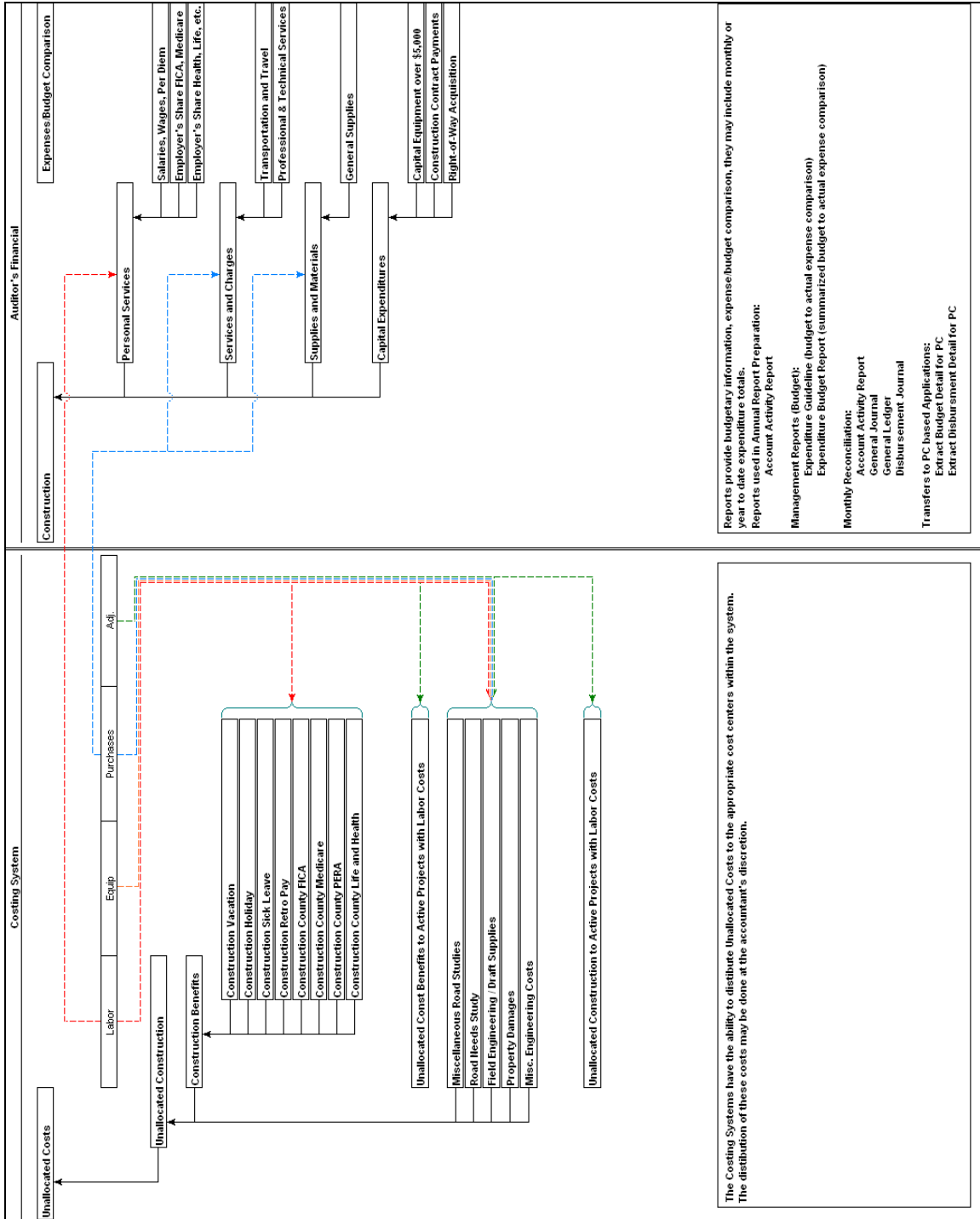
Construction



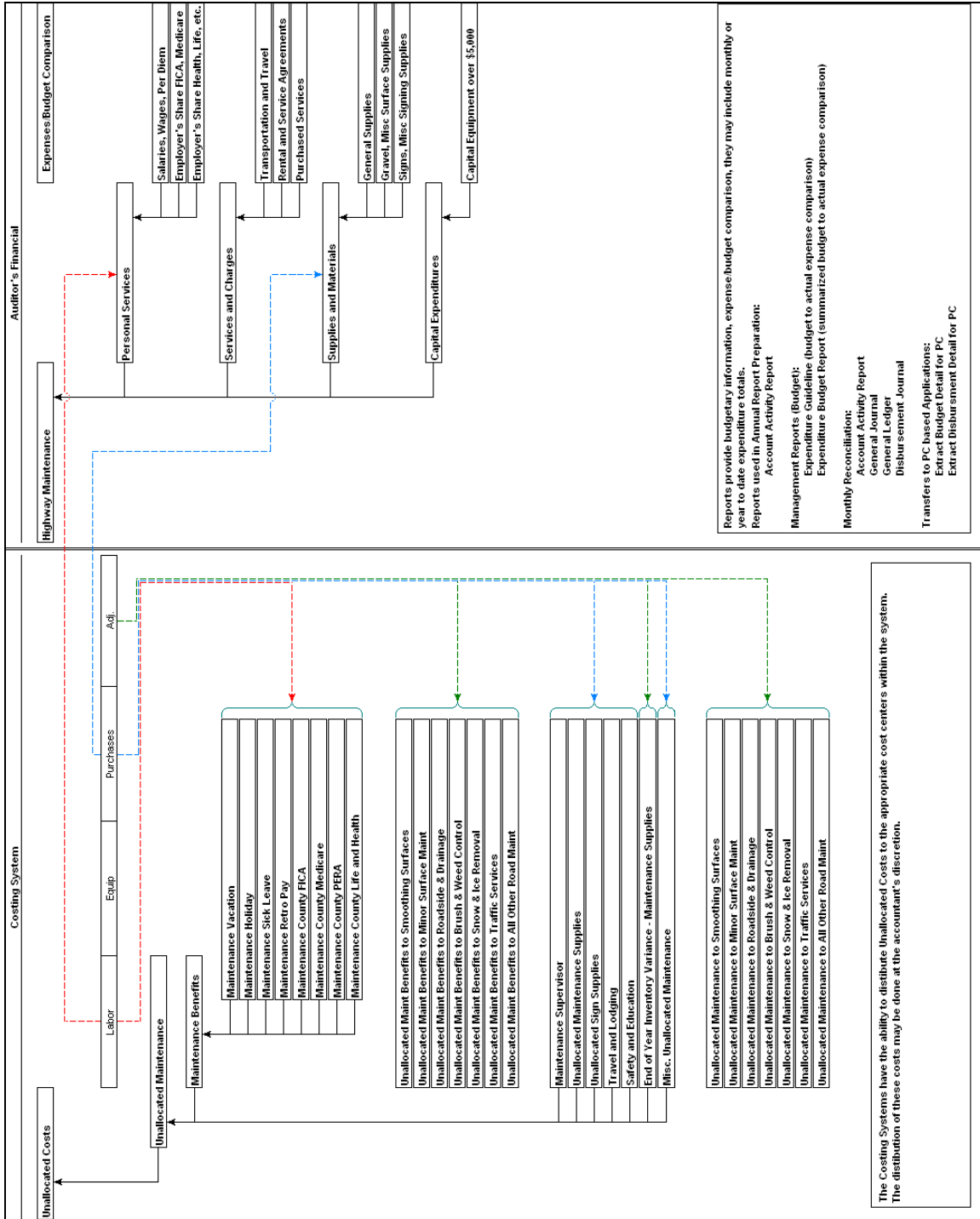
Unallocated Costs – Administration



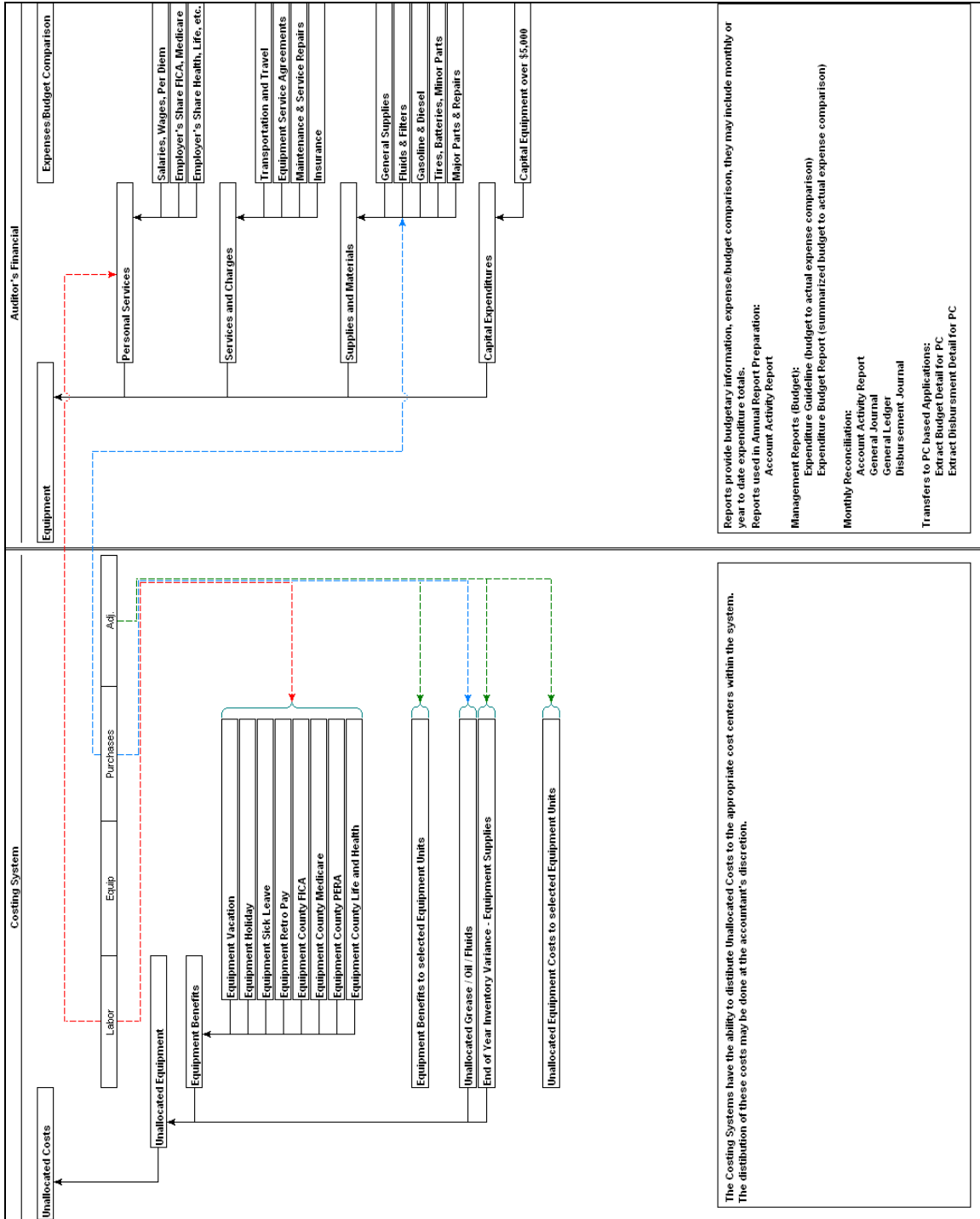
Unallocated Costs – Construction



