State of Alaska
FY2004 Governor's Operating Budget

Department of Environmental Conservation
Facility Construction and Operations
BRU/Component Budget Summary

BRU/Component: Facility Construction and Operations

(There is only one component in this BRU. To reduce duplicate information, we did not print a separate BRU section.)

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Component Mission

Assist communities in improving sanitation conditions.

Component Services Provided

- Provide grants, loans and engineering assistance for water, sewerage, and solid waste facilities.
- Develop training programs for, and certify water and sewerage system operators.
- Provide over-the-shoulder and emergency assistance to system operators in remote communities.

Component Goals and Strategies

1) REDUCE THE NUMBER OF HOUSEHOLDS WITHOUT ACCESS TO ADEQUATE SANITATION FACILITIES.

- Solicit applications and award grants to communities for sanitation facility projects in rural communities on a priority public health need basis.
- Work directly with communities to plan systems that can be operated and maintained locally.
- As agent for communities, manage private companies developing designs and supervising construction.
- Approve and track the expenditure of state and federal grant funds.

2) ASSIST COMMUNITIES IN CONSTRUCTING WATER, SEWERAGE AND SOLID WASTE FACILITIES.

- Solicit applications and make low-interest loans to community- and certain privately-owned utilities for drinking water and wastewater projects.
- Award grants (requiring a local match) and loans to communities on a priority public health need basis.
- Approve and track the expenditure of state and federal grant and loan funds.

3) PROVIDE ASSISTANCE TO COMMUNITY WATER AND SEWERAGE SYSTEM OPERATORS.

- Provide, via contracts with regional Native health corporations, Remote Maintenance Workers to travel routinely to and assist water and sewer operators in small communities across the state.
- Provide direct Remote Maintenance Worker assistance to communities where services cannot be provided through regional Native health corporations.

4) TRAIN AND CERTIFY WATER AND WASTEWATER SYSTEM OPERATORS.

- Train and certify operators of small drinking water systems as required by changes in federal law.
- Maintain a lending library of training materials.
- Administer operator certification examinations.
- Receive and evaluate applications for certification, issue certificates, and maintain a database of certified operators.
- Staff the Water and Wastewater Works Advisory Board which adjudicates certification decisions.

Key Component Issues for FY2003 – 2004

RURAL SANITATION. Progress towards developing sustainable water and sewerage systems in rural communities will be a priority.

Major Component Accomplishments in 2002

MUNICIPAL WATER, SEWERAGE AND SOLID WASTE MATCHING GRANTS PROGRAM
- Awarded a total of 23.4 million in state and federally-funded matching grants to 16 communities for 42 water, wastewater and solid waste projects. The total local contribution was 13.2 million.

MUNICIPAL LOANS PROGRAM
- Awarded 32.3 million in new, low-interest loans to 9 communities for 15 water, wastewater and solid waste projects.
- Secured 15.7 million in federal funding to add to loan account capital.
- Collected 8.1 million in loan principal and interest for deposit into the loan funds.

VILLAGE SAFE WATER PROGRAM
- Secured 41.3 million in federal Environmental Protection Agency and US Department of Agriculture-Rural Development grant funding for the program.
- Awarded 39.3 million in grants for 49 water, wastewater and solid waste projects.

REMOTE MAINTENANCE WORKER PROGRAM
- Due, in part, to remote maintenance worker assistance, there have been no large scale failures of rural sanitation systems since 1989.
- Provided regular over-the-shoulder operator assistance to 180 communities.

OPERATOR CERTIFICATION PROGRAM
- Administered two statewide operator certification examinations to over 270 applicants where approximately 182 examinees attained certification or upgraded their existing certifications.
- Administered 370 exams to village operators in conjunction with 39 special entry-level training courses, of which 307 achieved entry-level certifications.

