

## Activity Based Costing

### WHAT IS ABC?

ABC was developed as a practical tool to solve a problem faced by many companies today. Typically, traditional cost accounting systems have evolved over the years primarily to serve the function of inventory valuation (satisfying the GAAP standards of “objectivity, verifiability, and materiality”) financial statement purposes. However, these traditional systems have many shortcomings, especially when used for internal management purposes. Two especially important shortcomings are: 1) the inability to identify individual product costs to a reasonable level of accuracy and 2) the inability to provide useful feedback to management for the purpose of operational control. As a result, managers of companies providing multiple goods and services are making important decisions about pricing, product mix, and process technology based upon inaccurate and inappropriate cost information. The following table illustrates how costs are restated with ABC.

<b>From: General Ledger</b>			<b>To: ABC Database</b>	
<b>CHART-OF-ACCOUNT VIEW</b>			<b>ACTIVITY-BASED VIEW</b>	
<b>Process Engineering Department</b>			<b>Process Engineering Department</b>	
Salaries	\$600,000	<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: 0 auto;">                     Use Resource Cost Drivers                 </div>	Create BOM's	\$31,500
Equipment	150,000		Maintain BOM's	121,000
Travel Expense	60,000		Create routings	32,500
Supplies	40,000		Maintain routings	101,500
Use and occupancy	30,000		Process special orders	83,000
Total	<b>\$880,000</b>		Improve processes	45,000
			Study capacities	119,000
		Design tooling	145,500	
		Train Employees	43,000	
		Administer department	158,000	
		<b>Total</b>	<b>\$880,000</b>	

### WHAT IS SPENT

### HOW RESOURCES ARE SPENT

Activity-based costing presents the cost view by responsibility center and restates costs according to the way resources are consumed.

Traditional cost systems typically focus on the product (goods or services) in the costing product. Costs are then traced to the product, because each product item is assumed to consume the resources in proportion to the volume produced. Therefore, volume attributes of the product item, such as the number of direct labor hours, machine hours, or material dollars, are used as the “drivers” to allocate overhead costs. These volume drivers, however, fail to account for product diversity in the form of size or complexity. Also, there is not a direct relationship between production volume and cost consumption.

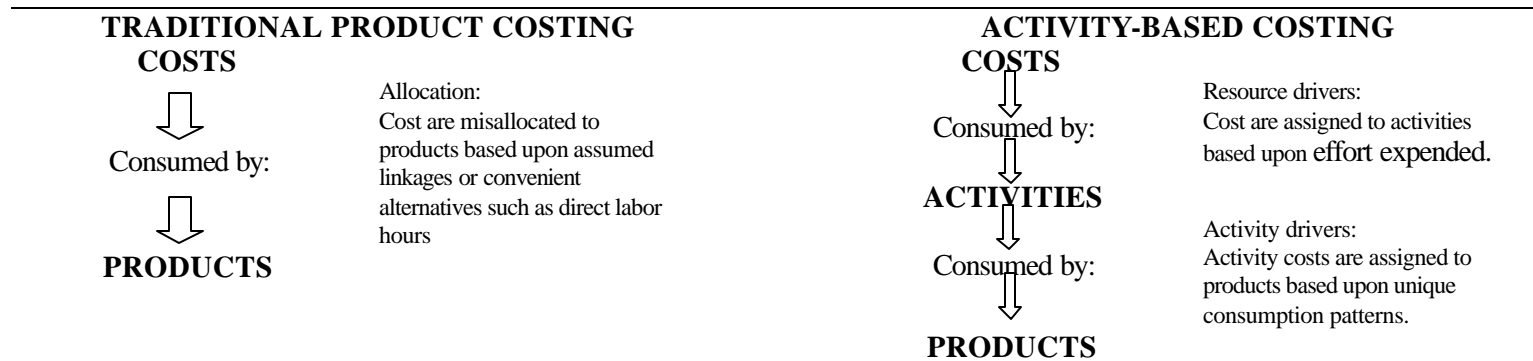
By contrast, ABC focuses on activities in the costing process. Costs are traced from activities to products, based on the product’s demand for these activities during the production process. Therefore, activity attributes such as hours of set-up time, process time, number of ECO’s, or

number of times handled, are used as the “drivers” to allocate overhead costs. Now, as the number of activity measures used increases, ABC is better able to capture the underlying economics of the company’s operation, and the reported product costs will become more accurate.

