Third Party Transaction Cost-Benefit Analysis

FINAL REPORT 539

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April 2003

Prepared for:
Arizona Department of Transportation
206 South 17th Avenue
Phoenix, Arizona 85007
in cooperation with
U.S. Department of Transportation
Federal Highway Administration

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Technical Report Documentation Page

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.
FHWA-AZ-03-539		

4. Title and Subtitle	5. Report Date
THIRD PARTY TRANSACTION COST-BENEFIT ANALYSIS	April 2003
	6. Performing Organization Code

7. Authors	8. Performing Organization Report No.
Mike Keeling, Steve Kalina and Don Logue	

9. Performing Organization Name and Address	10. Work Unit No.
Data Site Consortium 1 East Camelback Road, suite 660 Phoenix, AZ 85012	11. Contract or Grant No. SPR-PL-1-(61) 539

12. Sponsoring Agency Name and Address	13.Type of Report & Period Covered
ARIZONA DEPARTMENT OF TRANSPORTATION **206 S. 17TH AVENUE** **PHOENIX, ARIZONA 85007** Project Manager: John Semmens	14. Sponsoring Agency Code

15. Supplementary Notes

Prepared in cooperation with the U.S. Department of Transportation, Federal Highway Administration

16. Abstract

This project involves a comprehensive analysis of direct and indirect costs of transacting business via third parties versus Arizona Department of Transportation (ADOT) Motor Vehicle Division (MVD) field offices, including long term and short term costs. The analysis examines the third party process in detail and compares it with the same process within MVD operations to determine the cost to MVD of providing a transaction through a third party versus the cost to provide the same transaction in an MVD office.

Using lessons learned from a review of prior models, review of relevant literature, and interviews with key personnel, a Third Party Transaction Cost model was constructed, populated with relevant data, and analyzed. Utilizing the model and cost and transaction data for the most recent fiscal year data available (July 1, 2001 – June 30, 2002), the table below shows a summary of costs per transaction by Channel - MVD Customer Service (over-the-counter), Renew-by-Mail (mail), traditional Third Party (third party offices), and Service Arizona (Internet).

Cost Model Summary by Channel

Customer Service	Renew by Mail	Third Party	Service Arizona
Cost Per Transaction	Cost Per Transaction	Cost Per Transaction	Cost Per Transaction
$ 12.80	$ 2.42	$ 11.74	$ 4.60

* Renew-by-Mail and ServiceArizona only include Registration Renewals

In addition to the cost savings of the Third Party Program, the Program provides a number of significant intangible benefits, such as:

- Reduced wait times in existing Customer Service offices
- More convenient hours and days of service availability
- Reduced customer travel time and improved customer goodwill
- Reduced need for new buildings, MVD staff, and equipment
- Improved image of MVD responsiveness
- Process improvement
- Demonstrated success of e-government and private/public partnerships.

17. Key Words	18. Distribution Statement	23. Registrant's Seal
Third party, vehicle registration,	Document is available to the U.S. public through the National Technical Information Service, Springfield, Virginia, 22161	

19. Security Classification	20. Security Classification	21. No. of Pages	22. Price
Unclassified	Unclassified	118	

SI (MODERN METRIC) CONVERSION FACTORS*

APPROXIMATE CONVERSIONS TO SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
	LENGTH			
in	inches	25.4	millimeters	mm
ft	feet	0.305	meters	m
yd	yards	0.914	meters	m
mi	miles	1.61	kilometers	km
	AREA			
in^2	square inches	645.2	square millimeters	mm^2
ft^2	square feet	0.093	square meters	m^2
yd^2	square yards	0.836	square meters	m^2
ac	acres	0.405	hectares	ha
mi^2	square miles	2.59	square kilometers	km^2
	VOLUME			
fl oz	fluid ounces	29.57	milliliters	mL
gal	gallons	3.785	liters	L
ft^3	cubic feet	0.028	cubic meters	m^3
yd^3	cubic yards	0.765	cubic meters	m^3
	NOTE: Volumes greater than 1000L shall be shown in m^3.			
	MASS			
oz	ounces	28.35	grams	g
lb	pounds	0.454	kilograms	kg
T	short tons (2000lb)	0.907	megagrams (or "metric ton")	mg (or "t")
	TEMPERATURE (exact)			
°F	Fahrenheit temperature	5(F-32)/9 or (F-32)/1.8	Celsius temperature	°C
	ILLUMINATION			
fc	foot candles	10.76	lux	lx
fl	foot-Lamberts	3.426	candela/m^2	cd/m^2
	FORCE AND PRESSURE OR STRESS			
lbf	poundforce	4.45	newtons	N
lbf/in^2	poundforce per square inch	6.89	kilopascals	kPa

APPROXIMATE CONVERSIONS FROM SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
	LENGTH			
mm	millimeters	0.039	inches	in
m	meters	3.28	feet	ft
m	meters	1.09	yards	yd
km	kilometers	0.621	miles	mi
	AREA			
mm^2	Square millimeters	0.0016	square inches	in^2
m^2	Square meters	10.764	square feet	ft^2
m^2	Square meters	1.195	square yards	yd^2
ha	hectares	2.47	acres	ac
km^2	Square kilometers	0.386	square miles	mi^2
	VOLUME			
mL	milliliters	0.034	fluid ounces	fl oz
L	liters	0.264	gallons	gal
m^3	Cubic meters	35.315	cubic feet	ft^3
m^3	Cubic meters	1.308	cubic yards	yd^3
	MASS			
g	grams	0.035	ounces	oz
kg	kilograms	2.205	pounds	lb
Mg	megagrams (or "metric ton")	1.102	short tons (2000lb)	T
	TEMPERATURE (exact)			
°C	Celsius temperature	1.8C + 32	Fahrenheit temperature	°F
	ILLUMINATION			
lx	lux	0.0929	foot-candles	fc
cd/m^2	candela/m^2	0.2919	foot-Lamberts	fl
	FORCE AND PRESSURE OR STRESS			
N	newtons	0.225	poundforce	lbf
kPa	kilopascals	0.145	poundforce per square inch	lbf/in^2

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GLOSSARY OF ACRONYMS

AAMVA	American Association of Motor Vehicle Administrators
ACI	Arizona Correctional Industries
ADOT	Arizona Department of Transportation
ATRC	Arizona Transportation Research Center
CDL	Commercial Driver's License
CGP	Competitive Government Partnerships
CIO	Chief Information Officer
CSS	Custom System Solutions
D/L	driver's license
DDL	Digital driver's license
DOA	Department of Administration
DPS	Department of Public Safety
e-government	electronic service delivery system for government
ERE	employee/employer related expenses
ESD	electronic service delivery
FMS	Financial Management Services
FTE	full time equivalent employee
FY	fiscal year
GAO	General Accounting Office
GITA	Government Information Technology Agency
HEAT	Help Desk Expert Automation Tool
IBM	International Business Machines
ID	identification
ISS	Internet Security System
IT	information technology
ITD	Intermodal Transportation Division
ITG	Information Technology Group
IVR	Interactive Voice Response
KB	kilobyte
LAN	local area network
MV	motor vehicle

MVD	Motor Vehicle Division
MVR	Motor Vehicle Record
OEG	Office for Excellence in Government
OMB	Office of Management and Budget
ORG	organization
OTC	over-the-counter
PC	personal computer
QA	Quality Assurance
RBM	renew-by-mail
T&R	Title & Registration
TRP	Temporary Registration Permit
TSG	Transportation Support Group
UNI/AAMVANET	User to Network Interface/AAMVA Network
VLT	Vehicle License Tax
WAN	wide area network

EXECUTIVE SUMMARY

INTRODUCTION

The Arizona Department of Transportation (ADOT), Arizona Transportation Research Center (ATRC), selected consultants from Data Site Consortium, Inc. to perform a cost-benefit study of the Motor Vehicle Division's (MVD) Third Party Program. The Third Party Program is a tool of competitive government that allows MVD to improve service quality and enhance customer service and satisfaction. ATRC and MVD desired a study to quantify the benefits and cost savings of third parties in offloading work and expense from MVD. This is particularly important as the potential increases for third parties to grow, and continued emphasis is placed on budget management and reducing wait times in MVD offices.

The project scope included a comprehensive analysis of direct and indirect costs of transacting business in third parties versus MVD field offices, including long term and short term costs. The analysis includes examining the third party process in detail and comparing it with the same process within MVD operations to determine the cost to MVD of providing a transaction through a third party versus the cost to provide the same transaction in an MVD office.

GAPS IN CURRENT MODELS

Our objectives when studying the current Third Party Cost-Benefit models and literature were to:

- Obtain and review available Third Party Cost-Benefit models prepared for MVD.
- Conduct a search and review of available literature related to the costing of internally and externally performed MVD third-party transactions.
- Perform a gap analysis of the existing models by examining current best-practices.

Our analysis of current models and literature disclosed the following gaps and understandings:

- Full cost allocation is the common method used in performing privatization/outsourcing cost analyses.
- The complexity of transactions and services provided by MVD and Third Parties varies significantly.
- Several channels are used to deliver these services (Internet, mail, over the counter, and phone).
- A better means of identifying the benefits of the Third Party Program should be determined.
- Hard dollar cost savings should not be the sole determinant of value of the Third Party Program.

INTERVIEW AND SURVEY RESULTS

The primary purpose of the interviews with MVD staff was to obtain a greater understanding of the business processes, transactions and resources employed to deliver MVD services by field offices and through the Third Party Program. Secondarily, we endeavored through our interviews to gain a better understanding of the issues associated with the previous cost models and how we could improve on the past models.

All interviewees agreed that attempting to do a study on comparing costs of the Third Party Program to the costs of MVD delivered services is a difficult and complex endeavor. Nearly half of those interviewed had reviewed the previous Third Party cost models that had been prepared by MVD. All interviewees that reviewed the past models did not completely agree with the way in which the transaction costs had been derived and had suggestions on ways to improve the models. A full cost approach for arriving at MVD Customer Service costs was almost unanimously stated as the preferred technique. Intuitively, most interviewees agreed that some type of classification scheme for transactions would make comparing transaction costs more meaningful. Although most did not suggest an approach, there was unanimous agreement of those familiar with previous modeling efforts that some type of classification by delivery channel would be appropriate. These channels would include mail, phone, Internet and over the counter transactions

COST MODEL

Using lessons learned from the review of prior models, review of relevant literature, and interviews with key personnel, a Third Party Transaction Cost model was constructed, populated with relevant data, and analyzed. This Third Party Transaction Cost model is a series of three interlinked Microsoft Excel workbooks. Minimal Microsoft Excel knowledge is needed to use the model.

Utilizing the model and cost and transaction data for the most recent fiscal year for which data were available (July 1, 2001 – June 30, 2002); the table below shows a summary of costs per transaction by Channel: MVD Customer Service (over-the-counter), Renew-by-Mail (mail), traditional Third Party (third party offices), and Service Arizona (Internet).

Cost Model Summary by Channel

Customer Service	Renew by Mail	Third Party	Service Arizona
Cost Per Transaction	Cost Per Transaction	Cost Per Transaction	Cost Per Transaction
$ 12.80	$ 2.42	$ 11.74	$ 4.60

General Assumptions:

- The Cost Model is based on a full cost allocation basis
- All indirect costs were included and allocated as appropriate
- The complexity of transactions and services provided by MVD and Third Parties varies significantly; however due to unavailability of data, we were unable to classify or segregate transactions by type or complexity.
- The costs indicated for Third Party reflect the state costs only and do not include individual third party office operating costs.
- Convenience fees that third parties charge their customers were not included.
- Revenues generated by MVD for Vehicle License Tax (VLT) and other transaction fees (registration fees, driver license fees, etc.) were not included in the analysis.
- Transaction types included registration renewals, titles, drivers licenses and vehicle inspections.

- Inquiry transactions such as motor vehicle registration (MVR) inquiries, fee to owner inquiries, address changes and "sold" notices were not included.

OBSERVATIONS

Based on our analysis of the cost model, we are able to make the following observations:

- Total cost per transaction for MVD Customer Service is $10.66 versus $9.54 for Third Party (savings of over $2.1 million per year).
- Direct Personnel Costs is the largest component of the MVD Customer Service cost at 56% of the total.
- The Third Party Fees, consisting of the Retainage of 2% of VLT, Transaction Fee Retainage, and Credit Card Reimbursement is the largest component of the Third Party cost at 62%.
- In addition to the cost savings of the Third Party Program, the Program provides a number of significant intangible benefits, such as:
    - Reduced wait times in existing Customer Service offices
    - More convenient hours and days of service availability
    - Reduced customer travel time and improved customer goodwill
    - Reduced need for new buildings, MVD staff, and equipment
    - Improved image of MVD responsiveness
    - Process improvement
    - Demonstrated success of e-government and private/public partnerships.

1. INTRODUCTION

1.1. BACKGROUND INFORMATION

The Arizona Department of Transportation (ADOT), Arizona Transportation Research Center (ATRC), selected consultants from Data Site Consortium, Inc. to perform a cost-benefit study of the Motor Vehicle Division's (MVD) Third Party Program.

The Third Party Program is a tool of competitive government that allows MVD to improve service quality and enhance customer service and satisfaction. ATRC and MVD desired a study to quantify the benefits and cost savings of third parties in offloading work and expense from MVD. This is particularly important as the potential for third parties to grow increases, and continued emphasis is placed on budget management and reducing wait times in MVD offices.

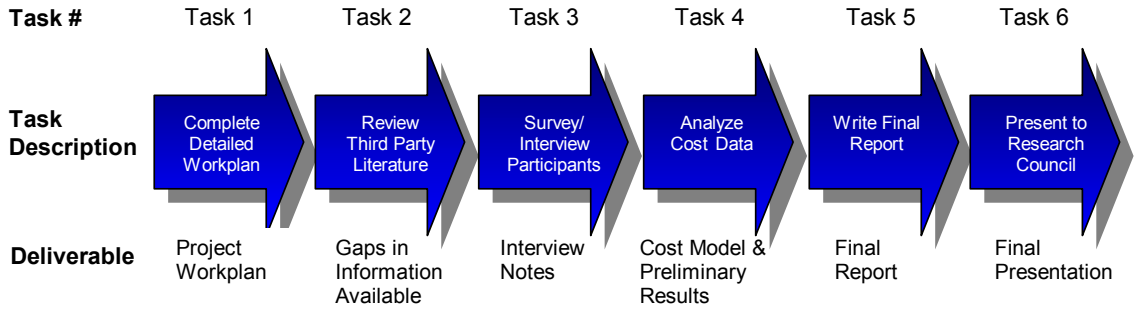
1.2. PROJECT SCOPE

The project scope included a comprehensive analysis of direct and indirect costs of transacting business in third parties versus MVD field offices, including long term and short term costs. The analysis includes examining the third party process in detail and comparing it with the same process within MVD operations to determine the cost to MVD of providing a transaction through a third party versus the cost to provide the same transaction in an MVD office.

1.3. PROJECT APPROACH

The project approach included six major tasks with associated deliverables:

Figure 1 – Project Approach



1.4. ORGANIZATION OF THE CONTENTS

This report is divided into an Executive Summary, four sections comprising the main body, and nine appendices. After this Introduction section, the report includes the following sections:

Section 2.0 – Gaps in Current Models
Section 3.0 – Interview and Survey Results
Section 4.0 – Cost Model

2. GAPS IN CURRENT MODELS

2.1. OBJECTIVES

The objectives in Task 2 of the Third Party Cost-Benefit Analysis study were to:

- Obtain and review previous Third Party Cost-Benefit models prepared for MVD
- Conduct a search and review of available literature related to the costing of internally and externally performed MVD third-party transactions
- Perform a gap analysis of the existing models with current best-practices.

The results of this analysis were utilized in subsequent project activities for the purposes of defining assumptions and developing the cost model.

2.2. TASKS PERFORMED

The following work was performed in Task 2:

- Interviewed key MVD stakeholders to gain an understanding of their areas of responsibility and expectations related to our study.
- Reviewed existing Third Party Cost-Benefit studies and examined the issues related to these studies through discussions with the authors and stakeholders.
- Performed extensive literature searches with the assistance of the Arizona Transportation Research Center.
- Conducted Internet searches for relevant information.
- Obtained and reviewed information from leading think-tanks on government privatization and outsourcing (Reason Public Policy Institute and Cascade Policy Institute).
- Reviewed relevant information available on state government websites.
- Analyzed previous studies and models with information learned through literature search to define gaps in the existing models.
- Analyzed the relevant literature to determine impact on the remainder of the project.

2.3. GAPS IN CURRENT MODELS

Three previous efforts to model MVD and Third Party costs have been developed for the Motor Vehicle Division in the last several years. We reviewed each of the following models:

1. Transaction Costs – Customer Service and Third Party, by Ruth Halikowski, March 7, 2000
2. Transaction Costs – Customer Service and Third Party, by Ruth Halikowski, January 24, 2001
3. *A Cost Model to Compare the Costs of Traditional Motor Vehicle Transaction Delivery to an e-Government Delivery System*, a report to the American Association of Motor

Vehicle Administrators (AAMVA) Electronic Government Working Group by Craig Stender, August 22, 2001.

Based on our analysis of these models in comparison with best practices derived from the literature review, the following gaps were identified:

- Models 1 & 2 included only Direct Costs and Operating Costs (referred to as "the first layer of indirect costs"). The first layer of indirect costs consists of those costs occurring outside of Customer Service and the Third Party Program, but essential to completing the transactions. The first layer included positions and costs related to the warehouse, forms printing, license plates and warehouse costs, and positions in other related MVD programs.

- Models 1 & 2 did not include Indirect Costs for:
    - MVD Administration
        - MVD Management
        - MVD Centralized Administrative Support
    - ADOT Administration
        - Arizona Transportation Research Center
        - Audit and Analysis
        - Contracts and Specifications
        - Equipment Services
        - Executive Staff
        - Financial Management Services (Accounting, Payroll, Cash Management, Financial Planning, Risk Management)
        - Human Resources
        - Information Technology, Telecommunications
        - Training Resources
        - Procurement
    - State of Arizona Administration
        - Department of Administration
        - Attorney General
        - Auditor General
        - Government Information Technology Agency
        - Governor's Office
        - Personnel Board
        - Retirement System

- In Model 1, rent costs were included for leased facilities but depreciation was not included for state-owned buildings. In Model 2, building depreciation was included.

- No attempts were made to classify or segregate transactions by type or complexity.

- Models 1 & 2 did not include a quantification or discussion of benefits of the Third Party program.

- Model 3 focused solely on comparing e-government (Electronic Service Delivery or Service Arizona) with traditional Over-the-Counter (OTC) transactions.

- Model 3, while including indirect costs for Information Technology, also did not include other types of indirect costs.

- Attempts were made in Model 3 to quantify Customer Costs for both OTC and e-government transactions.

- While no attempt was made to quantify benefits, consideration of intangible benefits of e-government transactions was included.

2.4. PROJECT IMPACT

Our analysis of the gaps in the current models combined with the results of our literature review disclosed the following:

- Full cost allocation is the common method used in performing privatization/outsourcing cost analyses. Accordingly, our model should include full cost allocation, including allocation of appropriate indirect costs.

- The complexity of transactions and services provided by MVD and Third Parties varies significantly. In addition, there are several channels used to deliver these services (Internet, mail, OTC, phone). A means of categorizing transactions and services for cost comparison purposes might be appropriate.