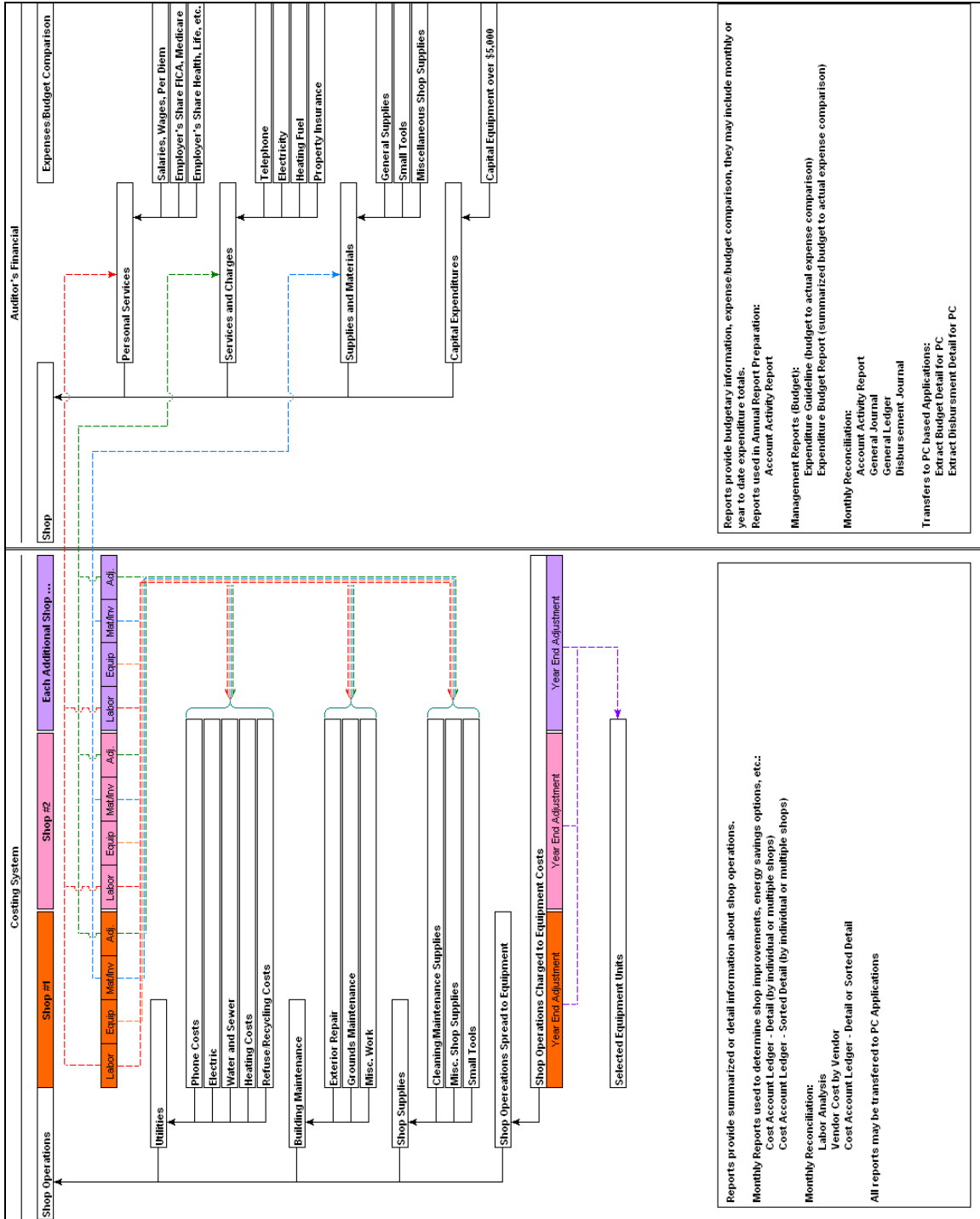
Unallocated Costs – Road Maintenance



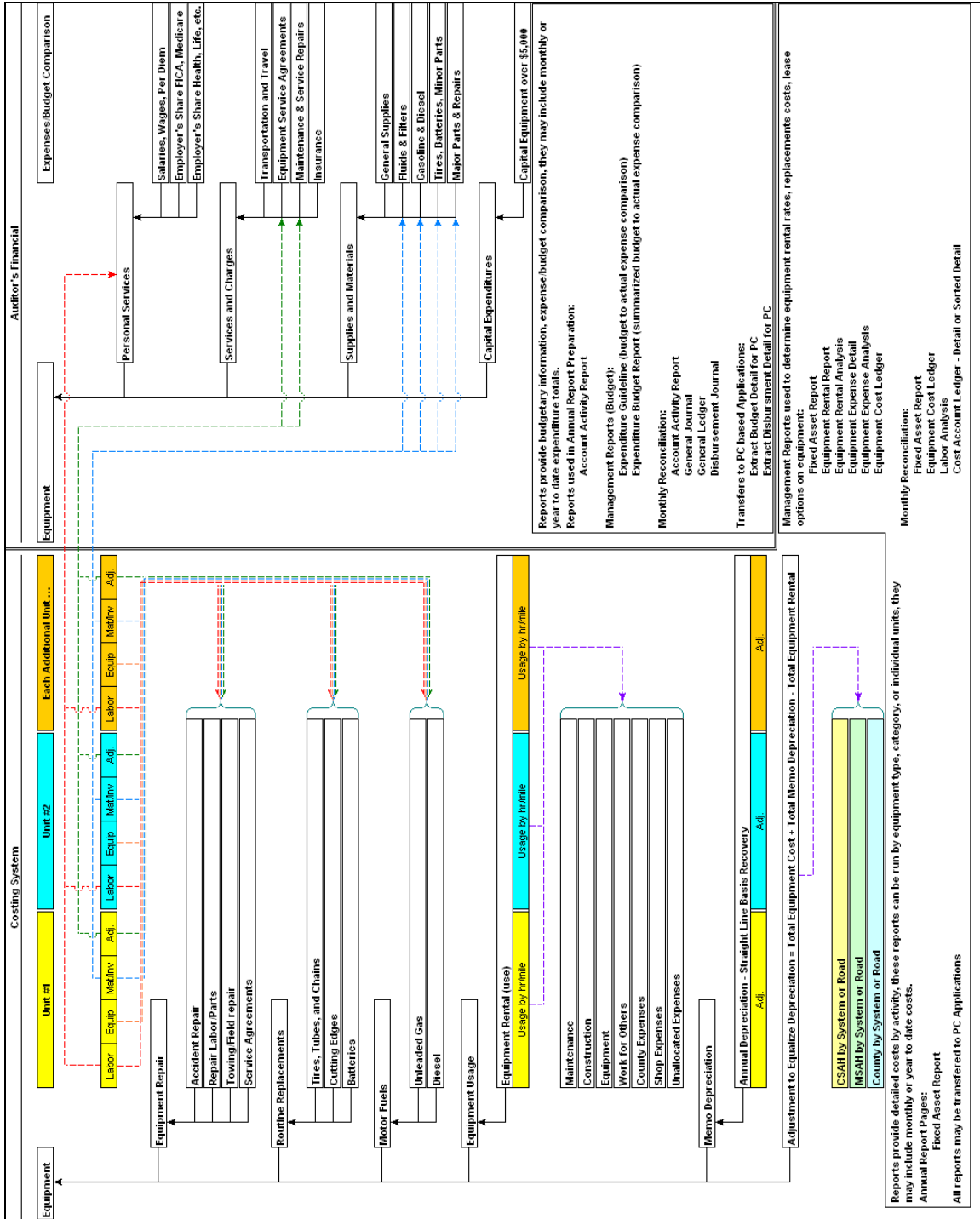
Unallocated Costs – Equipment Maintenance



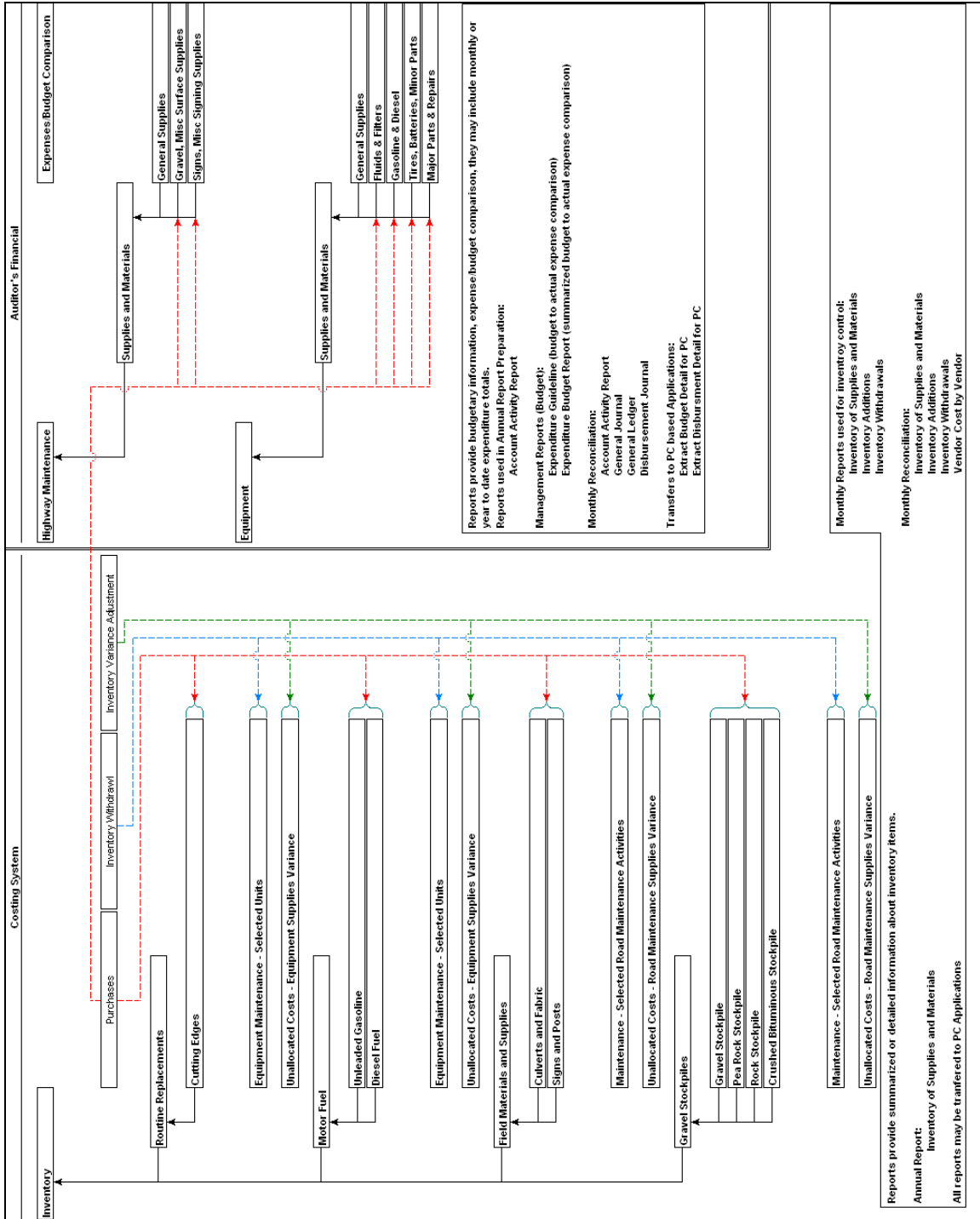