Another important distinction between traditional cost systems and ABC is the scope of operations. Traditional systems, being concerned primarily with inventory valuation, track only those costs incurred within the factory walls. ABC theory contends that, because virtually all of a company’s activities exist to support production and delivery of today’s goods and services, they should all be included as product costs. Examples of these factory and corporate support costs, which can all be split apart and traced to individual products or product families are:

- |                     |                          |                        |
|---------------------|--------------------------|------------------------|
| Logistics           | Service                  | General Administration |
| Production          | Technology               | Distribution           |
| Marketing and Sales | Financial Administration | Information Resources  |

Conventional management accounting systems treat costs as a variable only if they change with short-term fluctuations in output. ABC theory contends that many important cost categories vary not with short-term changes in out, but with changes (over a period of years) in the design, mix and range of a company’s products and customers. These costs of complexity must be identified and assigned to products.



Traditional product costing simplistically allocates costs, ABC traces costs based on cause and effect.

The following pages provide a simplistic framework and examples of the process of formulating an ABC program. This particular example deals with providing services and the associated costs. The example also illustrates a projected anticipated growth which translates into projected costs. Finally, the illustration provides the ability to track revenues and costs.

## Model-Calibrate-Plan-Track

### Planning Steps

- Identify products, services, and customer
- Identify activities
- Identify resources
- Determine activity requirements
- Determine resource requirements
- Relate resource requirements to resource availability
- Calculate the number and cost of available resources
- Calculate the cost of required resources
- Calculate the cost of activities
- Calculate the cost of cost objects

### Service Level and Fees

Service	Current Output	Measure	Service Fee	Projected Output	% increase
Teen Driver	15,000	Licenses	\$ 12	20,000	33%
Adult Driver	10,000	Licenses	\$ 10	14,000	40%
Renewal	40,000	Licenses	\$ 6	52,000	30%
Transfer	10,000	Licenses	\$ 10	14,000	40%
<b>Total</b>	75,000			10,000	33%

Identifies products, services, and customers

### Activities and Measure

Activity	Measure
Test Defensive Driving	Tests
Administer Road Test	Test Hours
Administer Written Test	Tests
Check Driving Record	Checks
Collect Fees	Receipts
Verify Personal Statistics	Items

Identify activities

**Resources**

Resource	Quantity	Cost Each	Available Measure	Required Measure	Measure Conversion Rate
Counter Clerk	13	\$ 40,000	FTE	Hours	2,000
Test Officer	6	\$ 60,000	FTE	Hours	2,000
Technician	2	\$ 50,000	FTE	Hours	2,000
Supplies	As needed	As needed	Cost	Cost	1
Facilities	2,500	\$ 20	Sq Feet	Sq Feet	1
Test Stations	6	\$ 7,500	Test Stations	Hours	2,500

Identify resources

**Consumption Rate**

Rate	Activity Measure	Activity
1	Test	Test Defensive Driving
½	Hour	Administer Road Test
1	Test	Administer Written Test
1	Receipt	Collect Fees
20	Items	Verify Personal Statistics

**Activity Requirements**

Qty reqd for each service unit	Activity	Measure	Current Requirement	Projected Requirement
<b>Teen Driver</b>			15,000	20,000
1	Test Defense Driving	Tests	15,000	20,000
0.5	Administer Road test	Test Hours	7,500	10,000
1	Administer Written Test	Tests	15,000	20,000
1	Collect Fees	Receipts	15,000	15,000
20	Verify Personal Statistics	Items	300,000	400,000
<b>Adult Driver</b>			10,000	14,000
0.4	Administer Road Test	Test Hours	4,000	5,600
1	Administer Written Test	Tests	10,000	14,000
1	Check Driving Record	Checks	10,000	14,000
1	Collect Fees	Receipts	10,000	14,000
10	Verify Personal Statistics	Items	100,000	140,000
<b>Renewal</b>			40,000	52,000
1	Collect Fees	Receipts	40,000	52,000
2	Verify Personal Statistics	Items	80,000	104,000
<b>Transfer</b>			10,000	14,000
1	Administer Written test	Tests	10,000	14,000
1	Check Driving Record	Checks	10,000	14,000
1	Collect Fees	Receipts	10,000	14,000
12	Verify Personal Statistics	Items	120,000	168,000