- A better means of identifying the benefits of the Third Party Program should be determined. Additionally, the impact to MVD and the public of eliminating the Third Party Program should be determined.

- Hard dollar cost savings should not be the sole determinant of value of the Third Party Program.

2.5. RESULTS OF LITERATURE SEARCH

An extensive literature review was performed. Although there is not a significant body of work directly related to costs and benefits of MVD third party programs, an extensive amount of information was found on privatization of state government services and the costs/ benefits associated with these programs.

Rather than listing a bibliography of the numerous documents reviewed, abstracts of only the literature that we feel is highly relevant to our study is included below. All documents listed were considered in the development of the cost/benefit models and recommendations in subsequent phases of the project. In addition to each document's reference information, a brief description of its relevance to our study is provided.

AAMVA's Model Privatization Program – A Guide to Outsourcing Government, June 1998
A summary of the issues associated with outsourcing of government services is presented. Of particular relevance is Appendix B – Summary of Privatization Survey, where each state's outsourced motor vehicle services are described. A description of related legislation and rules, impacts and effectiveness of the programs, costs, and the pros & cons of privatization are discussed. See Appendix B for a breakdown of state outsourcing functions and major issues identified.

Annual Report on Privatization, Reason Public Policy Institute, 1997
A common public sector mistake is failing to determine the true fully allocated costs of in-house services. This shortcoming will cause unfair cost comparisons with outsourcing alternatives. The authors describe a model where direct plus indirect internal costs should be compared with the costs of contracting-out plus contract monitoring costs when making outsourcing decisions.

The State of Virginia has developed the COMPETE PC-based cost comparison program for determining the cost of internal delivery of services. The model uses fully allocated costs and the activity cost of service units of output in state functions. See Appendix A for a synopsis of this model.

Annual Report on Privatization, Reason Public Policy Institute, 1998
There are no real guidelines that lay out how governments should conduct fair public/private competition. Objective third parties should be used to determine the true cost of governmental services. These costs should include depreciation, an overhead allocation based on usage, an interest expense allocation and the cost of outside consultants.

Competitive Government Handbook, State of Arizona, Office for Excellence in Government (OEG), September 2001, v4.
This document contains information on developing a full cost model for in-house costs, and a guide for comparing in-house costs to the cost of outsourcing. Several cost models and decision making tools are provided. See Appendix A for a synopsis of this model.

A Framework for Evaluating the Government Contracting-Out Decision with an Application to Information Technology, Steven Globerman and Aiden R. Vining, Public Administration Review, November/December 1996, Vol. 56, No. 6.
The premise of this article is that outsourcing should only be employed when society is made better by doing so. Minimizing government cost is only one factor to consider. A more important consideration is the cost to citizens. The authors contend that outsourcing does lower overall production costs due to competition and efficiency gains.

How to Compare Costs Between In-House and Contracted Services, Lawrence Martin, Reason Public Policy Institute, March 1993, #4.
A common mistake in determining internal costs of governmental services is the failure to include interest, pension, facilities and equipment as direct costs related to the services. Cost savings from outsourcing should be the difference of avoidable costs less contractor costs. A general rule of thumb is to apply a 10% to 20% administrative cost to the cost of the outsourcing

contract. The Office of Management and Budget (OMB) has a staffing formula which can also be used to determine the cost of outsourcing administration. Finally, the cost of contracting should be reduced by the net new revenue to the state that is attributable to the outsourcing contract.

The Long Term Impact and Cost Effectiveness of Outsourcing, J. Lynn Johnson and Louis D. Ponthieu, Transportation Research Center, University of North Texas, December 1999.
The authors conclude via survey data that the long term cost savings to state governments associated with outsourcing have generally been small. When indirect costs related to the governmental programs are considered, significant cost savings can result over time.

Partial outsourcing is a viable alternative; therefore outsourcing decisions should not be polarized on an all or nothing basis. Functions that have been outsourced do not tend to be brought back in-house over time. Outsourcing tends to increase over time. Finally, it is difficult to do cost/benefit analyses related to outsourcing due to the problems identifying internal & external costs, tangible & intangible costs and discretionary & non-discretionary costs.

Private Practices: A Review of Privatization in State Government, Keon S. Chi and Cindy Jasper, The Council of State Governments, 1997.
Based on survey data, the authors concluded that cost savings is the primary reason for a state's decision to outsource. Although the authors conclude that the majority of states could not estimate the cost savings resulting from privatization. Because of the difficulty in determining the true costs of outsourcing to state government, state policy makers should develop analysis formats for agencies to use. Of those states that provided a percentage cost savings, most indicated less than a 5% savings to state government.

2.6. ANALYSIS OF RELEVANT COST MODELS

Model Name: State of Arizona Competitive Government Program Handbook

Date: June, 2001

Relevance to the Study:
The Competitive Government Program, created in 1996 by the Arizona Legislature, was formed to foster fair public-private competition for the purpose of better meeting customer needs, fostering efficiency and reducing costs. The cost models presented are very applicable to this study because they factor in the accounting rules and policies of the State of Arizona and are tailored for state agency use.

Description of the Model's Pertinent Contents:
Two cost models are presented: the Full Cost Model and the Mini-Model. We will focus our analysis on the Full Cost Model. The Mini-Model uses a standard rate of 16% of direct costs to arrive at an indirect cost allocation for internal services and is more limited in scope.

The process described for building the internal cost model begins with collecting relevant direct costs for the function under review. The next step is to determine the indirect costs attributed to

the function. The model emphasizes the distinguishing of avoidable vs. unavoidable costs. Only avoidable costs are relevant for the model.

The full costing method described in the text does not rely on a specific method of allocating indirect costs to the internal function. Various allocation methods are suggested, leaving it to the analyst to select the most applicable allocation method for each direct cost category. For instance, payroll costs could be allocated based on the number of full time equivalent employees (FTEs) in the target function, whereas Accounts Payable costs could be allocated by the number of warrants issued.

The model does a good job of describing the difference between agency and statewide indirect costs and how they should be treated in the model. The key point is that both are important factors to include in deriving the full cost of an agency function. The Department of Administration provides a statewide indirect cost allocation percentage for each agency.

The model provides spreadsheets for all cost categories. It provides references to the State of Arizona Accounting Manual for determining useful life of capital assets for the purpose of computing depreciation. All assets and improvements with a cost of more than $5,000 are considered capitalized costs for the model.

After all internal costs are collected, costs related to outsourcing are then identified. Many of the costs are not relevant to this study, such as the various types of one-time conversion costs that would be incurred with the initial outsourcing of an internal function. These include personnel redeployment, asset retirement, lease cancellations and real estate sales. Any new revenue generated through the outsourcing is shown as a reduction in outsourcing costs. Revenue could be in the form of additional fees due to the state, net gain on asset sales, as well as the sales tax collected by the state from the outsourcer.

A rule of thumb provided for evaluating the internal and outsourced costs for a given function is that if the cost savings from outsourcing is not at least 10%, then outsourcing should not be done.

In all, the model provides a very thorough methodology and tool for performing an evaluation of costs for the purpose of outsourcing an existing state function. No attempt is made at quantifying so called 'soft' benefits of outsourcing, such as customer convenience and time savings, productivity gains, and quality improvements.

For more information and to obtain a downloadable model, go to: www.governor.state.az.us/excellence or contact the State of Arizona Office for Excellence in Government at (602) 543-7546.

Model Name: Commonwealth of Virginia Cost Comparison Program (COMPETE)

Date: May, 1996

Relevance to the Study:
The Cost Comparison Program ("COMPETE") is a fully automated, personal computer (PC)-operated decision-making tool used by the State of Virginia for the purpose of evaluating insourcing/outsourcing alternatives by assuring a level playing field.

Description of the Model's Pertinent Contents:
"COMPETE" builds several key pieces of information for evaluating in-sourcing/outsourcing alternatives, including:

- The fully allocated cost of a state function or activity
- The activity cost of service units of output in a state function
- A level playing field cost comparison of operating a function in-house vs. the private sector

The fully allocated cost of the state function is then compared to the State cost to contract with private firms. This information allows an agency to accurately compare alternative proposals, with an emphasis on the State's fully allocated costs, and to set benchmarks for performing the service and measuring the performance of a contract.

As with the Arizona Competitive Government model, COMPETE is based on a series of cost spreadsheets that are completed by the analyst. A full cost model is developed.

The model provides state workers with very specific instructions as to where to get the cost data required to complete the spreadsheets.

The model describes two types of overhead or indirect costs (operations / general and administrative) incurred in support of the function or activity which are not 100 percent attributable to the function or activity. Operations overhead is the cost incurred in support of the function by the supervisory workforce **one level** above the studied function. General and Administrative overhead are internal agency support costs, other than operations overhead, incurred in the support of the studied function. The model does not apply an allocation from other state agencies that indirectly support the agency and function. General and Administrative overhead costs are automatically allocated to the studied function on a FTE ratio basis.

The model attempts to develop activity based costs for core activities and determine the annual cost per service unit of output. Although not directly related to the in-sourcing/outsourcing decision, this data can be used to develop a more efficient and competitive internal organization.

Inputs to the activity based costing models include:

- Major performance activities of the function
- Percentage of time spent on each major activity
- Number of service units of each major performance activity (units of output).

The model does not provide guidance as to how to account for and model outsourcing costs for comparison purposes. As with the Arizona model, no attempt is made to address the 'soft' benefits of outsourcing.

For more information and to download the model, go to: http://www.vipnet.org/ccc/compete/ or contact the State of Virginia Commonwealth Competition Council at (804) 786-0240.

2.7. SUMMARY OF JURISDICTIONS OUTSOURCING PROGRAMS

Below are the responses of forty-nine jurisdictions in the United States and Canada responding to all or part of a survey developed by the AAMVA Privatization Working Group. The following tables represent our interpretation and summarization of a relevant subset of the AAMVA survey results.

Table 1 – Jurisdictions Outsourcing MVD Functions

Function	Number of Jurisdictions	Planned
Drivers Licensing	*18 outsource all or part*	
New Issuance	13	1
Renewals	18	1
Duplicates	15	1
Transfers	11	
Skills Testing	*23 outsource all or part*	
Non-CMV	10	
CMV	21	1
Motorcycle	13	
Written Testing		
Non-CDL	9	1
Motorcycle	7	
Vision Testing	9	
Registration Functions	*26 outsource all or part*	
New	26	1
Renewals	25	2
Duplicates	18	1
Insurance Verification	7	1
Emission Testing	13	
Title Verification	8	1
Safety Inspections	6	
Motor Carrier Functions	*6 outsource all or part*	
IRP	3	2
IFTA	6	1
Single State Registration	0	
Oversize Permitting	1	1
Safety	1	2
General Functions	*12 outsource all or part*	
Telephone	4	
Correspondence	2	1
Driver Improvement	11	
Defensive Driving	12	
Accident Records	3	

Source: AAMVA Model Privatization Program, Privatization Survey, June, 1998.

Table 2 – Results of Jurisdictions Outsourcing MVD Functions

Result	Drivers Licensing	Motor Vehicle	Motor Carrier	General Functions
Cost Savings	12	14	4	6
Increased Customer Service	22	15	7	6
Improved Employee Moral	2	0	1	1
Cost Avoidance	11	15	4	4
Decrease in Wait Times	19	9	3	2
Enhanced Public Perception	14	8	5	4
Increase in Revenue	0	0	0	0
Better Customer Satisfaction	15	8	6	5
Reduced Backlogs	13	8	4	6

Source: AAMVA Model Privatization Program, Privatization Survey, June, 1998

Thirty five jurisdictions reported that their outsourcing programs are working well while three reported that their programs were not working well, with two jurisdictions reporting mixed results.

The complete AAMVA survey can be found on the web at:
http://www.aamva.com/Documents/egvPrivatization-june98.pdf

3. INTERVIEW AND SURVEY RESULTS

3.1. OBJECTIVES

The objectives of Task 3 of the Third Party Cost-Benefit Analysis were to:

- Conduct a series of interviews with appropriate MVD and outside individuals to gather understanding of their areas of responsibility and obtain from them information pertinent to the study.
- Continue to collect and analyze data and research that will be used in the building of the cost benefit models.

The results of this task were used in subsequent phases of the project for the purpose of defining assumptions and developing the cost model.

3.2. TASKS PERFORMED

The following work was performed in Task 3:

- Identified interviewees that possessed an appropriate knowledge of the issues and functions related to our study.
- Developed a series of interview questions
- Interviewed key individuals to gain an understanding of their areas of responsibility and expectations related to our study, and obtain from them information pertinent to the study.
- Obtained related organization information, policies & procedures and preliminary transaction volume and cost data for MVD Customer Service and the Third Party functions.
- Continued to obtain and review information from leading think-tanks on government privatization and outsourcing (Reason Public Policy Institute and Cascade Policy Institute).
- Built a set of working papers for use in the model development.

3.3. SUMMARY OF INTERVIEW RESULTS

The primary purpose of the interviews with MVD staff was to obtain a greater understanding of the business processes, transactions and resources employed to deliver MVD services by field offices and through the Third Party Program. Secondarily, we endeavored through our interviews to gain a better understanding of the issues associated with the previous cost models and how we could improve on the past models. Finally, we used the interviewees as sounding boards to corroborate our ideas and proposed methods under consideration for the construction of the Third Party Cost – Benefit Model. We feel that interviews were valuable and all objectives for the interview process were met.

All interviewees agreed that attempting to do a study on comparing costs of the Third Party Program to the costs of MVD delivered services is a difficult and complex endeavor. Most interviewees readily recognized the political ramifications of such a study and the differences of opinion related to the program both inside and outside of MVD. While all concurred that the Third Party Program provided a high degree of benefits to the customers of the State of Arizona, many were unsure that the program provided a significant cost savings to MVD.

Nearly half of those interviewed had reviewed the previous Third Party cost models that had been prepared by MVD. All interviewees that reviewed the past models did not completely agree with the way in which the transaction costs had been derived and had suggestions on ways to improve the models. Most agreed that indirect costs should be applied to the cost of field office transactions and that some form of transaction classification should be employed to make the model more meaningful. One interviewee preferred an incremental or marginal cost method where indirect costs are not considered.

Specifically, a full cost approach for arriving at MVD Customer Service costs was almost unanimously stated as the preferred technique. Most recognized that prior MVD prepared models included only Direct Costs and Operating Costs (referred to as "the first layer of indirect costs"). The first layer of indirect costs consisted of those costs occurring outside of Customer Service and the Third Party Program, but essential to completing the transactions. The first layer included positions and costs related to the warehouse, forms printing, license plates and warehouse costs, and positions in other related MVD programs. The prior models did not include any Indirect Costs for MVD Administration, ADOT Administration including Human Resources, Information Technology, Training, Procurement, etc. Finally, State of Arizona Administration costs were excluded from prior modeling efforts. According to the interviewees, these costs should be included in the model.

Intuitively, most interviewees agreed that some type of classification scheme for transactions would make comparing transaction costs more meaningful. Although most did not suggest an approach, there was unanimous agreement of those familiar with previous modeling efforts that some type of classification by delivery channel would be appropriate. These channels would include, mail, phone, Internet and over the counter transactions. Identifying the costs for each channel would provide valuable information in deciding which delivery techniques should be expanded in the future. To classify transactions by complexity or time to complete was not practical in the minds of most interviewees. Finally, interviewees mostly agreed that an 'apples to apples' comparison should be performed. Only MVD Customer Service costs for transactions that are being performed by a Third Party mechanism should be considered. There are numerous transactions performed by MVD that are not available to Third Parties.

Another valuable issue emerged from the interview process related to how best to represent the benefit of the Third Party program. Several interviewees suggested that the study show the effects of eliminating the Third Party program in terms of the required addition of MVD Customer Service offices and staff. Alternatively, if additional offices were not added, what effect on existing MVD office customer wait times would result from the scaling back or elimination of the Third Party program.

Finally, interviewees recognized that the Quality Assurance function within the Third Party program provides a significant value added benefit that is not present in the Customer Service offices. In this function, approximately eight staff members perform a sampling review of Third Party transactions on a daily basis and assist in correcting errant transactions. Detailed statistics of Third Party office transaction quality are maintained, identifying quality trends and problems in Third Party offices where remedial action might be required. The added benefit of the Quality Assurance function though, cannot readily be quantified because Customer Service offices do not keep quality related statistics. Several interviewees suggested that this function be removed from the Third Party costs total, since a similar function was not present for internal Customer Service transactions, assuring an 'apples to apples' comparison between the two programs.

All interviewees were supportive of the project and agreed to provide any information necessary for the development of the model.

4. COST MODEL

4.1. OBJECTIVES

Using lessons learned from review of prior models, review of relevant literature, and interviews with key personnel, a Third Party Transaction Cost model was constructed, populated with relevant data, and analyzed. The model was not only to be used to evaluate current data, but also to be a tool that could be used in the future. In addition, the model could be used to perform "What If" analyses.

4.2. STRUCTURE OF THE MODEL

The Third Party Transaction Cost model is a series of three interlinked Microsoft Excel workbooks. Microsoft Excel 97 or later (Excel 97, Excel 2000, Excel 2002) may be used to access and update the model. Minimal Microsoft Excel knowledge is needed to use the model. Modifying the model requires an intermediate level of understanding of Microsoft Excel, including formulas and worksheet linking.

The three Excel files or workbooks are:

1. **CostModelSummary.xls** – contains the overall summary, summary by channel (Customer Service, Renew-by-Mail, traditional Third Party, and Service Arizona), and detailed calculations by channel.

2. **MVDCosts.xls** – contains all of the detailed costs, allocations, and transactions that apply to MVD Customer Service.

3. **ThirdPartyCosts.xls** – contains all of the detailed costs, allocations, and transactions that apply to Third Parties, including Service Arizona.

The two detailed Excel files or workbooks for MVD Customer Service Costs and Third Party Costs contain multiple detailed worksheets or spreadsheets. The detailed worksheets are linked into a Summary worksheet that is then linked into the overall Cost Model Summary. Thus, any changes in a detailed cell in the model are automatically recalculated and displayed in the Summary worksheet for that model as well as the overall Cost Model Summary.

Instructions for using this model are included in Appendix D, while exact the formulas used in each worksheet are included in Appendices E, F, and G for the Cost Model Summary, MVD Cost Model, and Third Party Cost model respectively.

Cost and transaction data in the model are for the most recent fiscal year data available, the ADOT Fiscal Year 2002 (for the period July 1, 2001 – June 30, 2002).

4.3. COST MODEL SUMMARY

The Cost Model Summary worksheet provides an overall summary comparison of MVD Customer Service costs and Third Party costs at total amounts and per transaction amounts by cost type.