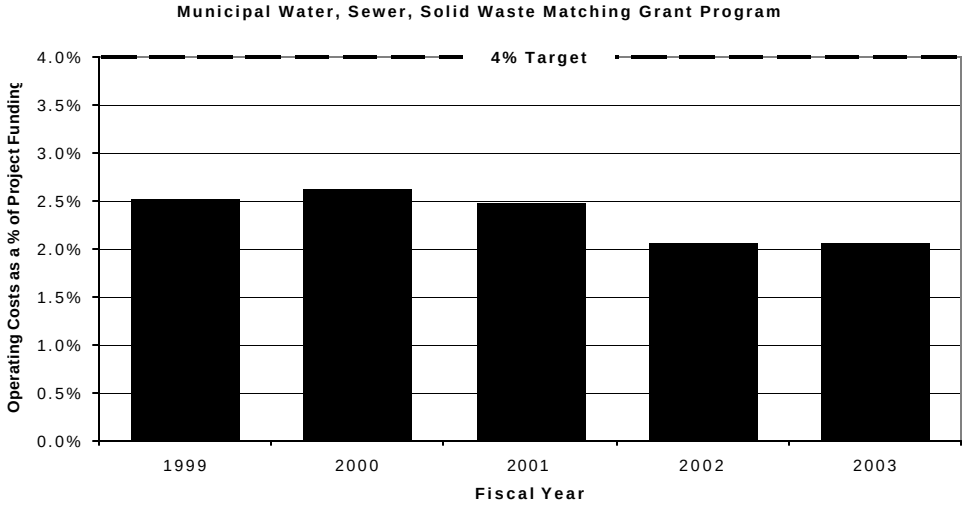
Statutory and Regulatory Authority

AS 46.03.030, AS 46.03.032, AS 46.03.036, AS 46.07, AS 46.30, 18 AAC 73, 18 AAC 74, 18 AAC 76, 18 AAC 77

Key Performance Measures for FY2004

Measure:
The agency operating costs per sanitation project.
Sec 67 Ch 124 SLA 2002(HB 515)

Alaska's Target & Progress:
Target: Manage operating costs at 4% or less.
Status: Between 1999 and 2003, operating costs for Municipal Water, Sewerage and Solid Waste Matching Grant projects varied from a high of 2.6% to the current low of 2.1% of project funding. Operating costs for Village Safe Water projects ranged from a high of 3.9% to the current low of 2.9% of project funding.



Benchmark Comparisons:
These programs are relatively unique and it is difficult to find other programs with which to make direct comparisons. As a general rule, programs with administrative costs of less than 5% of grant or contract amounts are considered efficient. For example, envisioning a very low overhead operation through efficiency and reliance on outside agency staff, the enabling statutes for the Denali Commission include a 5% cap on administrative funding.

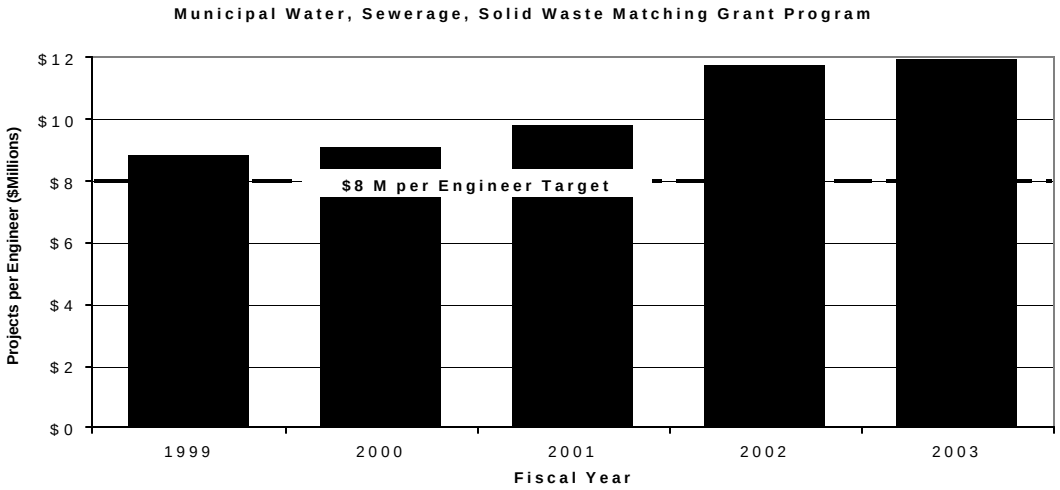
Background and Strategies:
The goal is to manage operating costs through efficiencies in how the division manages water, sewer and solid waste grant projects. The primary strategies for improving efficiency are:
- to increase the use and role of private companies in managing projects; and
- to streamline internal operations by improving data systems and administrative procedures.