Determine activity requirements

**Activity Requirements Summary**

Activity	Measure	Current	Projected
Test Defensive Driving	Tests	15,000	20,000
Administer Road Test	Test Hours	11,500	15,600
Administer Written Test	Tests	35,000	48,000
Check Driving Record	Checks	20,000	28,000
Collect Fees	Receipts	75,000	100,000
Verify Personal Statistics	Items	600,000	812,000

### Activity Resource Requirements

Qty required for each activity output	Requirement Type	Resource	Measure	Current	Projected
<b>Test Defensive Driving</b>			<b>Test</b>	<b>15,000</b>	<b>20,000</b>
1	Each	Test Stations	Hours	15,000	20,000
0.25	Each	Technician	Hours	3,750	5,000
200	Total	Facilities	Sq Feet	200	200
<b>Administer Road Test</b>			<b>Test Hours</b>	<b>11,500</b>	<b>15,600</b>
1	Each	Test Officer	Hours	11,500	15,600
200	Total	Facilities	Sq Feet	200	200
<b>Administer Written Test</b>			<b>Tests</b>	<b>35,000</b>	<b>48,000</b>
0.08	Each	Counter Clerk	Hours	2,800	3,840
0.5	Each	Supplies	Cost	17,500	24,000
900	Total	Facilities	Sq Feet	900	900
<b>Check Driving Record</b>			<b>Checks</b>	<b>20,000</b>	<b>28,000</b>
0.25	Each	Counter Clerk	Hours	5,000	7,000
0.2	Each	Supplies	Cost	4,000	5,600
400	Total	Facilities	Sq Feet	400	400
<b>Collect Fees</b>			<b>Receipts</b>	<b>75,000</b>	<b>100,000</b>
0.08	Each	Counter Clerk	Hours	6,000	8,000
400	Total	Facilities	Sq Feet	400	400
<b>Verify Personal Statistics</b>			<b>Items</b>	<b>600,000</b>	<b>812,000</b>
0.02	Each	Counter Clerk	Hours	12,000	16,240
400	Total	Facilities	Sq Feet	400	400

Determine resource requirements – how much resource is required to perform and activity

### Resource Requirements Summary

Resource	Measure	Current	Projected
Test Stations	Hours	15,000	20,000
Technician	Hours	3,750	5,000
Facilities	Sq Feet	2,500	2,500
Test Officer	Hours	11,500	15,600
Counter Clerk	Hours	25,800	35,080
Supplies	Cost	21,500	29,600

**Resource Requirements versus Available Summary**

Resource	Cur	Proj	Measure	Convert Rate	Cur	Proj	Cur	Addl Req	Measure
Technician	3,750	5,000	Hours	2,000	1.88	2.50	2	1	FTE
Test Officer	11,500	15,600	Hours	2,000	5.75	7.80	6	2	FTE
Counter Clerk	25,800	35,080	Hours	2,000	12.90	17.75	13	5	FTE
Test Stations	15,000	20,000	Hours	2,500	6.00	8.00	6	2	Test Stations
Facilities	2,500	2,500	Sq Feet		2,500	2,500	2,500		Sq Feet
Supplies	21,500	29,600	Cost		21,500	29,600	21,500	8,100	Cost

Relate resource requirements to resource availability - how much resource can produce

**Resources Available Summary**

Resource	Measure	Cur	Proj	Unit Cost	Cur	Proj
Technician	FTE	2	3	\$50,000	\$100,000	\$150,000
Test Officer	FTE	6	8	\$60,000	\$360,000	\$480,000
Counter Clerk	FTE	13	18	\$40,000	\$520,000	\$720,000
Test Stations	Test Stations	6	8	\$7,500	\$45,000	\$60,000
Facilities	Sq Feet	2,500	2,500	\$20	\$50,000	\$50,000
Supplies	Cost	21,500	29,600		\$21,500	\$29,600
Total					\$1,096,500	\$1,489,600

Calculate the number of and cost of available resources

**Resource Requirements Cost**

Resource	Available Cost	Measure	Convert Rate	Reqd Cost	Measure	Cur	Proj	Cur	Proj
Technician	\$50,000	FTE	2,000	\$25	Hours	3,750	5,000	\$93,750	\$125,000
Test Officer	\$60,000	FTE	2,000	\$30	Hours	11,500	15,600	\$345,000	\$486,000
Counter Clerk	\$40,000	FTE	2,000	\$20	Hours	25,800	35,080	\$516,000	\$701,600
Test Stations	\$7,500	Test Stations	2,500	\$3	Hours	15,000	20,000	\$45,000	\$60,000
Facilities	\$20	Sq Feet		\$20	Sq Feet	2,500	2,500	\$50,000	\$50,000
Supplies		Cost		\$1	Cost	21,500	29,600	\$21,500	\$29,600
Total								\$1,071,250	\$1,434,200