Table 3 – Cost Model Summary

	MVD Customer Service		Third Party	
Cost Type	**FY2002 Total**	**Cost Per Transaction**	**FY2002 Total**	**Cost Per Transaction**
Direct Personnel Costs				
Customer Service Personnel	$ 29,579,207	$ 5.56	$ 1,794,035	$ 0.94
Direct Support Personnel	$ 2,482,167	$ 0.47	$ 257,189	$ 0.13
Total Direct Personnel Costs	$ 32,061,374	$ 6.02	$ 2,051,224	$ 1.07
Operating Costs				
Operating Costs	$ 9,416,391	$ 1.77	$ 1,937,518	$ 1.01
Technology Costs				
Information Technology Costs	$ 2,950,362	$ 0.55	$ 1,044,921	$ 0.55
Telecommunications Costs	$ 1,460,780	$ 0.27	$ 524,581	$ 0.27
Total Technology Costs	$ 4,411,142	$ 0.83	$ 1,569,502	$ 0.82
Indirect Costs				
MVD Indirect Costs	$ 1,824,832	$ 0.34	$ 655,315	$ 0.34
ADOT Indirect Costs	$ 4,428,981	$ 0.83	$ 252,765	$ 0.13
State Indirect Costs	$ 250,110	$ 0.05	$ 14,274	$ 0.01
Total Indirect Costs	$ 6,503,922	$ 1.22	$ 922,354	$ 0.48
Building & Equipment Costs				
Building Costs	$ 2,074,994	$ 0.39	$ 118,421	$ 0.06
Equipment Costs	$ 1,868,629	$ 0.35	$ 106,644	$ 0.06
Total Building & Equipment Costs	$ 3,943,623	$ 0.74	$ 225,065	$ 0.12
Other Costs				
Other Costs	$ 384,098	$ 0.07	$ 137,933	$ 0.07
Third-Party Fees				
Third-Party Fees	N/A	N/A	$ 11,382,322	$ 5.96
Total Costs	**$ 56,720,549**	**$ 10.66**	**$ 18,225,918**	**$ 9.54**
Total Cost Savings Using Third Parties			$ 2,142,993	$ 1.12

4.4. SUMMARY BY CHANNEL

The Summary by Channel worksheet provides a summary of costs per transaction by Channel - MVD Customer Service (over-the-counter), Renew-by-Mail (mail), traditional Third Party (third party offices), and Service Arizona (Internet).

Table 4 – Cost Model Summary by Channel

Customer Service	Renew by Mail	Third Party	Service Arizona
Cost Per Transaction	Cost Per Transaction	Cost Per Transaction	Cost Per Transaction
$ 12.80	$ 2.42	$ 11.74	$ 4.60

Channel Definitions:

- Customer Service, sometimes referred to as 'Over-the-Counter' transactions, represent those transactions that take place at MVD Customer Service offices.

- Renew by Mail is a specialty unit within MVD that processes registration renewals mailed to MVD by customers. In addition to processing registration renewals mailed to MVD, the Renew by Mail unit also handles the mailing of completed registrations and tabs that were initiated over the internet or by phone for Service Arizona. The processing costs related to the Service Arizona transactions are depicted as Service Arizona costs in the cost models.

- Third Party represents the transactions performed at the traditional third party offices throughout the state.

- Service Arizona is a unique subset of third party transactions. These transactions include a wide array of vehicle and drivers transactions accessible to customers over the Internet, as well as vehicle registration renewal transactions processed through an Interactive Voice Response (IVR) system.

4.5. MVD CUSTOMER SERVICE COST MODEL

The MVD Customer Service Summary worksheet summarizes the total costs by category from the detailed worksheets listed below.

Table 5 – MVD Customer Service - Summary

Cost Type	FY2002 Total	Cost Per Transaction
Direct Personnel Costs		
Total Customer Service Personnel	$ 29,579,207	$ 5.56
Total Direct Support Personnel	$ 2,482,167	$ 0.47
Total Direct Personnel Costs	$ 32,061,374	$ 6.02
Operating Costs		
Total Operating Costs	$ 9,416,391	$ 1.77
Technology Costs		
Total Information Technology Costs	$ 2,950,362	$ 0.55
Total Telecommunications Costs	$ 1,460,780	$ 0.27
Total Technology Costs	$ 4,411,142	$ 0.83
Indirect Costs		
Total MVD Indirect Costs	$ 1,824,832	$ 0.34
Total ADOT Indirect Costs	$ 4,428,981	$ 0.83
Total State Indirect Costs	$ 250,110	$ 0.05
Total Indirect Costs	$ 6,503,922	$ 1.22
Building & Equipment Costs		
Total Building Costs	$ 2,074,994	$ 0.39
Total Equipment Costs	$ 1,868,629	$ 0.35
Total Building & Equipment Costs	$ 3,943,623	$ 0.74
Other Costs		
Total Other Costs	$ 384,098	$ 0.07
Total MVD Customer Service Costs	**$ 56,720,549**	**$ 10.66**

The Direct Personnel Costs worksheet includes direct Customer Service costs, other direct support personnel costs and other personnel costs.

Table 6 – MVD Customer Service Cost Model – Direct Personnel Costs

Cost Type/Function	FTEs	Total FY2002 Salary Costs	Allocation Basis	Allocation Percentage	Total Allocated to Customer Service
Customer Service Personnel					
Customer Service Field Office Personnel	869	$ 22,653,454	Full	100%	$ 22,653,454
Customer Service Headquarters Personnel	7	$ 262,908	Full	100%	$ 262,908
ERE on Customer Service Personnel		$ 6,662,845	Full	100%	$ 6,662,845
Total Customer Service Personnel	876	$ 29,579,207		100%	$ 29,579,207
Direct Support Personnel					
Abandoned Vehicle - ISS	2.0	$ 40,170	Full	100%	$ 40,170
Title Production - ISS	0.5	$ 10,901	Full	100%	$ 10,901
Film Research - ISS	8.0	$ 163,008	Full	100%	$ 163,008
Mandatory Insurance - ISS	2.5	$ 55,878	Full	100%	$ 55,878
Criminal Traffic - ISS	2.0	$ 40,752	Full	100%	$ 40,752
Microfilm - ISS	4.0	$ 81,504	Full	100%	$ 81,504
Civic Traffic - ISS	2.0	$ 40,752	Full	100%	$ 40,752
Medical Review - ISS	1.0	$ 25,590	Full	100%	$ 25,590
Training - ISS	14.0	$ 491,008	Full	100%	$ 491,008
Technical Support - ISS	20.0	$ 492,860	Full	100%	$ 492,860
Out-of-State Desk - ISS	3.0	$ 78,615	Full	100%	$ 78,615
Renew-by-Mail - ISS	1.0	$ 23,111	Full	100%	$ 23,111
Audit - TSG	1.0	$ 38,654	Full	100%	$ 38,654
Warehouse - CSS	5.3	$ 132,182	Full	100%	$ 132,182
Plate Positions - CSS	0.9	$ 30,982	Full	100%	$ 30,982
Dishonored checks - CGP	2.8	$ 72,677	Full	100%	$ 72,677
Motor Vehicle Enforcement Services	4.0	$ 104,404	Full	100%	$ 104,404
ERE on Direct Support Personnel		$ 559,119	Full	100%	$ 559,119
Total Direct Support Personnel	74.0	$ 2,482,167		100%	$ 2,482,167
Other Personnel Costs					
Temporary Personnel		$ 248,414	Customer Service Headcount/Total MVD Headcount	58%	$ 144,665
Education & Training		$ 182,922	Customer Service Headcount/Total MVD Headcount	58%	$ 106,525
Travel Expenses		$ 395,608	Customer Service Headcount/Total MVD Headcount	58%	$ 230,383
Other		$ 421,240	Customer Service Headcount/Total MVD Headcount	58%	$ 245,310
Total Other Personnel Costs		$ 1,248,184		100%	$ 726,884
Total Direct Personnel Costs	**950**	**$ 33,309,558**			**$ 32,788,257**

The Operating Costs worksheet contains primary operating costs such as plates & tags, driver license credentials, printing, postage, and supplies.

Table 7 – MVD Customer Service Cost Model – Operating Costs

Cost Type/Function	Total FY2002 Costs	Allocation Basis	Allocation Percentage	Total Allocated to Customer Service
Operating Costs				
Plates & Tabs	$ 2,295,285	Registrations	84%	$ 1,924,848
Drivers License Credentials (DDL)	$ 2,400,000	DL Transactions	99%	$ 2,377,989
Printing	$ 1,393,761	Transactions	74%	$ 1,025,495
Postage	$ 1,300,000	Already Allocated	100%	$ 1,300,000
Supplies	$ 3,789,277	Transactions	74%	$ 2,788,058
Total Operating Costs	**$ 11,178,323**			**$ 9,416,391**

The Technology Costs worksheet includes programming costs, information technology (IT) equipment & software depreciation and purchases, external telecommunications costs, and telecommunications depreciation and purchases.

Table 8 – MVD Customer Service Cost Model – Technology Costs

Cost Type/Function	Total FY2002 Costs	Allocation Basis	Allocation Percentage	Total Allocated to Customer Service
Information Technology Costs				
Programming	$ 3,522,535	Total Customer Service Transactions /Grand Total Transactions	74%	$ 2,591,796
IT Equipment Depreciation (Capitalized Equipment)	$ 159,219	Customer Service Drivers License Transactions/Grand Total Drivers License Transactions	99%	$ 157,759
IT Equipment Purchases (Non-Capitalized)	$ 248,140	Total Customer Service Transactions /Grand Total Transactions	74%	$ 182,575
Software Depreciation (Capitalized)	$ 6,395	Total Customer Service Transactions /Grand Total Transactions	74%	$ 4,705
Software Purchases (Non-Capitalized)	$ 18,385	Total Customer Service Transactions /Grand Total Transactions	74%	$ 13,527
Total Information Technology Costs	$ 3,954,674			$ 2,950,362
Telecommunications Costs				
External Telecommunications	$ 1,842,956	Total Customer Service Transactions /Grand Total Transactions	74%	$ 1,356,002
Telecommunications Equipment Depreciation (Capitalized Equipment)	$ 115,110	Total Customer Service Transactions /Grand Total Transactions	74%	$ 84,695
Telecommunications Equipment Purchases (Non-Capitalized)	$ 27,294	Total Customer Service Transactions /Grand Total Transactions	74%	$ 20,082
Total Telecommunications Costs	$ 1,985,360			$ 1,460,780
Total Technology Costs	**$ 5,940,034**			**$ 4,411,142**

The Building & Equipment Costs worksheet includes building rent & depreciation, maintenance, utilities, and equipment purchases, depreciation, and maintenance.

Table 9 – MVD Customer Service Cost Model – Building & Equipment Costs

Cost Type	FY2002 Total	Allocation Basis	Allocation Percentage	Total Allocated to Customer Service
Building Costs				
Building Depreciation	$ 1,125,710	Customer Service Headcount/Total MVD Headcount (includes additional depr for added bldgs in FY2002	58%	$ 655,561
Building Rent	$ 414,416	Customer Service Headcount/Total MVD Headcount	58%	$ 241,337
Janitorial & Building Repair/Maintenance	$ 980,574	Customer Service Headcount/Total MVD Headcount	58%	$ 571,040
Landscaping	$ 55,001	Customer Service Headcount/Total MVD Headcount	58%	$ 32,030
Utilities	$ 987,420	Customer Service Headcount/Total MVD Headcount	58%	$ 575,027
Total Building Costs	$ 3,563,121			$ 2,074,994
Equipment Costs				
Equipment Lease/Rental	$ 1,367,805	Customer Service Headcount/Total MVD Headcount	58%	$ 796,545
Equipment Depreciation (Capitalized Equipment)	$ 33,154	Customer Service Headcount/Total MVD Headcount	58%	$ 19,307
Equipment Purchases (Non-Capital)	$ 765,956	Customer Service Headcount/Total MVD Headcount	58%	$ 446,057
Equipment Repair & Maintenance	$ 1,041,841	Customer Service Headcount/Total MVD Headcount	58%	$ 606,719
Total Equipment Costs	$ 3,208,757			$ 1,868,629
Total Building & Equipment Costs	**$ 6,771,877**			**$ 3,943,623**

The Indirect Costs worksheet includes indirect costs for functions that provide support to MVD Customer Service including at the central MVD, ADOT, and State of Arizona levels.

Table 10 – MVD Customer Service Cost Model – Indirect Costs

Cost Type/Function	Total FY2002 Costs	Allocation Basis	Allocation Percentage	Total Allocated to Customer Service
MVD Indirect Costs				
MVD Management	$ 685,510	Total Customer Service Transactions/Grand Total Transactions	74%	$ 504,382
MVD Centralized Administrative Support	$ 1,311,709	Total Customer Service Transactions/Grand Total Transactions	74%	$ 965,124
ERE on Above Personnel	$ 482,928	Total Customer Service Transactions/Grand Total Transactions	74%	$ 355,326
Total MVD Indirect Costs	$,480,147			$ 1,824,832
ADOT Indirect Costs				
Audit & Analysis	$ 1,698,900	Customer Service Headcount/Total ADOT Headcount	20%	$ 346,429
Executive Staff	$ 605,300	Customer Service Headcount/Total ADOT Headcount	20%	$ 123,429
Financial Management Services	$ 17,030,500	Customer Service Headcount/Total ADOT Headcount	20%	$ 3,472,749
Human Resources	$ 893,600	Customer Service Headcount/Total ADOT Headcount	20%	$ 182,217
Procurement	$ 1,060,900	Customer Service Headcount/Total ADOT Headcount	20%	$ 216,332
Training Resources	$ 430,700	Customer Service Headcount/Total ADOT Headcount	20%	$ 87,826
Total ADOT Indirect Costs	$ 21,719,900			$ 4,428,981
State Indirect Costs				
DOA - General Accounting Office	$ 332,551	Customer Service Headcount/Total ADOT Headcount	20%	$ 67,812
DOA - State Procurement Office	$ 47,773	Customer Service Headcount/Total ADOT Headcount	20%	$ 9,742
DOA - Risk Management Division	$ 75,083	Customer Service Headcount/Total ADOT Headcount	20%	$ 15,310
DOA - Mail Room		Customer Service Headcount/Total ADOT Headcount	20%	$ -
Attorney General	$ 203,733	Customer Service Headcount/Total ADOT Headcount	20%	$ 41,544
State Treasurer	$ 29,461	Customer Service Headcount/Total ADOT Headcount	20%	$ 6,007
Public Records - Legislature	$ 90,150	Customer Service Headcount/Total ADOT Headcount	20%	$ 18,383
Governor's Office - Office of Strategic Planning & Budgeting	$ 59,272	Customer Service Headcount/Total ADOT Headcount	20%	$ 12,086
Governor's Office - Office of Equal Opportunity	$ 45,718	Customer Service Headcount/Total ADOT Headcount	20%	$ 9,323
Governor's Office - Office for Excellence in Government	$ 282,686	Customer Service Headcount/Total ADOT Headcount	20%	$ 57,643
DOA - Occupancy	$ 60,123	Customer Service Headcount/Total ADOT Headcount	20%	$ 12,260
Total State Indirect Costs	$ 1,226,550			$ 250,110
Total Indirect Costs	**$ 25,426,597**			**$ 6,503,922**

The Other Costs worksheet includes other costs, such as advertising, insurance, interest, and miscellaneous costs.

Table 11 – MVD Customer Service Cost Model – Other Costs

Cost Type	FY2002 Total	Allocation Basis	Allocation Percentage	Total Allocated to Customer Service
Other Costs				
Advertising	$ 225,818	Total Customer Service Transactions/Grand Total Transactions	74%	$ 166,151
Insurance	$ 7,324	Total Customer Service Transactions/Grand Total Transactions	74%	$ 5,389
Interest Expense	$ 11,980	Total Customer Service Transactions/Grand Total Transactions	74%	$ 8,815
Other Miscellaneous Costs	$ 276,910	Total Customer Service Transactions/Grand Total Transactions	74%	$ 203,744
Total Other Costs	**$ 522,032**			**$ 384,098**

The Transactions worksheet includes detailed transaction counts grouped by Title transactions, Registration Transactions, Renew-by-Mail transactions, Vehicle Inspection transactions, Drivers License transactions, and Inquiry transactions. Headcount data is also included.

Table 12 – MVD Customer Service Cost Model – Transactions

Transaction Type	FY2002 Total
Title Transactions	
Title with registration	618,676
Title only	236,201
Duplicate title	169,197
Salvage/dismantled title	46,106
Create initial title	305,816
Title from Authorization for Transfer of Ownership form	Included in above
Title from an Arizona Repossession Affidavit	Included in above
Bonded titles	Included in above
Restored salvage	Included in above
Reconstruct title	Included in above
Recovered theft title	Included in above
Non-repairable title	Included in above
Refurbished title	Included in above
Special Constructed title	Included in above
Total Title Transactions	1,375,996
Registration Transactions	
Vehicle registration renewals	975,925
Modify registration	85,537
Temporary registrations (TRPs)	77,771
Duplicate registration	37,368
Issuance of a replacement plate and/or year tab	76,584
Personalized plate applications	15,049
Issuance of Disability plates/placards	
Issuance of specialty plates	8,201
Issuance of government plates	
Mobile Home/Permanent Plates	7,219
Fleet Registrations	

Transaction Type	FY2002 Total
Other Registration Transactions	
Total Registration Transactions	1,283,654
Renew-By-Mail	
Renew-By-Mail Renewals	1,100,451
Total Renew By Mail Renewals	1,100,451
Vehicle Inspections	
Level 1 Vehicle Inspections	227,402
Other Inspections	
Total Vehicle Inspection Transactions	227,402
Drivers License Transactions	
Drivers License Issuance	240,629
Drivers License Renewal	125,251
Permits issued	93,870
Drivers License Reinstatement	68,823
Duplicate Drivers License	453,280
ID Card Issuance	94,838
Drivers License Cancellation	0
Drivers License Written Test	151,832
Drivers License Road Test	83,231
Motorcycle Skills Test	4,768
Commercial License (CDL) Written Test	17,692
Commercial License (CDL) Road Test	573
Total Drivers License Transactions	1,334,787
Total Non-Inquiry Customer Service Transactions	**5,322,290**
Inquiry Transactions	
MVR Inquiries	
Fee Inquiries	
Address Changes	
Record Sold Notices	
Total Inquiry Transactions	0
Grand Total MVD Customer Service Transactions	**5,322,290**
Grand Total Transactions (MVD & Third-Party)	
Grand Total Title Transactions	2,291,194
Grand Total Registration Transactions	1,530,693
Grand Total Drivers License Transactions	1,347,142
Grand Total Vehicle Inspection Transactions	374,369
Grand Total Renew-by-Mail Transactions	1,100,451
Grand Total Inquiry Transactions	0
Grand Total Service Arizona Transactions	589,728
Grand Total All Transactions	**7,233,577**
Headcount	
Average Customer Service Field Office Headcount	990
Average MVD Headcount	1,700
Average ADOT Headcount	4,855

4.6. THIRD PARTY COST MODEL

The Summary worksheet summarizes the total costs by category.

Table 13 – Third Party Service Cost Model – Summary

Cost Type	FY2002 Total	Cost Per Transaction
Direct Personnel Costs		
Total Competitive Government Personnel	$ 1,794,035	$ 0.94
Total Direct Support Personnel	$ 257,189	$ 0.13
Total Direct Personnel Costs	$ 2,051,224	$ 1.07
Operating Costs		
Total Operating Costs	$ 1,937,518	$ 1.01
Technology Costs		
Total Information Technology Costs	$ 1,044,921	$ 0.55
Total Telecommunications Costs	$ 524,581	$ 0.27
Total Technology Costs	$ 1,569,502	$ 0.82
Indirect Costs		
Total MVD Indirect Costs	$ 655,315	$ 0.34
Total ADOT Indirect Costs	$ 252,765	$ 0.13
Total State Indirect Costs	$ 14,274	$ 0.01
Total Indirect Costs	$ 922,354	$ 0.48
Building & Equipment Costs		
Total Building Costs	$ 118,421	$ 0.06
Total Equipment Costs	$ 106,644	$ 0.06
Total Building & Equipment Costs	$ 225,065	$ 0.12
Other Costs		
Total Other Costs	$ 137,933	$ 0.07
Third-Party Fees		
Total Third Party Fees	$ 11,382,322	$ 5.96
Total Third Party Costs	**$ 18,225,918**	**$ 9.54**

The Third Party Fees include all fees paid to third parties including the retainage of 2% of VLT, transaction fee retainage, and credit card fee reimbursements.