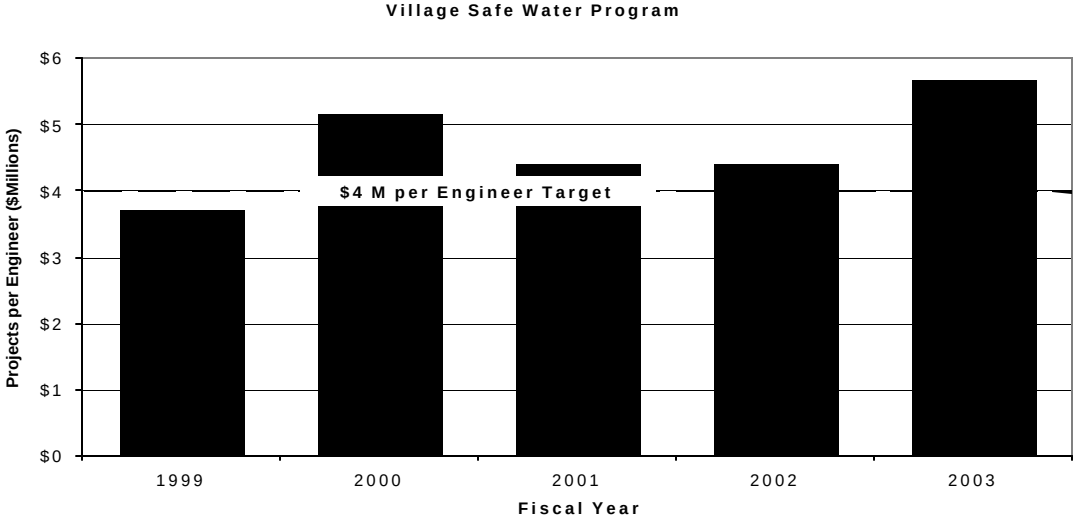
Measure:
The number and cost of sanitation projects per division engineer.
Sec 67 Ch 124 SLA 2002(HB 515)

Alaska's Target & Progress:

Target:	$4 million per engineer managing Village Safe Water projects. $8 million per engineer managing Municipal Water, Sewerage and Solid Waste Matching Grant projects.
Status:	
Between 1999 and 2003	**Municipal Water, Sewerage and Solid Waste Matching Grant** The average number of projects managed by each program engineer varied between a low of 10.0 in 1999 to a high of 16.0 in 2003. The value of projects managed by the engineers of the program steadily increased from just under $9 million per engineer to nearly $12 million per engineer.

Village Safe Water
The number of projects per engineer varied from a low of 4.3 in 1999 to a high of 6.1 in 2003. Funding per engineer has increased from $3.7 million in 1999 to almost $5.7 million in 2003.





Benchmark Comparisons:
These programs are relatively unique and it is difficult to find other programs with which to make direct comparisons. Performance levels are probably best assessed by examining trending over time.

Background and Strategies:
Of the two parts contained in this performance measure -- the number of sanitation projects per engineer and the cost of sanitation projects per engineer -- the cost of projects per engineer is a far better workload indicator. The workload associated with a given number of projects can vary substantially depending on project size. Project funding, on the other hand, integrates variations in project size into the measure.

The primary strategies for improving efficiency are:
- to increase the use and role of private companies in managing projects; and
- to streamline internal operations by improving data systems and administrative procedures.

Measure:
The cost per household served.
Sec 67 Ch 124 SLA 2002(HB 515)

Alaska's Target & Progress:

Target: Manage grants to strike a balance between capital costs, operating cost, level of service, and system life expectancy.
Status: Baseline of 11 projects completed between 1983 and 2000 average costs were $67,627. Additional data for 25 projects revised the baseline cost per household to $65,288.

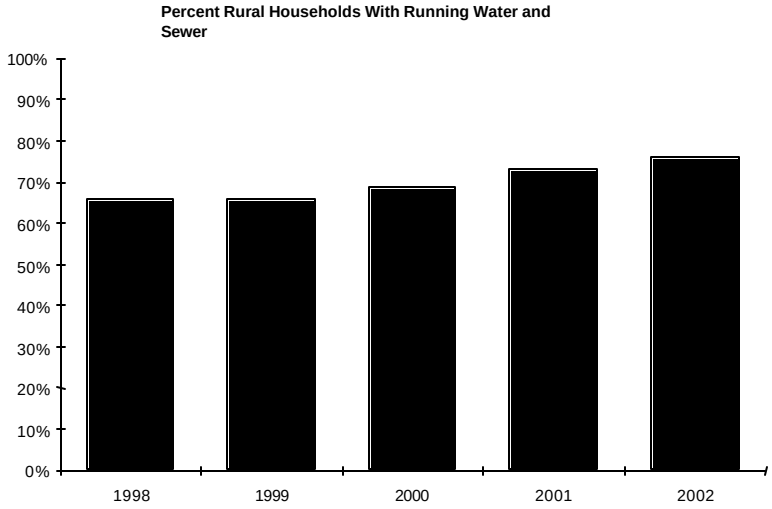
Benchmark Comparisons:
A comparable analysis of the cost of providing water and sewer utilities in urban Alaska suggests that the average cost there is about one-half that in rural Alaska. This effect is the result of the high costs of construction in remote locations as well as the diseconomies of scale associated with developing utilities for relatively small numbers of customers.