Calculate the cost of required resources

**Activity Cost**

Activity	Cur	Proj	Measure	Resource	Qty Reqd	Measure	Unit Cur	Unit Proj	Cur	Proj
Test Defensive Driving	15,000	20,000	Tests	Test Stations	1	Hours	3.00	3.00	\$45,000	\$60,000
				Technician	0.25	Hours	25.00	25.00	\$93,750	\$125,000
				Facilities	200	Sq Feet	20.00	20.00	\$4,000	\$4,000
									\$142,750	\$189,000
Administer Road Test	11,500	15,600	Test Hours	Test Officer	1	Hours	30.00	30.00	\$345,000	\$468,000
				Facilities	200	Sq Feet	20.00	20.00	\$4,000	\$4,000
									\$349,000	\$472,000
Administer Written Test	35,000	48,000	Tests	Counter Clerk	0.08	Hours	20.00	20.00	\$56,000	\$76,800
				Supplies	0.5	Cost	1.00	1.00	\$17,500	\$24,000
				Facilities	900	Sq Feet	20.00	20.00	\$18,000	\$18,000
									\$91,500	\$118,800
Check Driving Record	20,000	28,000	Checks	Counter Clerk	0.25	Hours	20.00	20.00	\$100,000	\$140,000
				Supplies	0.2	Cost	1.00	1.00	\$4,000	\$5,600
				Facilities	400	Sq Feet	20.00	20.00	\$8,000	\$8,000
									\$112,000	\$153,600
Collect Fees	75,000	100,000	Receipts	Counter Clerk	0.08	Hours	20.00	20.00	\$120,000	\$160,000
				Facilities	400	Sq Feet	20.00	20.00	\$8,000	\$8,000
									\$128,000	\$168,000
Verify Personal Statistics	6000,000	812,000	Items	Counter Clerk	0.02	Hours	20.00	20.00	\$240,000	\$324,800
				Facilities	400	Sq Feet	20.00	20.00	\$8,000	\$8,000
									\$248,000	\$332,800
				Grand Total					\$1,071,250	\$1,434,200

**Activity Cost per Unit of Output**

Activity	Cur Cost	Proj Cost	Cur Output	Proj Output	Cur Unit Cost	Proj Unit Cost	Measure
Test Defensive Driving	\$142,750	\$189,000	15,000	20,000	\$9.517	\$9.450	Tests
Administer Road Test	\$349,000	\$472,000	11,500	15,600	\$30.348	\$30.256	Test Hours
Administer Written test	\$91,500	\$118,800	35,000	48,000	\$2.614	\$2.475	Tests
Check Driving Record	\$112,000	\$153,600	20,000	28,000	\$5.600	\$5.486	Checks
Collect Fees	\$128,000	\$168,000	75,000	100,000	\$1.707	\$1.680	Receipts
Verify Personal Statistics	\$248,000	\$332,800	600,000	812,000	\$0.413	\$0.410	Items
	\$1,071,250	\$1,434,200					