Table 14 – Third Party Service Cost Model – Third Party Fees

Cost Type/Function	Total FY2002 Costs	Allocation Basis	Allocation Percentage	Total Allocated to Third Party
Third Party Fee Retainage				
2% of VLT	$ 6,571,119	Full	100%	$ 6,571,119
Registration Fee	$ 1,513,230	Full	100%	$ 1,513,230
Title Fee	$ 925,406	Full	100%	$ 925,406
Driver License Fee	$ 220,727	Full	100%	$ 220,727
Inquiry Fees	$ 7,497	Full	100%	$ 7,497
Non-Resident Permit	$ 1,105	Full	100%	$ 1,105
Credit Card Fee Reimbursment	$ 2,143,237	Full	100%	$ 2,143,237
Total Third Party Fees	**$ 11,382,322**			**$ 11,382,322**

The Direct Personnel Costs worksheet includes direct costs for MVD personnel that support the Third Party program, other direct support personnel costs and other personnel costs.

Table 15 – Third Party Service Cost Model – Direct Personnel Costs

Cost Type/Function	FTEs	Total FY2002 Costs	Allocation Basis	Allocation Percentage	Total Allocated to Third Party
Competitive Government Program Personnel					
Third Party Auditors	7.0	$ 270,578	Full	100%	$ 270,578
Third Party QA	21.0	$ 494,251	Full	100%	$ 494,251
Third Party D/L	15.0	$ 364,514	Full	100%	$ 364,514
Third Party T&R	10.0	$ 162,094	Full	100%	$ 162,094
CGP Admin	3.5	$ 130,934	Full	100%	$ 130,934
ERE on Above CGP Personnel		$ 371,665	Full	100%	$ 371,665
Total Competitive Government Personnel	56.5	$ 1,794,035		100%	$ 1,794,035
Direct Support Personnel					
Renew-by-Mail - ISS	2.0	$ 46,222	Full	100%	$ 46,222
Out-of-State Desk - ISS	1.0	$ 26,205	Full	100%	$ 26,205
Comm Unit - ISS	2.0	$ 47,048	Full	100%	$ 47,048
Training - ISS	1.5	$ 52,608	Full	100%	$ 52,608
Warehouse - CSS	1.0	$ 24,940	Full	100%	$ 24,940
Plate Positions - CSS	0.2	$ 6,885	Full	100%	$ 6,885
ERE on Above Supporting Personnel		$ 53,281	Full	100%	$ 53,281
Total Direct Support Personnel	7.7	$ 257,189		100%	$ 257,189
Other Personnel Costs					
Temporary Personnel		$ 248,414	Headcount	3%	$ 8,256
Education & Training		$ 182,922	Headcount	3%	$ 6,079
Travel Expenses		$ 395,608	Headcount	3%	$ 13,148
Other		$ 421,240	Headcount	3%	$ 14,000
Total Other Personnel Costs		$ 1,248,184			$ 41,484
Total Direct Personnel Costs	**64.2**	**$ 3,299,408**			**$ 2,092,708**

The Operating Costs worksheet contains primary operating costs such as plates & tags, driver license credentials, printing, postage, and supplies.

Table 16 – Third Party Service Cost Model – Operating Costs

Cost Type/Function	Total FY2002 Costs	Allocation Basis	Allocation Percentage	Total Allocated to Third Party
Operating Costs				
Plates & Tabs	$ 2,295,285	Registrations	16%	$ 370,437
Drivers License Credentials (DDL)	$ 2,400,000	DL Transactions	1%	$ 22,011
Printing	$ 1,393,761	Transactions	26%	$ 368,266
Postage	$ 175,585	Calculated	100%	$ 175,585
Supplies	$ 3,789,277	Transactions	26%	$ 1,001,219
Total Operating Costs	**$ 10,053,908**			**$ 1,937,518**

The Technology Costs worksheet includes programming costs, IT equipment & software depreciation and purchases, external telecommunications costs, and telecommunications depreciation and purchases.

Table 17 – Third Party Service Cost Model – Technology Costs

Cost Type/Function	Total FY2002 Costs	Allocation Basis	Allocation Percentage	Total Allocated to Third Party
Information Technology Costs				
Programming	$ 3,522,535	Transactions	26%	$ 930,739
IT Equipment Depreciation (Capitalized Equipment)	$ 159,219	Transactions	26%	$ 42,069
IT Equipment Purchases (Non-Capitalized)	$ 248,140	Transactions	26%	$ 65,565
Software Depreciation (Capitalized)	$ 6,395	Transactions	26%	$ 1,690
Software Purchases (Non-Capitalized)	$ 18,385	Transactions	26%	$ 4,858
Total Information Technology Costs	$ 3,954,674			$ 1,044,921
Telecommunications Costs				
External Telecommunications	$ 1,842,956	Transactions	26%	$ 486,954
Telecommunications Equipment Depreciation (Capitalized Equipment)	$ 115,110	Transactions	26%	$ 30,415
Telecommunications Equipment Purchases (Non-Capitalized)	$ 27,294	Transactions	26%	$ 7,212
Total Telecommunications Costs	$ 1,985,360			$ 524,581
Total Technology Costs	**$ 5,940,034**			**$ 1,569,502**

The Building & Equipment Costs worksheet includes building rent & depreciation, maintenance, utilities, and equipment purchases, depreciation, and maintenance.

Table 18 – Third Party Service Cost Model – Building & Equipment Costs

Cost Type	Total FY2002 Costs	Allocation Basis	Allocation Percentage	Total Allocated to Third Party
Building Costs				
Building Depreciation	$ 1,125,710	Headcount	3%	$ 37,413
Building Rent	$ 414,416	Headcount	3%	$ 13,773
Janitorial & Building Repair/Maintenance	$ 980,574	Headcount	3%	$ 32,590
Landscaping	$ 55,001	Headcount	3%	$ 1,828
Utilities	$ 987,420	Headcount	3%	$ 32,817
Total Building Costs	$ 3,563,121			$ 118,421
Equipment Costs				
Equipment Lease/Rental	$ 1,367,805	Headcount	3%	$ 45,459
Equipment Depreciation (Capitalized Equipment)	$ 33,154	Headcount	3%	$ 1,102
Equipment Purchases (Non-Capital)	$ 765,956	Headcount	3%	$ 25,457
Equipment Repair & Maintenance	$ 1,041,841	Headcount	3%	$ 34,626
Total Equipment Costs	$ 3,208,757			$ 106,644
Total Building & Equipment Costs	**$ 6,771,877**			**$ 225,065**

The Indirect Costs worksheet includes indirect costs for functions that provide support to MVD personnel supporting the Third Party Program at the central MVD, ADOT, and State levels.

Table 19 – Third Party Service Cost Model – Indirect Costs

Cost Type/Function	Total FY2002 Costs	Allocation Basis	Allocation Percentage	Total Allocated to Third Party
MVD Indirect Costs				
MVD Management	$ 685,510	Transactions	26%	$ 181,128
MVD Centralized Administrative Support	$ 1,311,709	Transactions	26%	$ 346,585
ERE on Above Personnel	$ 482,928	Transactions	26%	$ 127,601
Total MVD Indirect Costs	$ 2,480,147			$ 655,315
ADOT Indirect Costs				
Audit & Analysis	$ 1,698,900	Headcount	1%	$ 19,771
Executive Staff	$ 605,300	Headcount	1%	$ 7,044
Financial Management Services	$ 17,030,500	Headcount	1%	$ 198,192
Human Resources	$ 893,600	Headcount	1%	$ 10,399
Procurement	$ 1,060,900	Headcount	1%	$ 12,346
Training Resources	$ 430,700	Headcount	1%	$ 5,012
Total ADOT Indirect Costs	$ 21,719,900		7%	$ 252,765
State Indirect Costs				
DOA - General Accounting Office	$ 332,551	Headcount	1%	$ 3,870
DOA - State Procurement Office	$ 47,773	Headcount	1%	$ 556
DOA - Risk Management Division	$ 75,083	Headcount	1%	$ 874
DOA - Mail Room		Headcount	1%	
Attorney General	$ 203,733	Headcount	1%	$ 2,371
State Treasurer	$ 29,461	Headcount	1%	$ 343
Public Records - Legislature	$ 90,150	Headcount	1%	$ 1,049
Governor's Office - Office of Strategic Planning & Budgeting	$ 59,272	Headcount	1%	$ 690
Governor's Office - Office of Equal Opportunity	$ 45,718	Headcount	1%	$ 532
Governor's Office - Office for Excellence in Government	$ 282,686	Headcount	1%	$ 3,290
DOA - Occupancy	$ 60,123	Headcount	1%	$ 700
Total State Indirect Costs	$ 1,226,550			$ 14,274
Total Indirect Costs	**$ 25,426,597**			**$ 922,354**

The Other Costs worksheet includes miscellaneous costs, such as advertising, insurance, and interest.

Table 20 – Third Party Service Cost Model – Other Costs

Cost Type	Total FY2002 Costs	Allocation Basis	Allocation Percentage	Total Allocated to Third Party
Other Costs				
Advertising	$ 225,818	Transactions	26%	$ 59,667
Insurance	$ 7,324	Transactions	26%	$ 1,935
Interest Expense	$ 11,980	Transactions	26%	$ 3,165
Other Miscellaneous Costs	$ 276,910	Transactions	26%	$ 73,166
Total Other Costs	**$ 522,032**			**$ 137,933**

The Transactions worksheet includes detailed transaction counts grouped by Title transactions, Registration Transactions, Service Arizona transactions, Vehicle Inspection transactions, Drivers License transactions, and Inquiry transactions. Headcount data is also included.

Table 21 – Third Party Service Cost Model – Transactions

Transaction Type	FY2002 Total
Title Transactions	
Title with registration	307,037
Title only	90,671
Duplicate title	60,054
Salvage/dismantled title	57,089
Create initial title	400,347
Title from Authorization for Transfer of Ownership form	0
Title from an Arizona Repossession Affidavit	0
Total Title Transactions	915,198
Registration Transactions	
Vehicle registration renewals	187,907
Modify registration	10,726
Temporary registration (TRPs)	26,280
Duplicate registration	2,469
Issuance of a replacement plate and/or year tab	18,732
Issuance of specialty plates	347
Issuance of government plates	0
Mobile Home/Permanent Plates	578
Fleet Registrations	0
Other Registration Transactions	0
Total Registration Transactions	247,039
Vehicle Inspections	
Level 1 Vehicle Inspections	146,967
Other Inspections	0
Total Vehicle Inspection Transactions	146,967
Inquiry Transactions	
MVR Inquiries (MVRs purchased)	
Fee Inquiries (from ServiceArizona)	
Plate Credit (from ServiceArizona)	
Address Changes (from ServiceArizona)	
Record Sold Notices	
Total Inquiry Transactions	0

Transaction Type Headcount	FY2002 Total
Average CGP Headcount	56.5
Average Field Office Headcount	990
Average MVD Headcount	1,700
Average ADOT Headcount	4,855
Transaction Type	**FY2002 Total**
Drivers License Transactions	
Drivers licenses issued	706
Drivers license renewals	775
Permits issued	471
Drivers license reinstatements	0
Duplicate drivers licenses	0
ID cards issued	258
Drivers License Written Test	N/A
Drivers License Road Test	2,426
Motorcycle Skills Test	28
Commercial License (CDL) Written Test	0
Commercial License (CDL) Road Test	7,691
Total Drivers License Transactions	12,355
ServiceArizona Transactions	
Registration Renewals	345,275
Duplication Drivers Licenses/Ids	76,282
Personalized/Specialty Plate	23,066
Fleet Registration Renewal	895
Address Change	
Plate Credit	114,170
Restricted Use 3-Day Permit	30,035
Driver's License Reinstatement	5
90 Day Temporary Permits	18
IVR Renewals	192,973
Total ServiceArizona Transactions	589,728
Total Non-Inquiry Third Party Transactions	**1,911,287**
Total Third Party Transactions	**1,911,287**

Grand Total Transactions (MVD & Third-Party)	
Grand Total Title Transactions	2,291,194
Grand Total Registration Transactions	1,530,693
Grand Total Drivers License Transactions	1,347,142
Grand Total Vehicle Inspection Transactions	374,369
Grand Total Renew-by-Mail Transactions	1,100,451
Grand Total Other Transactions	0
Grand Total Service Arizona Transactions	589,728
Grand Total All Transactions	**7,233,577**

4.7. COST MODEL ASSUMPTIONS

General Assumptions:

- The Cost Models are based on a full cost allocation basis. The cost models include direct personnel, supporting personnel, operating costs, technology costs, indirect costs, building & equipment, and other related costs.

- Indirect costs were included and allocated as appropriate for centralized MVD administrative costs, ADOT administrative costs for service departments that provide support to MVD, and State of Arizona administrative costs (as defined and allocated by the DOA General Accounting Office)

- Cost and transaction data was obtained directly from MVD Centralized Support, Competitive Government Programs, ADOT Financial Management Services and Budgeting, and the Department of Administration General Accounting Office.

- The complexity of transactions and services provided by MVD and Third Parties varies significantly. However, in our primary analysis, due to unavailability of data, we were unable to classify or segregate transactions by type or complexity. We did provide a secondary summary of costs per transaction by channel used to deliver these services (Customer Service OTC, ServiceArizona (Internet), mail, and traditional Third Party).

- The costs indicated for Third Party reflect the state costs only and do not include individual third party office operating costs.

- Convenience fees that third parties charge their customers were not included in the analysis.

- Revenues generated by MVD for Vehicle License Tax (VLT) and other transaction fees (registration fees, driver license fees, etc.) were not included in the analysis.

- Cost and transaction data was taken from Fiscal Year 2002 actual data.

- Transaction data included all types of the following:

    - Registration Renewals
    - Titles
    - Drivers License
    - Vehicle Inspections
    - Renew-by-Mail
    - ServiceArizona

- Inquiry transactions such as MVR inquiries, fee to owner inquiries, address changes and record sold notices were not included in the total transaction counts as those transactions were not all tracked or available for both Customer Service and Third Party.

Table 22 - Cost Model Detail Assumptions - Internal MVD Costs

Category	Cost Type	Assumptions	Allocation Basis	Source of Data
Direct Personnel Costs	Customer Service Personnel	All Customer Service Field Office Personnel (all ORGS but 2201) (869 Headcount) and Customer Service Headquarters Personnel (ORG 2201) (7 Headcount) and ERE on all of those personnel	Fully allocated to MVD Internal	Ruth Halikowski
Direct Personnel Costs	Direct Support Personnel	Other personnel that provide direct support to Customer Service but are not part of their ORGS. FTE's defined by management as follows: Abandoned Vehicle – 2 FTE Title Production – 0.5 FTE Film Research – 8 FTE Mandatory Insurance – 2.5 FTE Criminal Traffic – 2 FTE Medical Review – 1 FTE Training – 14 FTE Technical Support – 20 FTE Out-of-State Desk – 3 FTE Renew-by-Mail – 1 FTE Audit – 1 FTE Warehouse – 5.3 FTE Plate Positions – 0.9 FTE Dishonored Checks –	Amounts have already been allocated by determining FTE dedicated to supporting Customer Service Field Office	Ruth Halikowski

Category	Cost Type	Assumptions	Allocation Basis	Source of Data
		2.8 FTE MV Enforcement – 4 FTE ERE on the above personnel was calculated using the same percentage (29.07%) as used for Field Office personnel		
Direct Personnel Costs	Temporary Personnel	Temporary agency services	Customer Service Headcount/MVD Headcount	Melissa Wynn
Direct Personnel Costs	Education & Training	Employee education & training	Customer Service Headcount/MVD Headcount	Melissa Wynn
Direct Personnel Costs	Travel Expenses	Lodging, meals, air fare, mileage, other travel	Customer Service Headcount/MVD Headcount	Melissa Wynn
Direct Personnel Costs	Other	Other personnel costs	Customer Service Headcount/MVD Headcount	Melissa Wynn
Operating Costs	Driver License Credentials	Staff, supplies, and equipment for DDL	% of Customer Service Transactions	Ruth Halikowski
Operating Costs	Plates & Tags	Total cost of producing plates and tags	% of Customer Service Transactions	Ruth Halikowski
Operating Costs	Printing	Total printing cost	% of Customer Service Transactions	Ruth Halikowski
Operating Costs	Postage	Amount already allocated by ADOT Budgeting	Fully allocated to Customer Service	Melissa Wynn
Operating Costs	Supplies	Total supplies including forms, office supplies, other	% of Customer Service Transactions	Melissa Wynn
Technology Costs	IT Costs – Programming	External Programming costs for mainframe, midrange, and PC	% of Customer Service Transactions	Melissa Wynn

Category	Cost Type	Assumptions	Allocation Basis	Source of Data
Technology Costs	IT Costs – Equipment Depreciation	Current year capitalized IT equipment purchased and depreciated straight-line over 5 years	% of Customer Service Transactions	Melissa Wynn
Technology Costs	IT Costs – Non-Capital Equipment	Current year IT equipment purchases that are not capitalized	% of Customer Service Transactions	Melissa Wynn
Technology Costs	IT Costs – Software Depreciation	Current year capitalized software purchased and depreciated straight-line over 5 years	% of Customer Service Transactions	Melissa Wynn
Technology Costs	IT Costs – Non-Capitalized Software Purchases	Current year software purchases that are not capitalized	% of Customer Service Transactions	Melissa Wynn
Technology Costs	External Telecommunications	External telecommunications services	% of Customer Service Transactions	Melissa Wynn
Technology Costs	Telecommunications Equipment Depreciation	Current year capitalized telecommunications equipment purchased and depreciated straight-line over 5 years	% of Customer Service Transactions	Melissa Wynn
Technology Costs	Telecommunications Equipment Purchases – Non-Capital	Current year telecommunications equipment purchases that are not capitalized	% of Customer Service Transactions	Melissa Wynn
Indirect Costs	MVD Indirect Costs	Costs for MVD management and centralized administrative support with ERE	Customer Service Headcount/MVD Headcount	Ruth Halikowski
Indirect Costs	ADOT Indirect Costs	Indirect costs are for ADOT departments that provide "internal service" functions to all of ADOT, including MVD. These include: - Audit &	Customer Service Headcount/Total ADOT Headcount	Melissa Wynn