Shop Operations



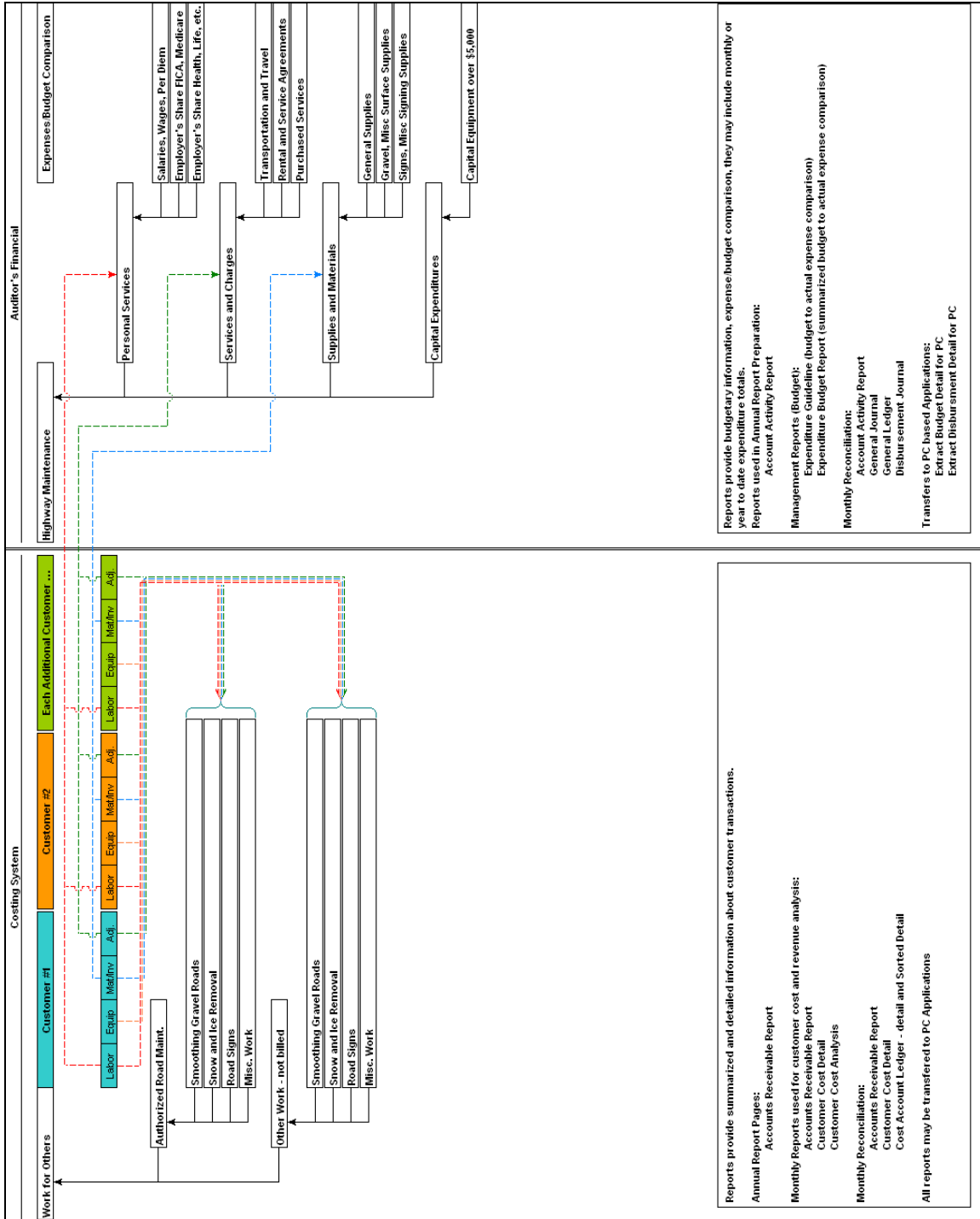
Equipment Maintenance



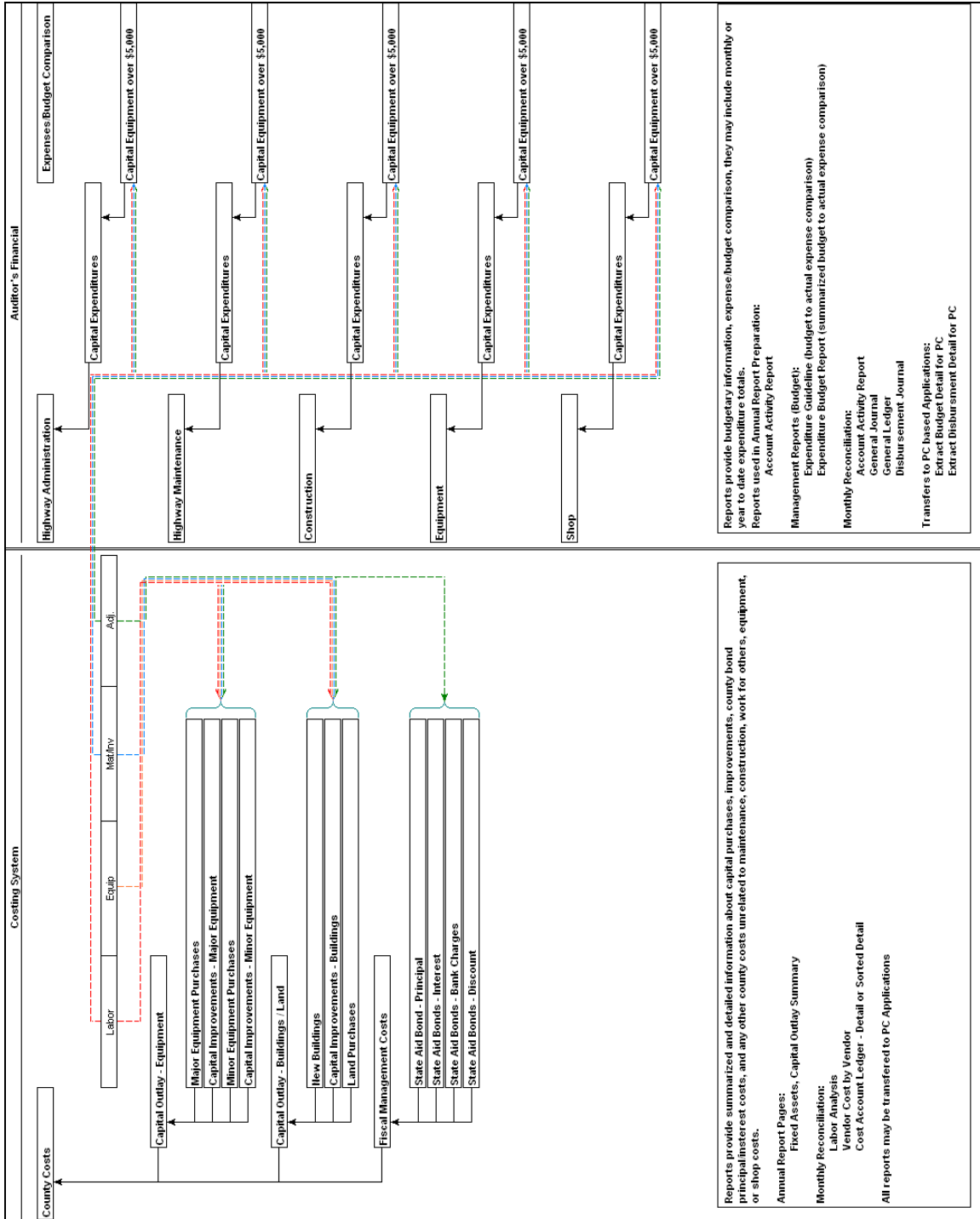
Inventory



Work For Others



Non Highway Costs



Reports provide budgetary information, expense budget comparison, they may include monthly or year to date expenditure totals.
 Reports used in Annual Report Preparation:
 Account Activity Report
 Management Reports (Budget):
 Expenditure outline (budget to actual expense comparison)
 Expenditure Budget Report (summarized budget to actual expense comparison)
 Monthly Reconciliation:
 Account Activity Report
 General Journal
 General Ledger
 Disbursement Journal
 Transfers to PC based Applications:
 Extract Budget Detail for PC
 Extract Disbursement Detail for PC

Reports provide summarized and detailed information about capital purchases, improvements, county bond principal interest costs, and any other county costs unrelated to maintenance, construction, work for others, equipment, or shop costs.
 Annual Report Pages:
 Fixed Assets, Capital Outlay Summary
 Monthly Reconciliation:
 Labor Analysis
 Vendor Cost by Vendor
 Cost Account Ledger - Detail or Sorted Detail
 All reports may be transferred to PC Applications