Activity Based Costing



**Cost of Services**

Service	Cur	Proj	Measure	Resource	Qty Reqd	Measure	Cur	Proj	Cur	Proj
Teen Driver	15,000	20,000	Licenses	Test Defensive Driving	1	Tests	\$9.517	\$9.450	\$142,755	\$189,000
				Administer Road Test	0.5	Test Hours	\$30.348	\$30.256	\$227,610	\$302,560
				Administer Written Test	1	Tests	\$2.164	\$2.475	\$39,210	\$49,500
				Collect Fees	1	Receipts	\$1.707	\$1.680	\$25,605	\$33,600
				Verify Personal Statistics	20	Items	\$0.413	\$0.410	\$123,900	\$164,000
									\$559,080	\$738,660
Adult Driver	10,000	14,000	Licenses	Administer Road test	0.4	Test Hours	\$30.348	\$30.256	\$121,392	\$166,434
				Administer Written Test	1	Tests	\$2.164	\$2.475	\$26,140	\$34,650
				Check Driving Record	1	Checks	\$5.600	\$5.486	\$56,000	\$76,804
				Collect Fees	1	Receipts	\$1.707	\$1.680	\$17,070	\$23,520
				Verify Personal Statistics	10	Items	\$0.413	\$0.410	\$41,300	\$57,400
									\$261,902	\$361,808
Renewal	40,000	52,000	Licenses	Collect Fees	1	Receipts	\$1.707	\$1.660	\$68,280	\$87,360
				Verify Personal Statistics	2	Items	\$0.413	\$0.410	\$33,040	\$42,640
									\$101,320	\$130,000
Transfer	10,000	14,000	Licenses	Administer Written Test	1	Tests	\$2.164	\$2.475	\$26,140	\$34,650
				Check Driving Record	1	Checks	\$5.600	\$5.486	\$56,000	\$76,804
				Collect Fees	1	Receipts	\$1.707	\$1.680	\$17,070	\$23,520
				Verify Personal Statistics	12	Items	\$0.413	\$0.410	\$41,300	\$57,400
									\$148,770	\$203,854
				Grand Total					\$1,071,072	\$1,434,322

**Cost per Unit of Services**

Service	Cur	Proj	Cur	Proj	Cur	Proj	Measure
Teen Driver	\$559,080	\$738,660	15,000	20,000	\$37.27	\$36.93	Licenses
Adult Driver	\$261,902	\$361,808	10,000	14,000	\$26.19	\$25.84	Licenses
Renewal	\$101,320	\$130,000	40,000	52,000	\$2.53	\$2.50	Licenses
Transfer	\$148,770	\$203,854	10,000	14,000	\$14.88	\$14.56	Licenses
	\$1,071,072	\$1,434,322					

## Model-Calibrate-Plan-Track

### Product/Service Analysis – Current Period to Projected Period

Service	Measure	Cur Cost	Cur Output	Unit Cost	Proj Cost	Proj Output	Unit Cost	% Chg Cost	% Chg Output
Teen Driver	Licenses	\$559	15	\$37.27	\$739	20	\$36.93	32%	33%
Adult Driver	Licenses	\$262	10	\$26.19	\$362	14	\$25.84	38%	40%
Renewal	Licenses	\$101	40	\$2.53	\$130	52	\$2.50	28%	30%
Transfer	Licenses	\$149	10	\$14.88	\$204	14	\$14.56	37%	40%
		\$1,071	75	\$14.28	\$1,434	100	\$14.34	34%	33%

### Service Activity Contribution Analysis – Current Period to Projected Period

Service	Measure	Cur Cost	Cur Contrib	Cur Output	Unit Cost	Proj Cost	Proj Contrib	Proj Output	Unit Cost
<b>Teen Driver</b>	Licenses	\$559		15	\$37.28	\$739		20	\$36.93
Test Defensive Driving	Tests		\$143		\$9.52		\$189		\$9.45
Administer Road Test	Test Hours		\$228		\$15.17		\$303		\$15.13
Administer Written Test	Tests		\$39		\$2.61		\$50		\$2.48
Collect Fees	Receipts		\$26		\$1.71		\$34		\$1.68
Verify Personal Statistics	Items		\$124		\$8.27		\$164		\$8.20
<b>Adult Driver</b>	Licenses	\$262		19	\$26.19	\$362		14	\$25.84
Administer Road Test	Test Hours		\$121		\$12.14		\$169		\$12.10
Administer Written Test	Tests		\$26		\$2.61		\$35		\$2.48
Check Driving Record	Checks		\$56		\$5.60		\$77		\$5.49
Collect Fees	Receipts		\$17		\$1.71		\$24		\$1.68
Verify Personal Statistics	Items		\$41		\$4.13		\$57		\$4.10
<b>Renewal</b>	Licenses	\$101		40	\$2.53	\$130		52	\$2.50
Collect Fees	Receipts		\$68		\$1.71		\$87		\$2.18
Verify Personal Statistics	Items		\$33		\$0.83		\$43		\$1.07
<b>Transfer</b>	Licenses	\$149		10	\$14.88	\$204		14	\$14.56
Administer Written Test	Tests		\$26		\$2.61		\$35		\$3.47
Check Driving Record	Checks		\$56		\$5.60		\$77		\$7.68
Collect Fees	Receipts		\$17		\$1.71		\$24		\$2.35
Verify Personal Statistics	Items		\$50		\$4.96		\$69		\$6.89
	Total	\$1,071	\$1,071	75	\$14.28	\$1,434	\$1,434	100	\$14.34