Category	Cost Type	Assumptions	Allocation Basis	Source of Data
		Analysis - Executive Staff - Financial Management Services - Human Resources - Procurement - Training Services		
Indirect Costs	State of Arizona Indirect Costs	Indirect costs are for State of Arizona Departments and offices that provide "internal service" functions to all State Departments including ADOT. DOA GAO provides a schedule of these costs to ADOT.	Allocations provided by DOA GAO are to ADOT. Further allocation to Customer Service by FY02 Customer Service Budget/FY02 Total ADOT Budget	DOA General Accounting Office (GAO)
Building & Equipment Costs	Building Depreciation	Total value of Customer Service buildings depreciated over 40 years on straight-line basis	Customer Service Headcount/Total MVD Headcount	Rich Grommel
Building & Equipment Costs	Building Rent	Annual rent for leased Customer Service buildings	Customer Service Headcount/Total MVD Headcount	Ruth Halikowski
Building & Equipment Costs	Janitorial & Building Repair & Maintenance	Cost for Janitorial services and Building Repair & Maintenance for Customer Service buildings	Customer Service Headcount/Total MVD Headcount	Ruth Halikowski
Building & Equipment Costs	Landscaping	Cost for Landscaping services for Customer Service buildings	Customer Service Headcount/Total MVD Headcount	Ruth Halikowski
Building & Equipment Costs	Utilities	Utilities for Customer Service buildings	Customer Service Headcount/Total MVD Headcount	Ruth Halikowski
Building & Equipment Costs	Equipment Lease/Rental	Equipment lease/rental charges for Field Offices	Customer Service Headcount/Total MVD Headcount	Ruth Halikowski

Category	Cost Type	Assumptions	Allocation Basis	Source of Data
Building & Equipment Costs	Equipment Depreciation	Capitalized equipment (non IT) purchased in current year and depreciated straight line over 5 years	Customer Service Headcount/Total MVD Headcount	Melissa Wynn
Building & Equipment Costs	Equipment Purchases	Equipment purchases that are not capitalized	Customer Service Headcount/Total MVD Headcount	Melissa Wynn
Building & Equipment Costs	Equipment Repair & Maintenance	Equipment repair and maintenance	Customer Service Headcount/Total MVD Headcount	Melissa Wynn
Other Costs	Advertising	Advertising	% of Customer Service Transactions	Melissa Wynn
Other Costs	Insurance	Insurance in addition to DOA Risk Management allocation	% of Customer Service Transactions	Ruth Halikowski
Other Costs	Interest Expense	Interest expense	% of Customer Service Transactions	Ruth Halikowski
Other Costs	Other Miscellaneous Costs	Awards, dues, books, subscriptions, publications, microfilm, bad debt, other miscellaneous	% of Customer Service Transactions	Melissa Wynn

Table 23 - Cost Model Detail Assumptions – Third Party Costs

Category	Cost Type	Assumptions	Allocation Basis	Source of Data
Direct Personnel Costs	Competitive Government Program (CGP) Personnel	CGP personnel in the following functions: - Third Party Auditors – 7 FTE - Third Party QA – 21 FTE - Third Party D/L – 15 FTE - Third Party T&R – 10 FTE - CGP Admin – 3.5 FTE Including ERE on above personnel	Fully allocated to Third Party	Ruth Halikowski
Direct Personnel Costs	Direct Support Personnel	Other personnel that provide direct support to Third Party but are not part of CGP. FTE's defined by management as follows: Renew-by-Mail – 2 FTE Out-of-State Desk – 1 FTE Comm Unit – 2 FTE Training – 1.5 FTE Warehouse – 1 FTE Plate Positions – 0.2 FTE ERE on the above personnel was supplied	Amounts have already been allocated by determining FTE dedicated to supporting Third Parties	Ruth Halikowski
Direct Personnel Costs	Temporary Personnel	Temporary agency services	CGP Headcount/MVD Headcount	Melissa Wynn
Direct Personnel Costs	Education & Training	Employee education & training	CGP Headcount/MVD Headcount	Melissa Wynn

Category	Cost Type	Assumptions	Allocation Basis	Source of Data
Direct Personnel Costs	Travel Expenses	Lodging, meals, air fare, mileage, other travel	CGP Headcount/MVD Headcount	Melissa Wynn
Direct Personnel Costs	Other	Other personnel costs	CGP Headcount/MVD Headcount	Melissa Wynn
Operating Costs	Plates & Tags	Total cost of producing plates and tags	% of Third Party Transactions	Ruth Halikowski
Operating Costs	Driver License Credentials	Staff, supplies, and equipment for DDL	% of Third Party Transactions	Ruth Halikowski
Operating Costs	Printing	Total printing cost	% of Third Party Transactions	Ruth Halikowski
Operating Costs	Postage	ServiceArizona renewals and Duplicate DL x presorted mail rates	Fully allocated	Jim Cullison
Operating Costs	Supplies	Total supplies including forms, office supplies, other	% of Third Party Transactions	Melissa Wynn
Technology Costs	IT Costs – Programming	External Programming costs for mainframe, midrange, and PC	% of Third Party Transactions	Melissa Wynn
Technology Costs	IT Costs – Equipment Depreciation	Current year capitalized IT equipment purchased and depreciated straight-line over 5 years	% of Third Party Transactions	Melissa Wynn
Technology Costs	IT Costs – Non-Capital Equipment	Current year IT equipment purchases that are not capitalized	% of Third Party Transactions	Melissa Wynn
Technology Costs	IT Costs – Software Depreciation	Current year capitalized software purchased and depreciated straight-line over 5 years	% of Third Party Transactions	Melissa Wynn
Technology Costs	IT Costs – Non-Capitalized Software Purchases	Current year software purchases that are not capitalized	% of Third Party Transactions	Melissa Wynn
Technology Costs	External Telecommunications	External telecommunications services	% of Third Party Transactions	Melissa Wynn

Category	Cost Type	Assumptions	Allocation Basis	Source of Data
Technology Costs	Telecommunications Equipment Depreciation	Current year capitalized telecommunications equipment purchased and depreciated straight-line over 5 years	% of Third Party Transactions	Melissa Wynn
Technology Costs	Telecommunications Equipment Purchases – Non-Capital	Current year telecommunications equipment purchases that are not capitalized	% of Third Party Transactions	Melissa Wynn
Indirect Costs	MVD Indirect Costs	Costs for MVD management and centralized administrative support with ERE	CGP Headcount/MVD Headcount	Ruth Halikowski
Indirect Costs	ADOT Indirect Costs	Indirect costs are for ADOT departments that provide "internal service" functions to all of ADOT, including MVD. These include: - Audit & Analysis - Contracts & Specifications - Equipment Services - Executive Staff - Financial Management Services - Human Resources - Procurement - Training	CGP/Total ADOT Headcount	Melissa Wynn

Category	Cost Type	Assumptions	Allocation Basis	Source of Data
Indirect Costs	State of Arizona Indirect Costs	Indirect costs are for State of Arizona Departments and offices that provide "internal service" functions to all State Departments including ADOT. DOA GAO provides a schedule of these costs to ADOT.	Allocations provided by DOA GAO are to ADOT. Further allocation to Third Party by FY02 CGP Budget/FY02 Total ADOT Budget	DOA GAO
Building & Equipment Costs	Building Depreciation	Total value of MVD buildings housing CGP personnel depreciated over 40 years on straight-line basis	CGP Headcount/Total MVD Headcount	Rich Grommel
Building & Equipment Costs	Janitorial & Building Repair & Maintenance	Cost for Janitorial services and Building Repair & Maintenance for MVD buildings housing CGP personnel	CGP Headcount/Total MVD Headcount	Ruth Halikowski
Building & Equipment Costs	Landscaping	Cost for Landscaping services for MVD buildings housing CGP personnel	CGP Headcount/Total MVD Headcount	Ruth Halikowski
Building & Equipment Costs	Utilities	Utilities for MVD buildings housing CGP personnel	CGP Headcount/Total MVD Headcount	Ruth Halikowski
Building & Equipment Costs	Equipment Lease/Rental	Equipment lease/rental charges for equipment used by CGP personnel	CGP Headcount/Total MVD Headcount	Ruth Halikowski
Building & Equipment Costs	Equipment Depreciation	Capitalized equipment (non IT) purchased in current year and depreciated straight line over 5 years	CGP Headcount/Total MVD Headcount	Melissa Wynn
Building & Equipment Costs	Equipment Purchases	Equipment purchases that are not capitalized	CGP Headcount/Total MVD Headcount	Melissa Wynn
Building & Equipment Costs	Equipment Repair & Maintenance	Equipment repair and maintenance	CGP Headcount/Total MVD Headcount	Melissa Wynn
Other Costs	Advertising	Advertising	% of Third Party Transactions	Melissa Wynn

Category	Cost Type	Assumptions	Allocation Basis	Source of Data
Other Costs	Insurance	Insurance in addition to DOA Risk Management allocation	% of Third Party Transactions	Ruth Halikowski
Other Costs	Interest Expense	Interest expense	% of Third Party Transactions	Ruth Halikowski
Other Costs	Other Miscellaneous Costs	Awards, dues, books, subscriptions, publications, microfilm, bad debt, other miscellaneous	% of Third Party Transactions	Melissa Wynn
Third Party Fees	Retainage	2% of VLT retained by Third Parties	Fully allocated to Third Party	Ruth Halikowski
Third Party Fees	Transaction Fees	$1.00 per transaction	Fully allocated to Third Party	Ruth Halikowski
Third Party Fees	Credit Card Fees	Amounts reimbursed to Third Parties for credit cards	Fully allocated to Third Party	Ruth Halikowski

4.8. OBSERVATIONS

Based on our analysis of the cost model, we are able to make the following observations:

- Total cost per transaction for MVD Customer Service is $10.66 versus $9.54 for Third Party. Using Third Party transactions allows a total savings to the state of over $2.1 million per year.

- Direct Personnel Cost is the largest component of the MVD Customer Service cost at 56% of the total. Operating Cost is the next highest at 17% and then Indirect Cost at 11%.

- The Third Party Fee, consisting of the Retainage of 2% of VLT, Transaction Fee Retainage, and Credit Card Reimbursement, is the largest component of the Third Party cost at 62%. Direct Personnel Cost to support the Third Party Program is next at 11% followed by Operating Cost at 10%.

- For cost of Registrations by channel, Renew-by-Mail is significantly the lowest cost at $2.42 per transaction, followed by Service Arizona at $4.60, traditional Third Party at $11.74, and MVD Customer Service at $12.80.

- In addition to the cost savings of the Third Party Program, the Program provides a number of significant intangible benefits, such as:

    - Reduced wait times in existing Customer Service offices
    - More convenient hours and days of service availability

- Reduced customer travel time
- Reduced need for new buildings, MVD staff, and equipment
- Improved customer goodwill
- Improved image of MVD responsiveness
- Process improvement
- Demonstrated success of e-government and private/public partnerships

APPENDIX A - LIST OF INTERVIEWEES

The following individuals were interviewed by the project team.

Penny Martucci, MVD
Jim Cullison, MVD
Lenor Montemayor, MVD
Micki Franklin, MVD
Becky Burk, MVD
Randy Raiford and direct reports, MVD
Brenda Oddy, MVD
Linda Sakhi, MVD
Craig Stender, GITA
Jim Douglas, Consultant
Krista Trembly
Ann Reece, MVD
John Bogert, ADOT
Rita Skiye, ADOT-Intermodal Transportation Division (ITD)

APPENDIX B - INTERVIEW QUESTIONNAIRE

Interview Questions

Name _____ **Division / Organization** _____

1. Describe your responsibilities and functional area organization structure.

_____

_____

2. Describe the major business processes that your organization performs or supports.

_____

_____

3. What part of your organization supports the Third Party Program and in what way?

_____

_____

4. What metrics can you provide that represents the cost and resources that your organization expends related to the Third Party program or traditional MVD services.

_____

_____

5. Describe you familiarity and assessment of any previous Third Party Cost Benefit Analysis that you have seen.

_____

_____

Interview Questions

6. What shortcomings have you seen in these models that we should take into account when developing our models?

7. What are the benefits of the Third Party Program?

8. Are there services or transactions that should be added/deleted from the program?

9. What do you think is the future of the Third Party Program? Why?

10. Is there additional information that can be provided or others that we should speak with to gain a better understanding of the Third Party Program?

APPENDIX C - INTERVIEW NOTES

Interview Notes

Interviewee:	Jim Cullison	**Date:**	Aug. 2, 2002
Interviewer(s):	Steve Kalina, Data Site Consortium Don Logue, Data Site Consortium	**Time**:	12:00 p.m.

Relevance to the Study:

Jim is the project liaison for our study.

Key Items Discussed:

The reason for this study is twofold:

1. MVD is currently maxed out on the ability to provide oversight of third parties.
   - If MVD wants to expand third parties in number and geography, they will need to add staff for oversight.
2. Justification for the program itself.
   - Budget-based decision
   - Looking for the future

MVD has had some companies interested in becoming third parties, particularly in T&R. However, MVD has not actively recruited new third parties in the past two years.

Looking at expanding for vehicle inspection of abandoned vehicles. Currently, this is done only by MVD enforcement people and they are backlogged significantly.

Big backlogs also exist in Level 2 & Level 3 inspections. It is more difficult to train people for those inspections. Not sure if will allow third parties to do those in the future.

In T&R, there are a number of transactions that third parties are not allowed to do (confidential, more complex, etc.).

They could expand third parties in the area of Drivers License processing. They only have two companies doing this now – one in Phoenix and one in Tucson. They can do everything except provide the credentials.

Still have document prep companies, known as Title Service Companies. They are not considered third parties.

Motor Carrier can be considered as part of the Third Party Program. It is a small part but could grow. Jim doesn't think that any third parties for motor carrier also do traditional T&R functions.

Jim indicated he would provide us a copy of the Third Party Statute.

For Electronic Service Delivery (ESD), MVD does not have any plans to add providers besides Service Arizona from International Business Machines (IBM). However, they can't prevent others from applying. Any new providers would have to set the bar by providing all the current transactions that are available as well as some sort of value add. There are plans to add additional transactions to Service Arizona. MVD plans those with IBM year-to-year. Expenses for ESD come from Rita Skiye's area in ITG.

Driver Services includes about 20 third party contractors and many testers (Jim wasn't sure). CDL is even bigger – 140 contractors and 300-400 testers. They are located throughout the state. These functions are also done at MVD field offices.

Driver Education programs in public schools are not considered third parties. Those programs can do road test and written tests, but the applicant must come into a MVD office to get their license.

Level 1 Vehicle Inspection is mostly auto dealers. There are 420 contracts and 900+ certified inspectors. Beside auto dealers, auto auctions and salvage companies have lots of inspectors.

The Competitive Government group includes:

- Third Party Program
- Renew by Mail
- Dealer Licensing
- Electronic Government
- Electronic Data Services (i.e. providing electronic MVRs to authorized parties)

MVD does refer some technical vendors to third parties for hardware, network setup, etc. There is a certification process for those technical vendors which would have a cost for MVD to administer. Ask Micki Franklin or Rita Skiye for more information.

Interview Notes

Interviewee:	Lenor Montemayor Deputy Assistant Director Title & Registration Partnerships	**Date:**	Aug. 6, 2002
Interviewer(s):	Steve Kalina, Data Site Consortium Don Logue, Data Site Consortium	**Time**:	2:00 p.m.

Relevance to the Study:

Lenor is the Deputy Assistant Director over Title & Registration Partnerships. She is over RBM, T&R Partnership Administration, Quality Assurance, Motor Carrier, and ESD.

Key Items Discussed:

Lenor indicated that the previous studies done by Ruth were not complete. Indirect costs were omitted.

The focus should be if third parties were not available, how many more people and facilities would MVD need.

There are about as many people employed by third parties as there are in MVD field offices. Approximately 65 T&R third parties with over 200 processors. There are about the same number of field offices.

Third party program originated as a result of a mandate to reduce the wait time in MVD offices to 15-20 minutes.

Only two third parties are doing Drivers Licensing.

Recently implemented reinstatement of drivers licenses on the Internet. This will take a lot of transactions out of the field offices.

There are no plans to open more MVD field offices. Charlene Knapp is in charge of all field offices. We might want to talk to her.

Technical costs are part of the WAN group (Mike Garrett's group) and the System Architect group (Roger Baune's group).

Previously, Information Technology Group (ITG) people were a part of third party but Craig Stender integrated them with the rest of ITG.

Generally, third parties are responsible for their own technology issues. ITG usually does not go out to support third parties.

Might be able to see how many hours are used by ITG in supporting third parties by reviewing Help Desk Expert Automation Tool (HEAT) system reports.

There is no different costs for IT development between third party and internal – they use the same systems.

Quality Assurance group – all batches from third parties go to QA – they sample and review batches before sending down to Microfilm.

Separate Third Party Audit people are part of Audit & Analysis.

Motor Carrier is part of Lenor's group.

Authorized = Company; Certified = Processor

Have different levels of training depending on authorization. Third parties only pay for book/materials cost ($30). MVD absorbs all other training costs for trainers, facilities, etc.

Other states – Virginia is probably closest to Arizona – especially for e-government. New Mexico has done some outsourcing. Several other states have done a little. Arizona is the leader.

Randy Raiford – ask him about access to MVRs

Setup for third parties – takes about 60 – 90 days (primarily because of Qwest to provide T1 line)

Prospective third parties request what types of transactions they wish to handle. Some transactions cannot be done by any third party – i.e. restored salvage. Have different levels of authorization with terms and definitions – obtain from Micki Franklin.

In the future, they plan to pilot allowing third parties to do bonded titles and to expand drivers license third parties.

For ESD, any new applicant must do everything that Service Arizona currently does plus some value-added.

No limits on pricing except "reasonable and commensurate". Third parties must post signs with their fees compared to MVD fees.

Does not track customer impact/costs of third parties.

Have some very successful third parties. They can make a very good living. Some drop out because they don't like all of the rules and regulations. MVD has had to cancel a few third parties.

If sell a third party, still have to reapply to the selection panel. There have been 2-3 sales of third parties over the past several years.

Ask Micki Franklin for listing of groups, third parties, whether they are open to the public or not, and their hours of operation (benefit to customers).

State Treasurer's office has to set up bank accounts for new third parties. Coordinated by Financial Management Services (FMS).

Data Link system – Heather Olsen's group developed – tracks info about third parties – is a web based application. Ask Micki for more details.

Interview Notes

Interviewee:	Micki Franklin Project Coordinator Title & Registration Partnerships	**Date:**	Aug. 6, 2002
Interviewer(s):	Steve Kalina, Data Site Consortium Don Logue, Data Site Consortium	**Time**:	3:00 p.m.

Relevance to the Study:

Micki is the Project Coordinator/Office Manager for T&R Partnerships. She assists third parties with administrative needs, workstation setup, credential inventories, and provides measurement and support services for Third Party.

Key Items Discussed:

In the past, some studies were done on tracking the amount of time per transaction. Came up with an average of 7.5 minutes for all transactions. Not sure if there was any breakdown of time by transaction type or complexity. Micki indicated she would try to find those studies.

Field offices do more types of complex transactions than what third parties can do.

Only fees third parties pay is $30 for training manual and $24 to DPS for fingerprint check.

Third parties do Temporary Registration Permits but field offices don't do (just Dealer Services office on Washington does).

Training classes for third parties are done at least once a month. Classes are typically limited to 6 – 8 people. Basic T&R class is 12 days. There are a few other specialty classes that are a few hours each. MVD training group delivers the training, so that would be a third party cost. Typically is about 100 hours per month of instructor time (1 or 2 instructors). Training is held at MVD facilities – usually 28th St & Washington, 51st Ave & Indian School, or in Tucson).

16 new third parties were added in FY2002.

QA serves as help desk for third party users.

Micki does all security setup for new third parties (user Ids, passwords, transaction access).

Data Link system is not completed yet and some of the data is not available. Help Desk does track calls received from third parties.