Benchmarking progress is probably best accomplished by monitoring variations in average total service cost. Ideally, per household costs will remain stable or decrease with time.

Background and Strategies:
The primary strategies for managing per household costs for water and sewer systems are:
- to increase use of enclosed haul and other innovative systems where piped utilities are exceedingly expensive;
- to provide incentive for controlling costs in the competitive grant process by awarding more points to projects that are less expensive; and
- to assert cost control and value engineering as a primary objective throughout project planning and development.

Measure:
The percentage of households with improved sanitation systems.
Sec 67 Ch 124 SLA 2002(HB 515)

Alaska's Target & Progress:
Target: Provide grants for water and sewer infrastructure to local governments that are capable of sustaining the infrastructure.
Status: The percentage of rural households with access to running water and sewer increased 3%, growing from 73 percent in 2001 to 76 percent in 2002.



Benchmark Comparisons:
The effort to bring running water and sewer to homes in rural Alaska is unique. We are not aware of comparable programs.

Background and Strategies:

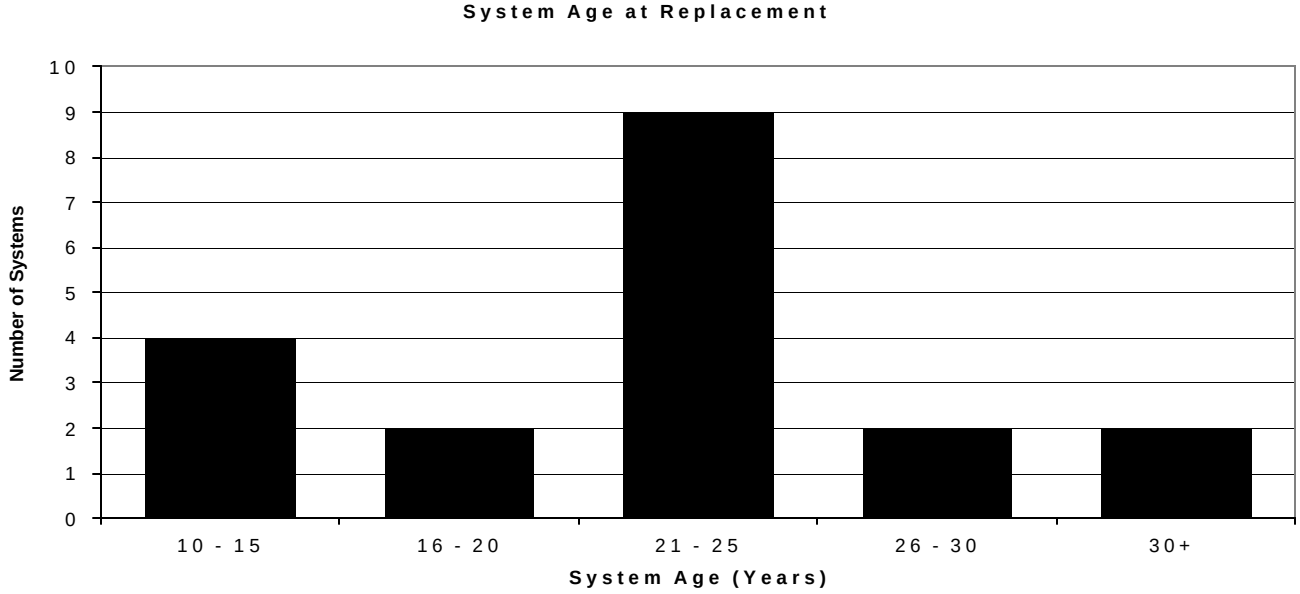
While the wording of this performance measure could be interpreted more broadly, we believe that the intent is to mark progress towards a specific goal of bringing running water and sewer to rural households. The division's programs also improve sanitation systems in urban communities, though the percent of households that benefit from improved sanitation systems in those communities is largely a random function of the nature of the projects underway at any given time. For this reason, the measure does not represent a targetable goal or particularly meaningful measure in urban areas of the State.