**Activity Analysis – Current Period to Projected Period**

Activity	Measure	Cur Cost	Cur Output	Unit Cost	Proj Cost	Proj Output	Unit Cost	% Cost	% Output	% Unit Cost
Test Defensive Driving	Tests	\$143	15	\$9.52	\$189	20	\$9.45	32%	33%	-1%
Administer Road Test	Test Hours	\$349	12	\$30.35	\$472	16	\$30.26	35%	36%	0%
Administer Written Test	Test	\$92	35	\$2.61	\$119	48	\$2.48	30%	37%	-5%
Check Driving Record	Checks	\$112	20	\$5.60	\$154	28	\$5.49	37%	40%	-2%
Collect Fees	Receipts	\$128	75	\$1.71	\$168	100	\$1.68	31%	33%	-2%
Verify Personal Statistics	Items	\$248	600	\$0.41	\$333	812	\$0.41	34%	35%	-1%
<b>Total</b>		<b>\$1,071</b>			<b>\$1,434</b>			<b>34%</b>	<b>35%</b>	<b>-1%</b>

**Activity Resource Contribution Analysis – Current Period to Projected Period**

Activity/Resource	Measure	Cur Cost	Cur Contrib	Cur Output	Unit Cost	Proj Cost	Proj Contrib	Proj Output	Unit Cost
<b>Test Defensive Driving</b>	Tests	\$143		15	\$9.52	\$189		20	\$9.45
Test Stations	Hours		\$45		\$3.00		\$60		\$3.00
Technician	Hours		\$94		\$6.25		\$125		\$6.25
Facilities	Sq Feet		\$4		\$0.27		\$4		\$0.20
<b>Administer Road Test</b>	Tests	\$349		12	\$30.35	\$472		16	\$30.26
Test Officer	Hours		\$345		\$30.00		\$468		\$30.00
Facilities	Sq Feet		\$4		\$0.35		\$4		\$0.26
<b>Administer Written Test</b>	Tests	\$92							
Counter Clerk	Hours		\$56		\$1.60		\$77		\$1.60
Supplies	Cost		\$18		\$0.50		\$24		\$0.50
Facilities	Sq Feet		\$18		\$0.51		\$18		\$0.38
<b>Check Driving Record</b>	Checks	\$112							
Counter Clerk	Hours		\$100		\$5.00		\$140		\$5.00
Supplies	Cost		\$4		\$0.20		\$6		\$0.20
Facilities	Sq Feet		\$8		\$0.40		\$8		\$0.29
<b>Collect Fees</b>	Receipts	\$128							
Counter Clerk	Hours		\$120		\$1.60		\$160		\$1.60
Facilities	Sq Feet		\$8		\$0.11		\$8		\$0.08
<b>Verify Personal Statistics</b>	Items	\$248							
Counter Clerk	Hours		\$240		\$0.40		\$325		\$0.40
Facilities	Sq Feet		\$8		\$0.01		\$8		\$0.01
<b>Total</b>		<b>\$1,071</b>	<b>\$1,071</b>			<b>\$1,434</b>	<b>\$1,434</b>		

Activity Based Costing

**Resource Requirements Analysis**

Description	Cur Cost	Proj Cost	Cur Reqd	Proj Reqd	Measure	Cur Cost Reqd	Proj Cost Reqd
Technician	94	125	3.8	5.0	Hours	\$25.00	\$25.00
Test Officer	345	468	11.5	15.6	Hours	\$30.00	\$30.00
Counter Clerk	516	702	25.8	35.1	Hours	\$20.00	\$20.00
Test Stations	45	60	15.0	20.0	Hours	\$3.00	\$3.00
Facilities	50	50	2.5	2.5	Sq Feet	\$20.00	\$20.00
Supplies	22	30	21.5	29.6	Costs	\$1.00	\$1.00
Total	1,071	1,434					