Technical vendors – must be certified by MVD – written and hands-on test (install hardware and software). ITG personnel (PC/LAN group) give this certification test to the third parties – each takes about 4-5 hours.

Interview Notes

Interviewee:	Becky Burk Quality Assurance Manager Title & Registration Partnerships	**Date:**	Aug. 6, 2002
Interviewer(s):	Steve Kalina, Data Site Consortium Don Logue, Data Site Consortium	**Time**:	3:30 p.m.

Relevance to the Study:

Becky is the Manger for the Quality Assurance function for T&R Partnerships. The QA group reviews and provides quality checks on work performed by third parties.

Key Items Discussed:

QA deals solely with traditional third parties.

Third parties batch work and hand deliver or Fedex to QA. They log batches into big Excel spreadsheet and then separate by each company and by clerk. QA checks are done 100% for some third parties and some of the more established third parties only have 10% of their work reviewed by QA.

If the work is ok, it gets put into buckets and goes to microfilm. If incorrect, QA keeps the originals and forwards copies back to the third parties for correction.

Field offices do not have their own QA group. Supervisors at field offices are supposed to QA 10% of the work from each field office, although it may vary.

Quality & accuracy is better for third parties because they are being watched by QA. Unable to compare between field office and third party quality & accuracy because field offices do not keep track of any error rates or other measurements.

QA sends disciplinary letters to third parties if needed.

Everything gets microfilmed whether from third party or field offices.

No additional processing is done by QA – they just review the work done by third parties.

QA has access to the TPX View system where they can watch users at third parties entering a transaction.

QA provides a significant amount of help desk support for third parties. QA personnel average 24-28 hours per person per week on the phone with third parties.

No automated call distribution for phone calls. Usually just assign desks/groups to answer phones.

Interview Notes

Interviewee:	Penny Martucci Assistant Division Director Competitive Government Partnerships	**Date:**	Aug. 6, 2002
Interviewer(s):	Steve Kalina, Data Site Consortium Don Logue, Data Site Consortium	**Time**:	4:00 p.m.

Relevance to the Study:

Penny is the Assistant Division Director for Competitive Government Partnerships and is the sponsor of this project.

Key Items Discussed:

A problem with previous studies is that they did not include any indirect costs.

Stacy Stanton & Charlie Bitner would like a QA function for the field offices but can't add the cost.

The third party program has been going for 9-10 years.

On Renew by Mail for Service Arizona – prison puts tags on renewal and mails – have only been using prison to do for the past 5-6 months.

Areas Penny is concerned with:

- Value of QA – not sure how to show this politically
- Cost Avoidance
- Indirect Costs

Possibly use cost of adding new field offices or additional field office wait times as a way of articulating benefits of the Third Party Program. There is a model for the cost of reducing field office wait times. Penny would look into this.

Future – some new transactions, more drivers license third parties, expand in outlying areas (geographically). However, now have a moratorium on any new third parties until they can get more QA people.

E-government – currently Penny is leader. Are hiring a Program Manager for E-Gov to report to Lenor. Krista Trembly works solely on Service Arizona now.

To segment on study – third parties and ESD. Don't break out motor carrier separately (too small). Do not include driving schools, etc.

Big issue distinguishing between Transactions, Services, and Activities. Transaction classifications would make the cost study more meaningful.

Charlene Knapp – Customer Service – has Queuematic data – keeps standards on how long to do each transaction in field offices. If transactions were to be segregated by complexity, this data is essential.

Interview Notes

Interviewee:	Randy Raiford, Program Manager Driver Services Brenda Oddy & Linda Sakhi, Drivers Services	**Date:**	Aug. 7, 2002
Interviewer(s):	Steve Kalina, Data Site Consortium Don Logue, Data Site Consortium	**Time**:	1:30 p.m.

Relevance to the Study:

Randy is Program Manager for Driver Services that includes third parties that provide driver testing, Commercial Drivers License testing, Level 1 Vehicle Inspections, drivers schools, and Electronic Data Services.

Key Items Discussed:

Some of the areas that Randy handles are considered third party and some areas are not. Driver Services and Level 1 Vehicle Inspections are considered third party.

Do have some measurements of numbers of transactions by type for CDL – will provide copies for Maricopa County and Pima County.

Driver Services – have supervisor and three staff that administer third parties and other parts, such as traffic survival schools. Approximately half of time is administering third parties.

Level 1 Vehicle Inspections – majority are auto dealers. Approx 420 companies with 900+ inspectors. Average approximately 11,000 inspections/month. Training is 1 ½ day class, including classroom and hands on training.

Do not allow third parties to do Level 2 or Level 3 inspections, but may start allowing them to do abandoned vehicles.

Last month, 13,000 Level 1 inspections by third parties and 18,000 by MVD field offices.

High school driver schools are not considered third parties (89 high schools have programs). They do administer written test and driving tests and issue a certificate of completion to take to a MVD field office to get the credential. They do offload a lot of work from field offices.

CDL written test can be done in any MVD office but skills test can only be done in two field offices (Goodyear and Southwest Mesa). Motorcycle tests can also be done in only two field offices.

A significant amount of work is required for Drivers Services entering data for traffic survival skills certificates of completion.

Level 1 Vehicle Inspections – only one person assigned for administration and data entry.

Have eight people total in Dealer area.

Big time savings for dealers to have own Level 1 inspectors so they don't have to dedicate people to drive hundreds of vehicles to MVD offices for inspections.

Previously took up to six weeks just to take CDL skills test because of backlog. Is much better now.

Hold third parties to higher standard than field office people in Level 1 Inspection.

Level 1 Inspection & Dealer Services is at 28th St & Washington office. Driver Services is on first floor of main MVD building.

Electronic Data Services – electronic access to MVRs. Not giving photos online. Not considered third party but does take away work from field offices. Have 52 non-government customers (private investigators, insurance companies, etc.). Some customers very high volume (one customer purchased 250,000 records in one month).

Interview Notes

Interviewee:	Craig Stender Director - GITA	**Date:**	Aug. 9, 2002
Interviewer(s):	Steve Kalina, Data Site Consortium	**Time**:	7:30 a.m.

Relevance to the Study:

Craig is the past Chief Information Officer (CIO) of ADOT and is very familiar with MVD systems and operations. Craig was the primary author of a study entitled 'Comparing the Costs of Traditional Motor Vehicle Transaction Delivery to an e-government Delivery System'. In addition, he is very familiar with the previous MVD Third Party cost studies.

Key Items Discussed:

Craig thinks that the study is relevant although he feels that the political pendulum is swinging the way of in-house processing versus the privatization rush that occurred several years ago.

He feels any study like this needs to separate the costs into three components, Field Office, Traditional Third Party, and ESD.

He firmly believes that ESD is the lowest cost, least risky way to outsource MVD transactions.

Transactions should be categorized, possibly into three types, based on complexity, when determining costs and comparing third party to over the counter transactions.

He suggested speaking with John Bogert, ADOT Chief of Staff about the study, saying John is very knowledgeable about the topic and cost accounting issues.

He suggested that we check with Virginia and Massachusetts regarding their MVD outsourcing efforts. Although he admitted that a lot of time could be wasted trying to get relevant information from other states. He tried as part of his study, and had little success. AAMVA had very little in the way of relevant information.

Craig said that Ruth Halikowski's cost study did not include telecommunications, computer hardware or office costs as part of the study. Most likely many indirect costs were excluded as well. He feels these costs should be included.

When asked about quantifying the benefits of the Third Party Program, he said that there is no easy way to put dollar amounts on these soft issues. He attempted to quantify customer time savings in terms of an average customer hourly wage and mileage charge for trip savings.

When asked as to the quality differences between the MVD OTC transactions and those completed in the Third Party program, we agreed that quality could be quantified for third party transactions, but could not be readily don't for MVD OTC transactions.

Interview Notes

Interviewee:	Jim Douglas	**Date:**	Aug. 9, 2002
Interviewer(s):	Steve Kalina, Data Site Consortium Mike Keeling, Data Site Consortium	**Time**:	1:30 p.m.

Relevance to the Study:

Jim is the former Deputy Director of MVD in charge of the related functions under review. He has participated in cost modeling exercises at MVD over the years and is familiar with the issues and complexities related to performing this study for MVD.

Key Items Discussed:

This study is of interest to the MVD Director, ADOT director and the Governor's office.

Jim agrees that transactions need to be categorized to compare costs across programs. A possible categorization that we discussed was to split transactions (or services) into three categories:

1. Ones that update the database and provide a deliverable to the customer
2. Inquiry transactions
3. Other activities (i.e. Testing)

Within these categories, we could then categorize them further based on the delivery channel:

1. Electronic & IVR
2. OTC
3. Mail
4. Phone

Jim feels that third party productivity is much higher than that in MVD field offices. He suggested that we get field office productivity measures from Charlene Knapp.

He felt that there were some shortcomings in the previous cost studies including the manner in which credit card charges were handled. Jim suggests that these charges should cancel out in a comparative study, and that they were included only as a cost to the of the Third Party program. In addition, the risk management premium paid by MVD to indemnify itself for the Third Party program was not included as a cost in the studies that he reviewed. Many indirect costs were also omitted.

He is also interested in the impact of incomplete transactions on the model. This was not taken into account in previous studies. He suggests that the incomplete transaction percentage is close to equal for all channels. For instance, although there are a lot of Service Arizona transactions which are aborted and this percentage can be quantified, he contends that a similar percentage of OTC transactions are aborted when a customer comes into a field office to renew a registration and does not bring their renewal invitation. What are the costs of these?

The scope of the study should include ESD, and anything else, which, if eliminated would move work to the field offices.

We agreed that a good approach to the study would be to focus on the impact to MVD and the customer if the Third Party program were eliminated. This could be a function of both cost and wait time.

He said an old model described the cost of eliminating 1 minute of average wait time at a field office at $1.3 million. He thinks that there might be a new number, and we should check with Ruth Halikowski.

He said that it would be beneficial to include a comparative state model for MVD third party programs. He said Gene Martell could give us some information related to other state's programs.

Interview Notes

Interviewee:	Ann Reece RBM Supervisor Title & Registration Partnerships	**Date:**	Aug. 19, 2002
Interviewer(s):	Steve Kalina, Data Site Consortium	**Time**:	11:00 a.m.

Relevance to the Study:

Ann supervises the Renew by Mail area and all mail room activities related to sending renewals and tags as well as the ACI activities.

Key Items Discussed:

Ann's area receives all renew by mail requests from customers. These are processed with the money posted, and the renewals are sent to Arizona Correctional Industries (ACI) where the tab is assigned and stapled to the registration, tab number written on the registration and the tab number keyed onto the T&R computerized registration record. These registration and tags are sent back to Ann's area, where they are sealed mailed to the customer.

Two of her people are assigned to the Service Arizona program, so these positions are a Third Party cost. (Ann provided a Position Control Register that included a listing of all positions in her area of responsibility).

The Special Plates area will move to her responsibility in September.

The ACI program does not process registrations with plates or duplicate registrations. 40 inmates are assigned to the MVD program and MVD is charged $.95 per 1000 characters and complete key verification at 90% of that rate. There is a $.06 charge for each tab processed and inserted. The charge to MVD in July for these ACI activities was $16,000 for almost 158K registrations.

Ann says here area is not set up to process tags and she estimates that she would have to hire almost 40 new staff if that activity was brought in-house, She thinks it is a truly efficient and cost savings program for MVD.

Ann provided transaction volumes for her department.

She offered to provide us with any needed information as we build our cost models.

Ann is not familiar with the previous cost Third Party cost studies.

Interview Notes

Interviewee:	Krista Trembly Customer Service Liaison Title & Registration Partnerships	**Date:**	Aug. 16, 2002
Interviewer(s):	Steve Kalina, Data Site Consortium Don Logue, Data Site Consortium	**Time**:	11:00 a.m.

Relevance to the Study:

Krista is a Customer Service agent that works solely with Service Arizona. She works directly with IBM and also with some customers.

Key Items Discussed:

Krista is full-time supporting Service Arizona.

Does daily reconciliation of Service Arizona activity (covering 7 days a week since Service Arizona is available 24x7).

Gets information from email and from Armani. Contacts IBM to let them know how much their wires should be.

John Tisdale uses Krista's reconciliation and credit card statements to determine rebate (retainage) back to IBM.

Krista handles some calls from customers – problems, need refunds, etc.

Donna Palmoe gets emails from Service Arizona and distributes to appropriate areas.

Are hiring a new person on 8/19/02 to be backup to Krista and do more meetings and technical support & testing of Service Arizona.

Krista has done some technical testing.

If another ESD provider were added, they would probably need to add another person.

Every registration renewal from Service Arizona requires that Renew by Mail process the transaction, and mail the tags. Two people from Renew by Mail are dedicated to fulfilling Service Arizona renewals.

Drivers License – print duplicates and reinstatements processed on Service Arizona. Have one person dedicated each day to produce drivers licenses.

Help Desk – IBM operates primary help desk. At times, customers have not received their tags or question credit card charges. Then the call or email gets forwarded to Krista for resolution.

Payment to IBM is 2% of VLT (with $4 minimum) + $1.00 per registration (if two year

registration, the amount is 2% of VLT with $8 minimum + $1.00). $4 for duplicate drivers license. Personalized plates – IBM charges convenience fee to customer – MVD does not pay IBM anything for personalized plates.

Statistics – Krista has on spreadsheet.

IVR – lots of renewals. Only thing that can be don on IVR is registration renewals.

Can get more transaction info from Jim Cullison and Rita Skiye.

To get retainage and other financial info, contact John Tisdale.

Krista is not familiar with the prior Third Party cost benefit model and had no input as to how our model should be constructed.

Interview Notes

Interviewee:	John Bogert ADOT Chief of Staff	**Date:**	Aug. 16, 2002
Interviewer(s):	Steve Kalina, Data Site Consortium Don Logue, Data Site Consortium	**Time**:	2:00 p.m.

Relevance to the Study:

John is the former Chief Auditor for ADOT and is familiar with the issues and complexities associated with trying to define and compare costs of internal MVD operations with the Third Party program. He is familiar with the previous cost studies.

Key Items Discussed:

Third Party convenience fees charged to customers should be considered a cost of the program.

He agrees that some type of transaction categorization should be done. Problem defining what is a transaction. Can't mix transaction types because they vary proportionally between field offices and third parties. John believes transaction is an exchange with a customer – issuance of a title or registration or drivers license. May be possible to classify as Interchange (database update) vs. Inquiry.

Should categorize by channel (OTC, Phone, Internet, Mail).

John feels that the best way to measure costs of the programs for comparison purposes is to use incremental or marginal costs. Cost should be applied to transactions weighted by the length of time it takes to complete a given transaction.

Fallacy that transactions from Service Arizona take away from field offices. More likely, transactions take away from Renew by Mail (which John thinks is lowest cost channel).

Renew by Mail – cannot put in with the OTC bucket

Convenience fees should be included as a cost associated with a third party transaction (take a global customer view).

Evaluate common transactions that are done by both third parties and field offices. Don't get hung up on complex transactions.

Incremental cost of field office is having another body at a counter.

By having third parties, is avoiding more fixed costs (i.e. additional facilities).

ADOT does not have a true cost accounting system. Are not set up to do cost accounting.

Most difficult to get costs for the field offices – other channels are easy.

Overhead allocations are difficult. Difficult to determine appropriate basis for allocation. Only use indirect costs that increase with transaction volume.

Some way to quantify benefits must be arrived at. Convenience, pollution and traffic reduction are all benefits. Convenience is the biggest benefit.

Aborted transactions are an issue of customer service- an activity, a cost of doing business.

MVD cannot adjust quickly to changes in volume – MVD is appropriated with budget cycles way in advance.

If doing a total, total cost model – is a lot of complexity and would require huge changes in the accounting system – and for what purpose?

Interview Notes

Interviewee:	Rita Skiye ADOT ITD – Special Projects Director	**Date:**	Sept. 4, 2002
Interviewer(s):	Steve Kalina, Data Site Consortium	**Time**:	3:00 p.m.

Relevance to the Study:

Rita manages all systems development and support for MVD Customer Service and the Third Party Program. She is familiar with the systems and technology costs to support the various MVD programs.

Key Items Discussed:

Rita agrees that some type of transaction categorization should be done. Should categorize by channel (OTC, Phone, Internet, Mail). IBM does very little when a new service is added to Service Arizona. Most of the effort is on the part of the MVD Special Projects staff to design, program and implement the service on the back-end systems. These are cost in which MVD pays.

All costs associated with Third Party technical support and development are put into ORG 2022.

Help Desk and Technical Support for Third Party include 6 staff, although all work is not related to Third Party. In addition, Rene Crum is completely dedicated to supporting Service Arizona. We will have a hard time segregating the time that staff works on Third Party because time reporting and HEAT reporting are not kept at that level of detail.

She recommended that we talk to Karen Strickland to get the detailed charges from DOA related to computer processing charge back for MVD.

MVD data processing cost are continually reviewed by Ruth Halikowski and she would be a good source for this information.

In terms of mainframe processing, nothing is unique to Third Party processing. All programs run for MVD Third Party T&R and Drivers processing are the same used for Field Office processing. There are a few extra database tables and controls in place related to Third Party, but these are insignificant in terms of cost.

Cost associated with Service Arizona use of UNI/AAMVANET must also be included in the model. She is unsure as to whether these Third Party costs can be segregated from other uses of these services. She will check into this.

Rita had not seen the previous Third Party cost models developed by MVD but agreed that segregating transaction delivery channel costs is important in MVD deciding which programs to expand.

APPENDIX D - COST MODEL INSTRUCTIONS

Overview

The Third Party Transaction Cost-Benefit Analysis model is a series of three interlinked Microsoft Excel workbooks. Microsoft Excel 97 or greater (Excel 97, Excel 2000, Excel 2002) may be used to access and update the model. Minimal Microsoft Excel knowledge is needed to use the model. Modifying the model requires intermediate level of understanding of Microsoft Excel, including formulas and worksheet linking.

The files are all small, under 70KB each, and can fit on a single diskette. The files must be loaded into the same subdirectory to allow the links to work correctly. File names and worksheet names should not be renamed to preserve the links between worksheets.

The three Excel files or workbooks are:

1. **CostModelSummary.xls** – contains the overall summary, summary by channel (Customer Service, Renew-by-Mail, traditional Third Party, and Service Arizona), and detailed calculations by channel.

2. **MVDCosts.xls** – contains all of the detailed costs, allocations, and transactions that apply to MVD Customer Service.

3. **ThirdPartyCosts.xls** – contains all of the detailed costs, allocations, and transactions that apply to Third Parties, including Service Arizona.

The two detailed Excel files or workbooks for MVD Customer Service Costs and Third Party Costs contain multiple detailed worksheets or spreadsheets. The detailed worksheets are linked into a Summary worksheet that is then linked into the overall Cost Model Summary. Thus, any changes in a detailed cell in the model are automatically recalculated and displayed in the Summary worksheet for that model as well as the overall Cost Model Summary.

Basic use of this model requires minimal data entry and recalculation. Formulas used in calculations only need to be changed when adding new cost types or changing allocation methods. Additional descriptions and examples of modifications are included later in this instruction manual.

Exact formulas for each cell in each worksheet are included at the end of this instruction manual.