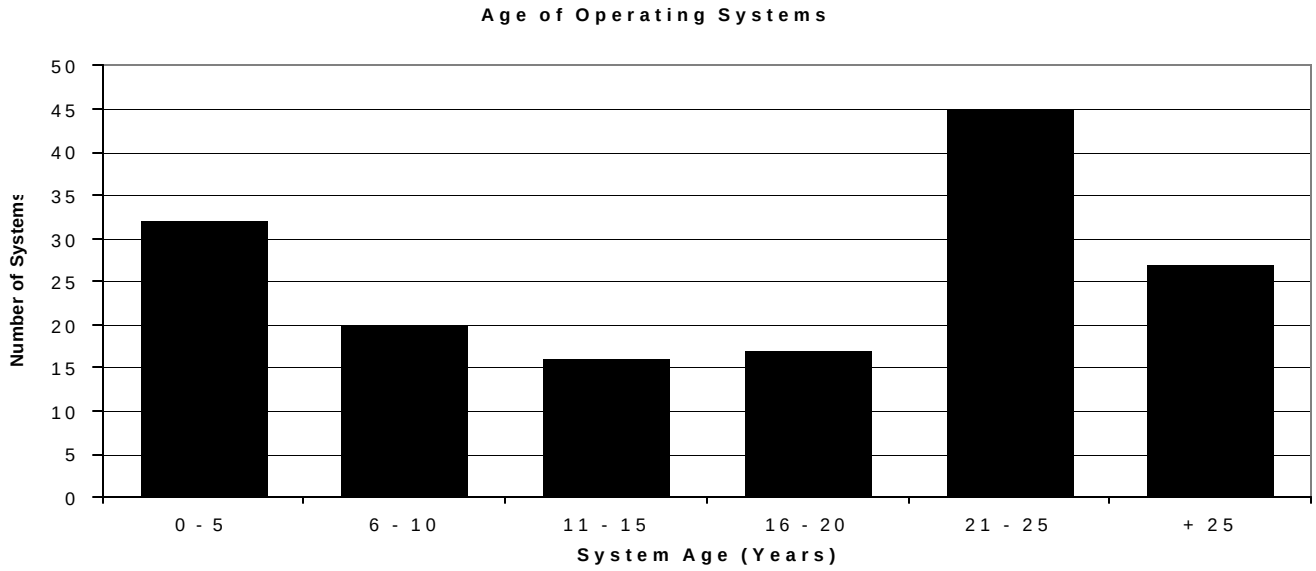
The primary strategies for accomplishing the goal of bringing running water and sewer to rural households are:

- to secure federal grant funds for rural sanitation projects;
- to make grants to rural communities with capacity to operate and maintain sanitation utilities for design and construction of water and sewer systems; and
- to work directly with rural communities to plan and construct water and sewer systems that can be operated and maintained locally.

Measure:
The actual life cycle cost compared to the design life cycle cost per year.
Sec 67 Ch 124 SLA 2002(HB 515)

Alaska's Target & Progress:
Target: Rural sanitation facilities should meet life cycle cost targets based upon a 20-year design life.
Status: Since the early 1960's, 19 community sanitation facilities have been replaced in rural Alaska. Thirteen facilities were 21 years old or older at the time of replacement. The remaining six were replaced within 20 years of construction. Facilities constructed more recently should significantly outlast those constructed earlier, due to improved design practices. A frequency distribution of the age of 157 operating rural sanitation facilities shows that nearly half are 21 years old or older.





Benchmark Comparisons:
A 20- to 30-year design life is the industry norm for water treatment facilities. Due to extreme operating conditions, facility life expectancy in rural Alaska suggests adopting a design life at the shorter end of the range.

Background and Strategies:
This measure has been simplified by measuring design and actual system longevity as a surrogate for life cycle costs. A more detailed analysis of life cycle costs would require data on operating costs that are not available.