**Resource Capacity Analysis**

Resource	Measure	Cur Qty	Proj Qty	Cur Reqd Qty	Proj Reqd Qty	Cur Diff	Proj Diff
Counter Clerk	FTE	13	18	12.90	17.54	0.10	0.46
Test Officer	FTE	6	8	5.75	7.80	0.25	0.20
Technician	FTE	2	3	1.88	2.50	0.13	0.50
Supplies	Cost	21,500	29,600	21,500.00	29,600.00		
Facilities	Sq Feet	2,500	2,500	2,500.00	2,500.00		
Test Stations	Test Stations	6	8	6.00	8.00		
Resource	Measure	Cur Qty	Proj Qty	Cur Reqd Qty	Proj Reqd Qty	Cur Diff	Proj Diff
Counter Clerk	FTE	\$520	\$720	\$516	\$702	\$4.0	\$18.4
Test Officer	FTE	\$360	\$480	\$345	\$468	\$15.0	\$12.0
Technician	FTE	\$100	\$150	\$94	\$125	\$6.3	\$25.0
Supplies	Cost	\$22	\$30	\$22	\$30		
Facilities	Sq Feet	\$50	\$50	\$50	\$50		
Test Stations	Test Stations	\$45	\$60	\$45	\$60		
	Total	\$1,097	\$1,490	\$1,071	\$1,434	\$25.3	\$55.4

**Service Profitability Analysis**

<b>Service</b>	<b>Fee</b>	<b>Measure</b>	<b>Cur Volume</b>	<b>Cur Cost</b>	<b>Cur Fees</b>	<b>Cur Surplus</b>	<b>Proj Volume</b>	<b>Proj Cost</b>	<b>Proj Fees</b>	<b>Proj Surplus</b>	<b>Change</b>
Teen Driver	12	Licenses	15	\$559	\$180	\$(379)	20	\$739	\$240	\$(499)	\$(119)
Adult Driver	10	Licenses	10	\$262	\$100	\$(162)	14	\$362	\$140	\$(222)	\$(60)
Renewal	6	Licenses	40	\$101	\$240	\$139	52	\$130	\$312	\$182	\$43
Transfer	10	Licenses	10	\$149	\$100	\$(49)	14	\$204	\$140	\$(64)	\$(15)
Total			75	\$1,071	\$620	\$(451)	100	\$1,434	\$832	\$(602)	\$(151)

Model-Calibrate-**Plan**-Track

(nothing)

## Model-Calibrate-Plan-Track

### Service Performance Analysis – Summary of Services – Approved Plan

Service	Measure	Proj Cost	Proj Output	Cost per Unit
Teen Driver	Licenses	\$738,605	20,000	\$36.93
Adult Driver	Licenses	\$361,785	14,000	\$25.84
Renewal	Licenses	\$129,985	52,000	\$2.50
Transfer	Licenses	\$203,825	14,000	\$14.56
Delta Available vs Req'd		\$55,400		
Total		\$1,489,600	100,000	\$14.90

### Service Performance Analysis – Summary of Services – Actual Results

Service	Measure	Actual Cost	Actual Output	Cost per Unit
Teen Driver	Licenses	\$748,901	22,000	\$34.04
Adult Driver	Licenses	\$354,481	15,400	\$23.02
Renewal	Licenses	\$125,777	50,000	\$2.52
Transfer	Licenses	\$214,841	17,000	\$12.64
Total		\$1,444,000	104,400	\$13.83

### Service Performance Analysis – Summary of Service Variances – Total Budget Variance

Service	Measure	Variance Cost	Variance Output	Cost per Unit
Teen Driver	Licenses	\$10,296	2,000	\$(2.89)
Adult Driver	Licenses	\$(7,304)	1,400	\$(2.82)
Renewal	Licenses	\$(4,208)	(2,000)	\$0.02
Transfer	Licenses	\$11,016	3,000	\$(1.92)
Delta Available vs Req'd		\$(55,400)		
Total		\$(45,600)	4,400	

**Service Performance Analysis – Summary of Services – Actual Volumes at Approved Rates**

<b>Service</b>	<b>Measure</b>	<b>Actual Cost</b>	<b>Plan Output</b>	<b>Cost per Unit</b>
Teen Driver	Licenses	\$810,349	22,000	\$36.83
Adult Driver	Licenses	\$396,346	15,400	\$25.74
Renewal	Licenses	\$124,722	50,000	\$2.49
Transfer	Licenses	\$245,843	17,000	\$14.46
Delta Available vs Req'd		\$(83,580)		
Total		\$1,493,680	104,400	\$14.31