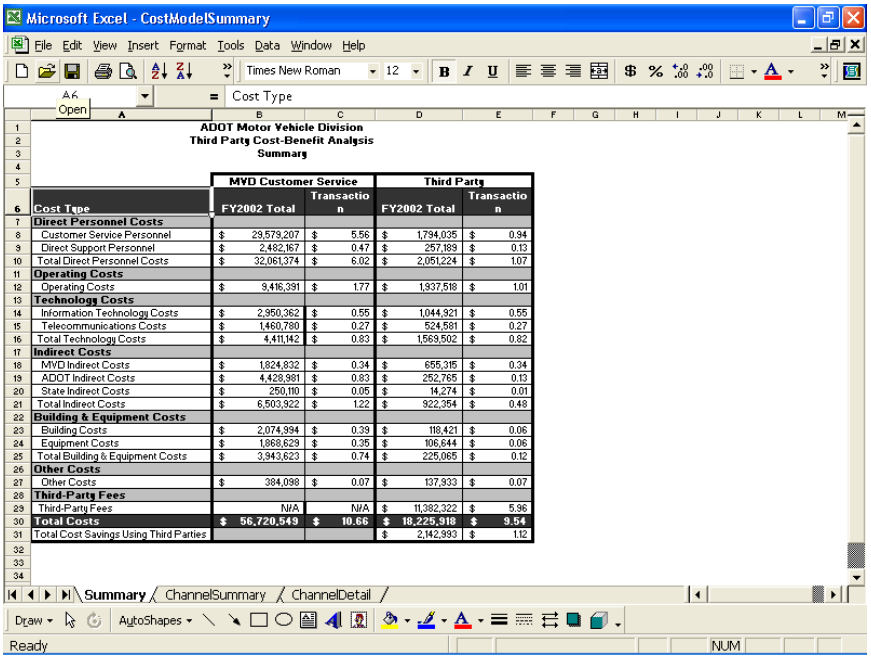
Cost and transaction data in the model is for the most recent fiscal year data available, the ADOT Fiscal Year 2002 (July 1, 2001 – June 30, 2002).

Detailed File Descriptions

The detailed worksheets in each file or workbook include:

1. **CostModelSummary.xls**
    a. **Summary** – provides an overall summary comparison of MVD Customer Service costs and Third Party costs at total amounts and per transaction amounts by cost type.

Figure 2 – CostModelSummary.xls file – Summary worksheet



Microsoft Excel - CostModelSummary

File Edit View Insert Format Tools Data Window Help

Times New Roman 12

Cost Type

ADOT Motor Vehicle Division
Third Party Cost-Benefit Analysis
Summary

Cost Type	MVD Customer Service FY2002 Total	MVD Customer Service Transaction	Third Party FY2002 Total	Third Party Transaction
Direct Personnel Costs				
Customer Service Personnel	$ 29,579,207	$ 5.56	$ 1,794,035	$ 0.94
Direct Support Personnel	$ 2,482,167	$ 0.47	$ 257,189	$ 0.13
Total Direct Personnel Costs	$ 32,061,374	$ 6.02	$ 2,051,224	$ 1.07
Operating Costs				
Operating Costs	$ 9,416,391	$ 1.77	$ 1,937,518	$ 1.01
Technology Costs				
Information Technology Costs	$ 2,950,362	$ 0.55	$ 1,044,921	$ 0.55
Telecommunications Costs	$ 1,460,780	$ 0.27	$ 524,581	$ 0.27
Total Technology Costs	$ 4,411,142	$ 0.83	$ 1,569,502	$ 0.82
Indirect Costs				
MVD Indirect Costs	$ 1,824,832	$ 0.34	$ 655,315	$ 0.34
ADOT Indirect Costs	$ 4,428,981	$ 0.83	$ 252,765	$ 0.13
State Indirect Costs	$ 250,110	$ 0.05	$ 14,274	$ 0.01
Total Indirect Costs	$ 6,503,922	$ 1.22	$ 922,354	$ 0.48
Building & Equipment Costs				
Building Costs	$ 2,074,994	$ 0.39	$ 118,421	$ 0.06
Equipment Costs	$ 1,868,629	$ 0.35	$ 106,644	$ 0.06
Total Building & Equipment Costs	$ 3,943,623	$ 0.74	$ 225,065	$ 0.12
Other Costs				
Other Costs	$ 384,098	$ 0.07	$ 137,933	$ 0.07
Third-Party Fees				
Third-Party Fees	N/A	N/A	$ 11,382,322	$ 5.96
Total Costs	**$ 56,720,549**	**$ 10.66**	**$ 18,225,918**	**$ 9.54**
Total Cost Savings Using Third Parties			$ 2,142,393	$ 1.12

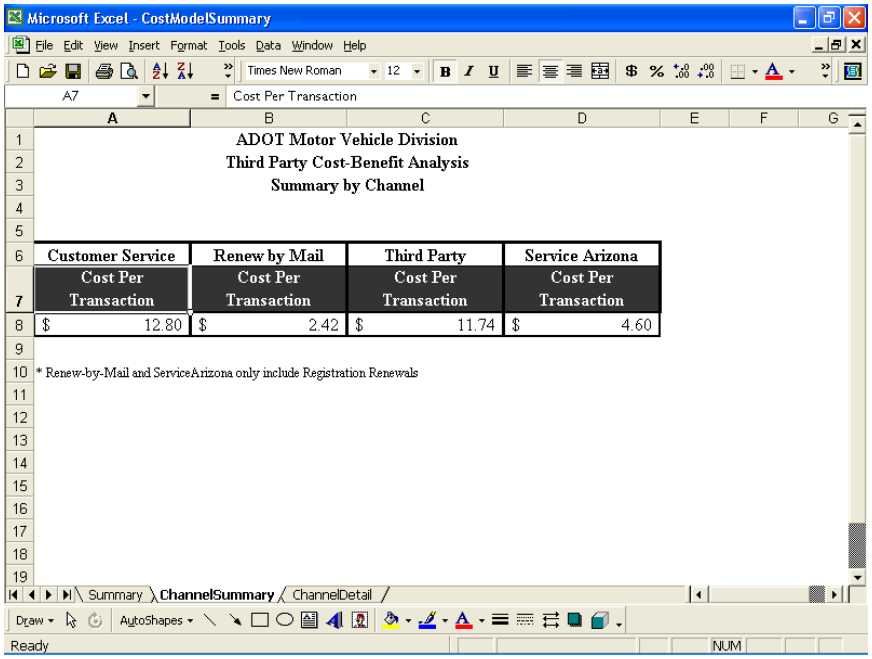
Summary | ChannelSummary | ChannelDetail

Draw AutoShapes

Ready NUM

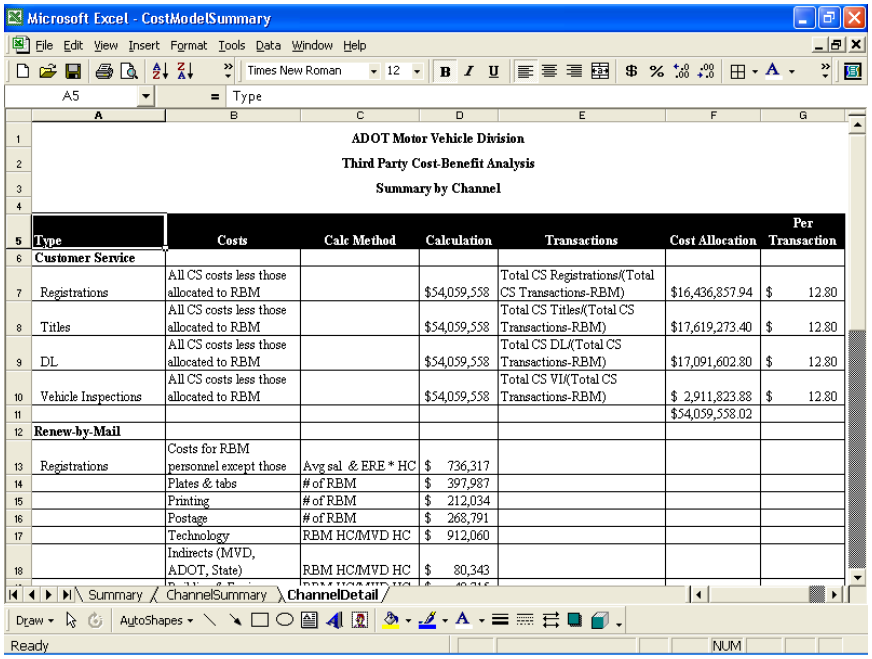
b. **ChannelSummary** – provides a summary of costs per transaction by Channel: MVD Customer Service (over-the-counter), Renew-by-Mail (mail), traditional Third Party (third party offices), and Service Arizona (Internet).

Figure 3 – CostModelSummary.xls file – ChannelSummary worksheet



c. **ChannelDetail** – provides detailed calculations to segregate costs of Renew-by-Mail from MVD Customer Service and Service Arizona from Third Party to provide proper breakdown for the ChannelSummary worksheet.

Figure 4 – CostModelSummary.xls file – ChannelDetail worksheet



Microsoft Excel - CostModelSummary

File Edit View Insert Format Tools Data Window Help

Times New Roman 12

A5 = Type

ADOT Motor Vehicle Division

Third Party Cost-Benefit Analysis

Summary by Channel

Type	Costs	Calc Method	Calculation	Transactions	Cost Allocation	Per Transaction
Customer Service						
Registrations	All CS costs less those allocated to RBM		$54,059,558	Total CS Registrations/(Total CS Transactions-RBM)	$16,436,857.94	$ 12.80
Titles	All CS costs less those allocated to RBM		$54,059,558	Total CS Titles/(Total CS Transactions-RBM)	$17,619,273.40	$ 12.80
DL	All CS costs less those allocated to RBM		$54,059,558	Total CS DL/(Total CS Transactions-RBM)	$17,091,602.80	$ 12.80
Vehicle Inspections	All CS costs less those allocated to RBM		$54,059,558	Total CS VI/(Total CS Transactions-RBM)	$ 2,911,823.88	$ 12.80
					$54,059,558.02	
Renew-by-Mail						
Registrations	Costs for RBM personnel except those	Avg sal & ERE * HC	$ 736,317			
	Plates & tabs	# of RBM	$ 397,987			
	Printing	# of RBM	$ 212,034			
	Postage	# of RBM	$ 268,791			
	Technology	RBM HC/MVD HC	$ 912,060			
	Indirects (MVD, ADOT, State)	RBM HC/MVD HC	$ 80,343			

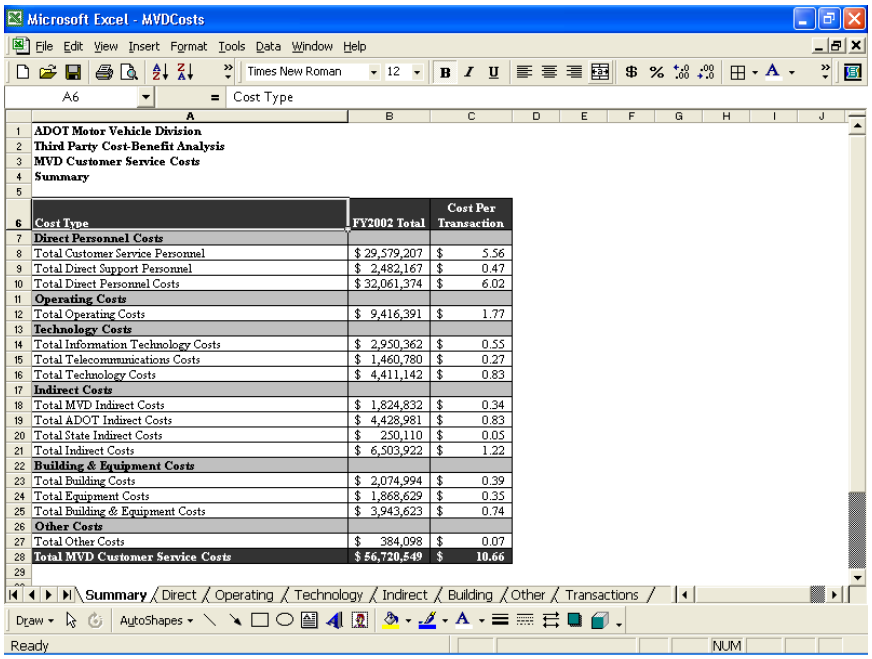
Summary ChannelSummary ChannelDetail

Draw AutoShapes

Ready NUM

2. **MVDCosts.xls**
    a. **Summary** – summarizes the total costs by category from the detailed worksheets listed below.

Figure 5 – MVDCosts.xls file – Summary worksheet



Microsoft Excel - MVDCosts

File Edit View Insert Format Tools Data Window Help

Times New Roman 12

A6 = Cost Type

ADOT Motor Vehicle Division
Third Party Cost-Benefit Analysis
MVD Customer Service Costs
Summary

Cost Type	FY2002 Total	Cost Per Transaction
Direct Personnel Costs		
Total Customer Service Personnel	$ 29,579,207	$ 5.56
Total Direct Support Personnel	$ 2,482,167	$ 0.47
Total Direct Personnel Costs	$ 32,061,374	$ 6.02
Operating Costs		
Total Operating Costs	$ 9,416,391	$ 1.77
Technology Costs		
Total Information Technology Costs	$ 2,950,362	$ 0.55
Total Telecommunications Costs	$ 1,460,780	$ 0.27
Total Technology Costs	$ 4,411,142	$ 0.83
Indirect Costs		
Total MVD Indirect Costs	$ 1,824,832	$ 0.34
Total ADOT Indirect Costs	$ 4,428,981	$ 0.83
Total State Indirect Costs	$ 250,110	$ 0.05
Total Indirect Costs	$ 6,503,922	$ 1.22
Building & Equipment Costs		
Total Building Costs	$ 2,074,994	$ 0.39
Total Equipment Costs	$ 1,868,629	$ 0.35
Total Building & Equipment Costs	$ 3,943,623	$ 0.74
Other Costs		
Total Other Costs	$ 384,098	$ 0.07
Total MVD Customer Service Costs	**$ 56,720,549**	**$ 10.66**

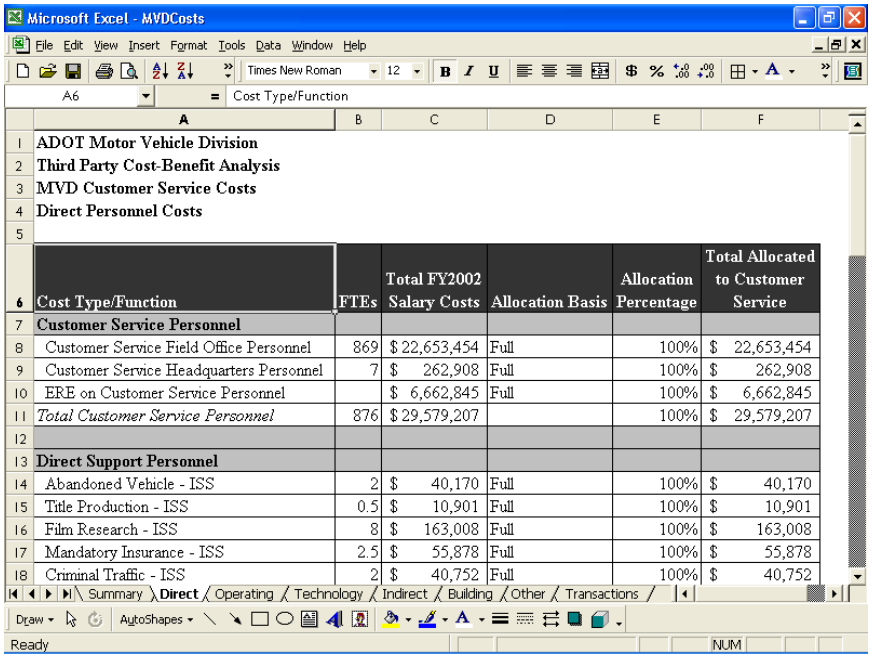
Summary | Direct | Operating | Technology | Indirect | Building | Other | Transactions

Draw AutoShapes

Ready NUM

b. **Direct** – includes direct Customer Service costs, other direct support personnel costs and other personnel costs.

Figure 6 – MVDCosts.xls file – Direct worksheet



Microsoft Excel - MVDCosts

ADOT Motor Vehicle Division
Third Party Cost-Benefit Analysis
MVD Customer Service Costs
Direct Personnel Costs

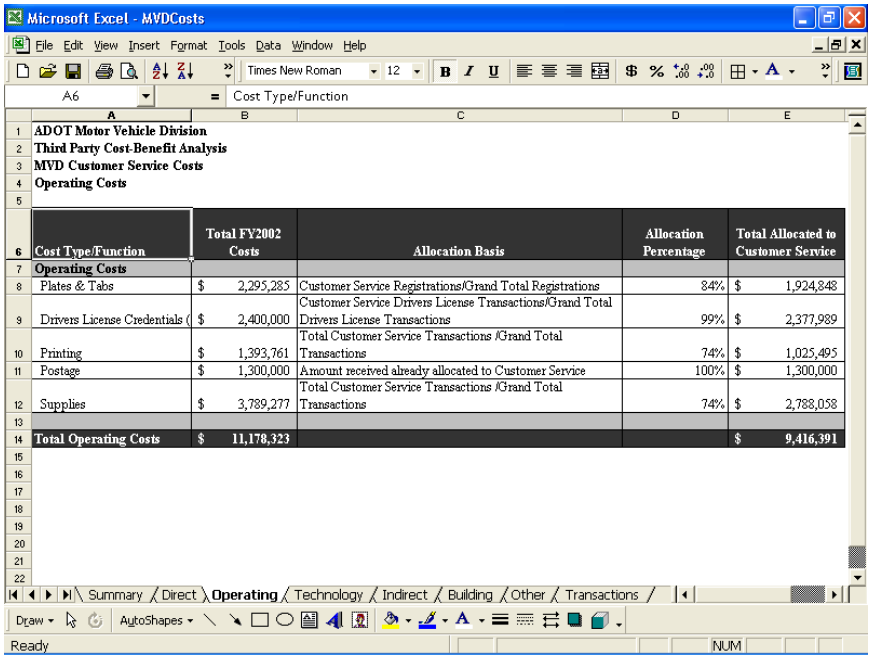
Cost Type/Function	FTEs	Total FY2002 Salary Costs	Allocation Basis	Allocation Percentage	Total Allocated to Customer Service
Customer Service Personnel					
Customer Service Field Office Personnel	869	$ 22,653,454	Full	100%	$ 22,653,454
Customer Service Headquarters Personnel	7	$ 262,908	Full	100%	$ 262,908
ERE on Customer Service Personnel		$ 6,662,845	Full	100%	$ 6,662,845
Total Customer Service Personnel	876	$ 29,579,207		100%	$ 29,579,207
Direct Support Personnel					
Abandoned Vehicle - ISS	2	$ 40,170	Full	100%	$ 40,170
Title Production - ISS	0.5	$ 10,901	Full	100%	$ 10,901
Film Research - ISS	8	$ 163,008	Full	100%	$ 163,008
Mandatory Insurance - ISS	2.5	$ 55,878	Full	100%	$ 55,878
Criminal Traffic - ISS	2	$ 40,752	Full	100%	$ 40,752

Summary | Direct | Operating | Technology | Indirect | Building | Other | Transactions

Ready

c. **Operating** – contains primary operating costs such as plates & tags, driver license credentials, printing, postage, and supplies.