The primary strategies for managing system longevity are:
- to continue to use the Remote Maintenance Worker program to assist communities with preventive maintenance and thereby extending the lives of existing systems; and
- to assert the division's remote maintenance workers' and engineers' arctic experience and expertise throughout project planning and development of new projects to optimize the life expectancy under what are often severe operating conditions.

Facility Construction and Operations

Component Financial Summary

All dollars in thousands

	FY2002 Actuals	FY2003 Authorized	FY2004 Governor
Non-Formula Program:			
Component Expenditures:			
71000 Personal Services	2,478.0	2,679.4	2,628.9
72000 Travel	271.4	329.4	318.4
73000 Contractual	757.5	1,211.7	1,208.7
74000 Supplies	31.5	70.6	69.6
75000 Equipment	37.0	51.5	49.5
76000 Land/Buildings	0.0	0.0	0.0
77000 Grants, Claims	1,483.2	1,503.3	1,464.1
78000 Miscellaneous	0.0	0.0	0.0
Expenditure Totals	**5,058.6**	**5,845.9**	**5,739.2**
Funding Sources:			
1002 Federal Receipts	1,420.4	1,660.6	1,631.2
1003 General Fund Match	591.3	620.5	610.7
1004 General Fund Receipts	354.0	360.2	266.1
1005 General Fund/Program Receipts	51.4	57.2	57.2
1061 Capital Improvement Project Receipts	1,808.0	2,142.8	2,163.1
1075 Alaska Clean Water Loan Fund	387.3	469.4	472.5
1100 Alaska Drinking Water Fund	446.2	535.2	538.4
Funding Totals	**5,058.6**	**5,845.9**	**5,739.2**

Facility Construction and Operations

Proposed Changes in Levels of Service for FY2004

Requested changes represent salary adjustments, reductions, or a realignment of resources to promote efficiencies or capture savings and have no impact on the level of services provided.

Summary of Component Budget Changes

From FY2003 Authorized to FY2004 Governor

All dollars in thousands

	General Funds	Federal Funds	Other Funds	Total Funds
FY2003 Authorized	**1,037.9**	**1,660.6**	**3,147.4**	**5,845.9**
Adjustments which will continue current level of service:				
-$75 per Month Health Insurance Increase for Non-covered Staff	0.0	0.0	2.1	2.1
-Annualize FY2003 COLA Increase for General Government, Confidential and Supervisory Bargaining Units	0.0	0.0	24.5	24.5
Proposed budget decreases:				
-Operator Assistance Reduction	-103.9	-29.4	0.0	-133.3
FY2004 Governor	**934.0**	**1,631.2**	**3,174.0**	**5,739.2**

Facility Construction and Operations

Personal Services Information

Authorized Positions			Personal Services Costs	
	FY2003 Authorized	FY2004 Governor		
Full-time	36	35	Annual Salaries	2,122,722
Part-time	0	0	Premium Pay	7,692
Nonpermanent	4	4	Annual Benefits	660,786
			Less 5.81% Vacancy Factor	(162,281)
			Lump Sum Premium Pay	0
Totals	**40**	**39**	**Total Personal Services**	**2,628,919**

Position Classification Summary

Job Class Title	Anchorage	Fairbanks	Juneau	Others	Total
Administrative Clerk II	2	0	1	0	3
Analyst/Programmer II	0	0	1	0	1
Division Director	0	0	1	0	1
Environ Conserv Mgr I	0	0	1	0	1
Environ Conserv Mgr II	0	0	1	0	1
Environ Conserv Mgr III	0	0	1	0	1
Environ Engineer I	2	0	0	0	2
Environ Engineer II	1	0	1	0	2
Environmental Spec I	0	0	1	0	1
Environmental Spec IV	0	0	1	0	1
Graduate Intern I	3	0	0	0	3
Grants Administrator I	1	0	0	0	1
Grants Administrator II	0	0	1	0	1
Maint Spec Bfc Foreman	1	0	0	0	1
Maint Spec Bfc Jrny II/Lead	2	0	1	0	3
Planner III	0	0	1	0	1
Prog Coordinator	0	0	1	0	1
Project Asst	0	0	1	0	1
Student Intern I	1	0	0	0	1
VSW Engineer I	4	0	0	0	4
VSW Engineer II	3	0	0	0	3
VSW Engineer III	1	0	0	0	1
VSW Engineering Assoc	3	0	0	0	3
VSW Engineering Asst	1	0	0	0	1
Totals	**25**	**0**	**14**	**0**	**39**