Figure 7 – MVDCosts.xls file – Operating worksheet



Microsoft Excel - MVDCosts

ADOT Motor Vehicle Division
Third Party Cost-Benefit Analysis
MVD Customer Service Costs
Operating Costs

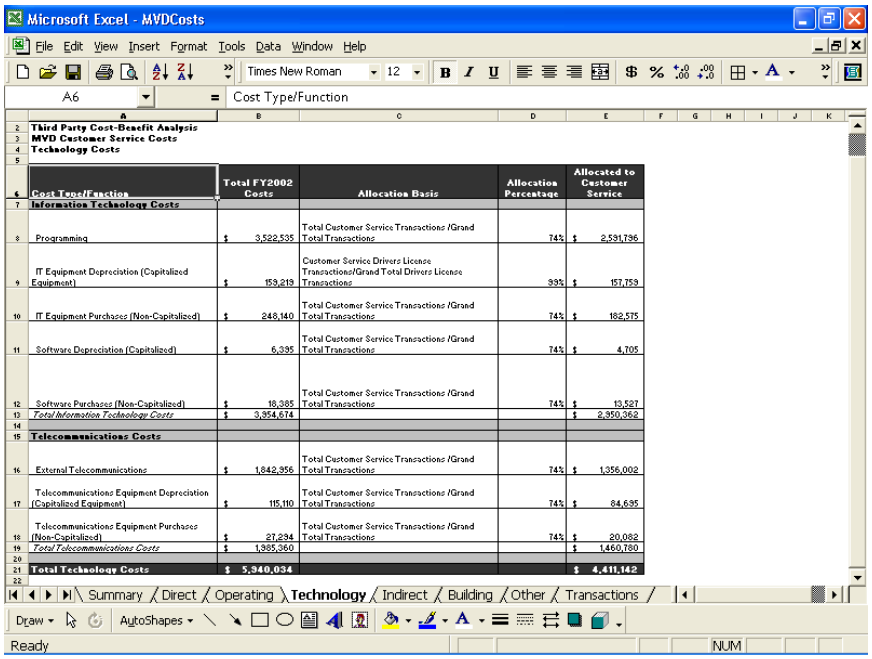
Cost Type/Function	Total FY2002 Costs	Allocation Basis	Allocation Percentage	Total Allocated to Customer Service
Operating Costs				
Plates & Tabs	$ 2,295,285	Customer Service Registrations/Grand Total Registrations	84%	$ 1,924,848
Drivers License Credentials (	$ 2,400,000	Customer Service Drivers License Transactions/Grand Total Drivers License Transactions	99%	$ 2,377,989
Printing	$ 1,393,761	Total Customer Service Transactions /Grand Total Transactions	74%	$ 1,025,495
Postage	$ 1,300,000	Amount received already allocated to Customer Service	100%	$ 1,300,000
Supplies	$ 3,789,277	Total Customer Service Transactions /Grand Total Transactions	74%	$ 2,788,058
Total Operating Costs	**$ 11,178,323**			**$ 9,416,391**

Summary | Direct | Operating | Technology | Indirect | Building | Other | Transactions

Ready

d. **Technology** – includes programming costs, IT equipment & software depreciation and purchases, external telecommunications costs, and telecommunications depreciation and purchases.

Figure 8 – MVDCosts.xls file – Technology worksheet



Microsoft Excel - MVDCosts

File Edit View Insert Format Tools Data Window Help

Times New Roman 12

A6 = Cost Type/Function

Third Party Cost-Benefit Analysis
MVD Customer Service Costs
Technology Costs

Cost Type/Function	Total FY2002 Costs	Allocation Basis	Allocation Percentage	Allocated to Customer Service
Information Technology Costs				
Programming	$ 3,522,535	Total Customer Service Transactions /Grand Total Transactions	74%	$ 2,591,736
IT Equipment Depreciation (Capitalized Equipment)	$ 159,219	Customer Service Drivers License Transactions/Grand Total Drivers License Transactions	99%	$ 157,759
IT Equipment Purchases (Non-Capitalized)	$ 248,140	Total Customer Service Transactions /Grand Total Transactions	74%	$ 182,575
Software Depreciation (Capitalized)	$ 6,385	Total Customer Service Transactions /Grand Total Transactions	74%	$ 4,705
Software Purchases (Non-Capitalized)	$ 18,385	Total Customer Service Transactions /Grand Total Transactions	74%	$ 13,527
Total Information Technology Costs	$ 3,954,674			$ 2,950,362
Telecommunications Costs				
External Telecommunications	$ 1,842,356	Total Customer Service Transactions /Grand Total Transactions	74%	$ 1,356,002
Telecommunications Equipment Depreciation (Capitalized Equipment)	$ 115,110	Total Customer Service Transactions /Grand Total Transactions	74%	$ 84,695
Telecommunications Equipment Purchases (Non-Capitalized)	$ 27,294	Total Customer Service Transactions /Grand Total Transactions	74%	$ 20,082
Total Telecommunications Costs	$ 1,985,360			$ 1,460,780
Total Technology Costs	**$ 5,940,034**			**$ 4,411,142**

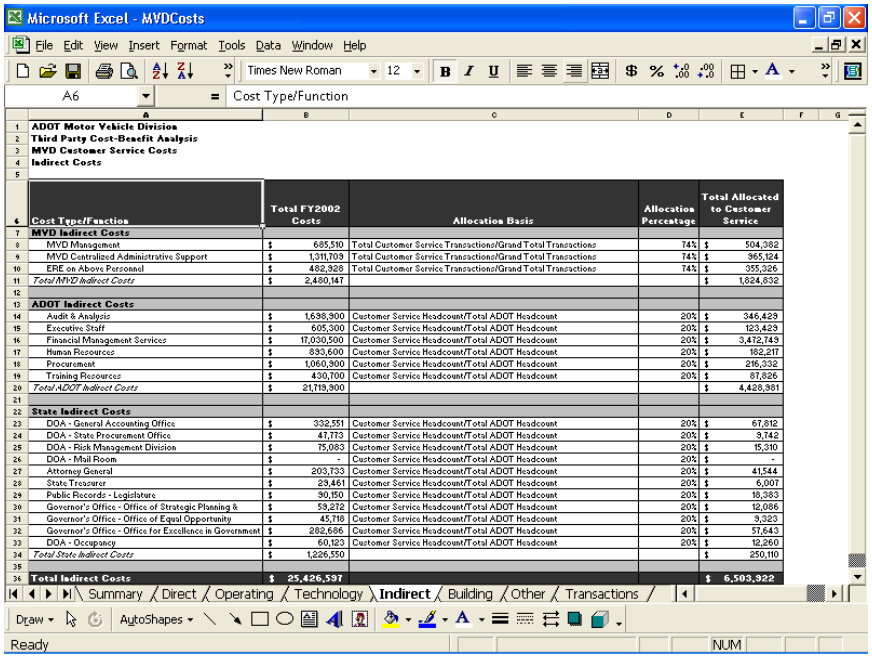
Summary | Direct | Operating | Technology | Indirect | Building | Other | Transactions

Draw AutoShapes

Ready NUM

e. **Indirect** – includes indirect costs for functions that provide support to MVD Customer Service including at the central MVD, ADOT, and State of Arizona levels.

Figure 9 – MVDCosts.xls file – Indirect worksheet



Microsoft Excel - MVDCosts

File Edit View Insert Format Tools Data Window Help

Times New Roman 12

A6 = Cost Type/Function

ADOT Motor Vehicle Division
Third Party Cost-Benefit Analysis
MVD Customer Service Costs
Indirect Costs

Cost Type/Function	Total FY2002 Costs	Allocation Basis	Allocation Percentage	Total Allocated to Customer Service
MVD Indirect Costs				
MVD Management	$ 685,510	Total Customer Service Transactions/Grand Total Transactions	74%	$ 504,382
MVD Centralized Administrative Support	$ 1,311,709	Total Customer Service Transactions/Grand Total Transactions	74%	$ 965,124
ERE on Above Personnel	$ 482,928	Total Customer Service Transactions/Grand Total Transactions	74%	$ 355,326
Total MVD Indirect Costs	$ 2,480,147			$ 1,824,832
ADOT Indirect Costs				
Audit & Analysis	$ 1,638,300	Customer Service Headcount/Total ADOT Headcount	20%	$ 346,423
Executive Staff	$ 605,300	Customer Service Headcount/Total ADOT Headcount	20%	$ 123,423
Financial Management Services	$ 17,030,500	Customer Service Headcount/Total ADOT Headcount	20%	$ 3,472,743
Human Resources	$ 893,600	Customer Service Headcount/Total ADOT Headcount	20%	$ 182,217
Procurement	$ 1,060,300	Customer Service Headcount/Total ADOT Headcount	20%	$ 216,332
Training Resources	$ 430,700	Customer Service Headcount/Total ADOT Headcount	20%	$ 87,826
Total ADOT Indirect Costs	$ 21,719,300			$ 4,428,961
State Indirect Costs				
DOA - General Accounting Office	$ 332,551	Customer Service Headcount/Total ADOT Headcount	20%	$ 67,812
DOA - State Procurement Office	$ 47,773	Customer Service Headcount/Total ADOT Headcount	20%	$ 9,742
DOA - Risk Management Division	$ 75,083	Customer Service Headcount/Total ADOT Headcount	20%	$ 15,310
DOA - Mail Room	$ -	Customer Service Headcount/Total ADOT Headcount	20%	$ -
Attorney General	$ 203,733	Customer Service Headcount/Total ADOT Headcount	20%	$ 41,544
State Treasurer	$ 29,461	Customer Service Headcount/Total ADOT Headcount	20%	$ 6,007
Public Records - Legislature	$ 90,150	Customer Service Headcount/Total ADOT Headcount	20%	$ 18,383
Governor's Office - Office of Strategic Planning &	$ 59,272	Customer Service Headcount/Total ADOT Headcount	20%	$ 12,086
Governor's Office - Office of Equal Opportunity	$ 45,718	Customer Service Headcount/Total ADOT Headcount	20%	$ 9,323
Governor's Office - Office for Excellence in Government	$ 282,686	Customer Service Headcount/Total ADOT Headcount	20%	$ 57,643
DOA - Occupancy	$ 60,123	Customer Service Headcount/Total ADOT Headcount	20%	$ 12,260
Total State Indirect Costs	$ 1,226,550			$ 250,110
Total Indirect Costs	**$ 25,426,537**			**$ 6,503,922**

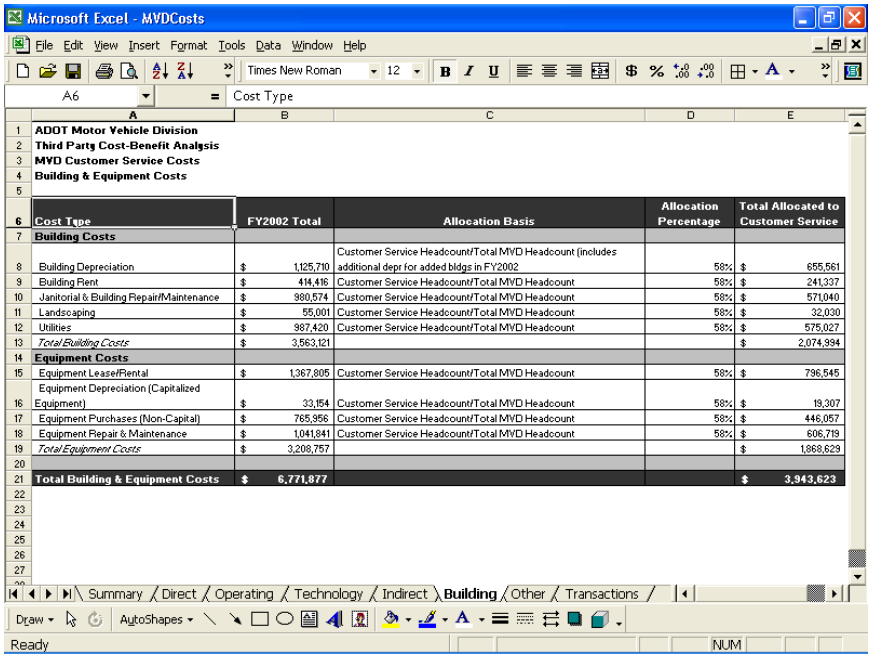
Summary / Direct / Operating / Technology / Indirect / Building / Other / Transactions

Draw AutoShapes

Ready NUM

f. **Building** – includes building rent & depreciation, maintenance, utilities, and equipment purchases, depreciation, and maintenance.

Figure 10 – MVDCosts.xls file – Building worksheet



Microsoft Excel - MVDCosts

File Edit View Insert Format Tools Data Window Help

Times New Roman 12

A6 = Cost Type

ADOT Motor Vehicle Division
Third Party Cost-Benefit Analysis
MVD Customer Service Costs
Building & Equipment Costs

Cost Type	FY2002 Total	Allocation Basis	Allocation Percentage	Total Allocated to Customer Service
Building Costs				
Building Depreciation	$ 1,125,710	Customer Service Headcount/Total MVD Headcount (includes additional depr for added bldgs in FY2002	58%	$ 655,561
Building Rent	$ 414,416	Customer Service Headcount/Total MVD Headcount	58%	$ 241,337
Janitorial & Building Repair/Maintenance	$ 980,574	Customer Service Headcount/Total MVD Headcount	58%	$ 571,040
Landscaping	$ 55,001	Customer Service Headcount/Total MVD Headcount	58%	$ 32,030
Utilities	$ 987,420	Customer Service Headcount/Total MVD Headcount	58%	$ 575,027
Total Building Costs	$ 3,563,121			$ 2,074,994
Equipment Costs				
Equipment Lease/Rental	$ 1,367,805	Customer Service Headcount/Total MVD Headcount	58%	$ 796,545
Equipment Depreciation (Capitalized Equipment)	$ 33,154	Customer Service Headcount/Total MVD Headcount	58%	$ 19,307
Equipment Purchases (Non-Capital)	$ 765,956	Customer Service Headcount/Total MVD Headcount	58%	$ 446,057
Equipment Repair & Maintenance	$ 1,041,841	Customer Service Headcount/Total MVD Headcount	58%	$ 606,719
Total Equipment Costs	$ 3,208,757			$ 1,868,629
Total Building & Equipment Costs	**$ 6,771,877**			**$ 3,943,623**

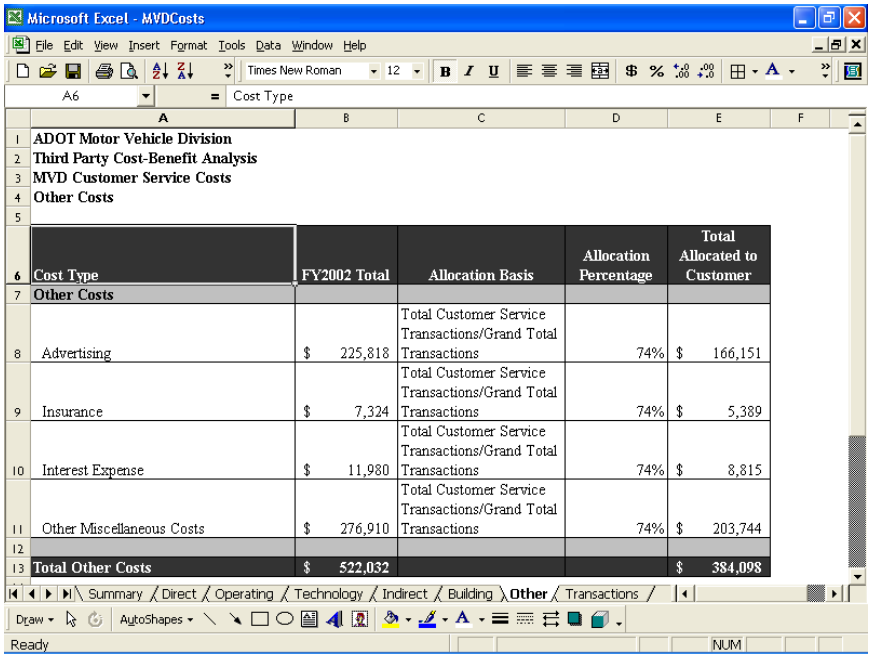
Summary / Direct / Operating / Technology / Indirect / Building / Other / Transactions

Draw AutoShapes

Ready NUM

g. **Other** – includes other costs, such as advertising, insurance, interest, and miscellaneous costs.

Figure 11 – MVDCosts.xls file – Other worksheet



Microsoft Excel - MVDCosts

File Edit View Insert Format Tools Data Window Help

Times New Roman 12

A6 = Cost Type

ADOT Motor Vehicle Division
Third Party Cost-Benefit Analysis
MVD Customer Service Costs
Other Costs

Cost Type	FY2002 Total	Allocation Basis	Allocation Percentage	Total Allocated to Customer
Other Costs				
Advertising	$ 225,818	Total Customer Service Transactions/Grand Total Transactions	74%	$ 166,151
Insurance	$ 7,324	Total Customer Service Transactions/Grand Total Transactions	74%	$ 5,389
Interest Expense	$ 11,980	Total Customer Service Transactions/Grand Total Transactions	74%	$ 8,815
Other Miscellaneous Costs	$ 276,910	Total Customer Service Transactions/Grand Total Transactions	74%	$ 203,744
Total Other Costs	**$ 522,032**			**$ 384,098**

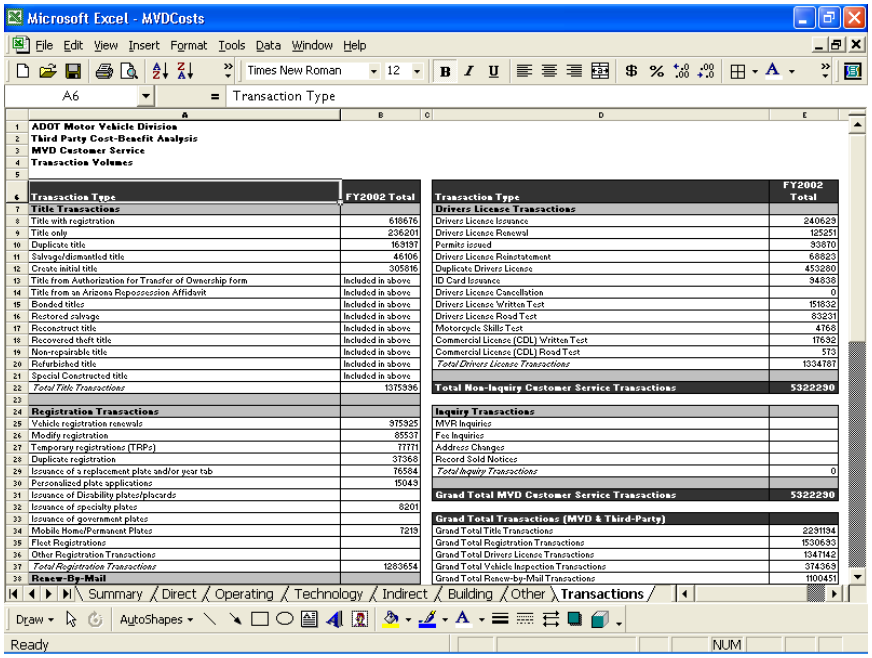
Summary / Direct / Operating / Technology / Indirect / Building / **Other** / Transactions

Draw AutoShapes

Ready NUM

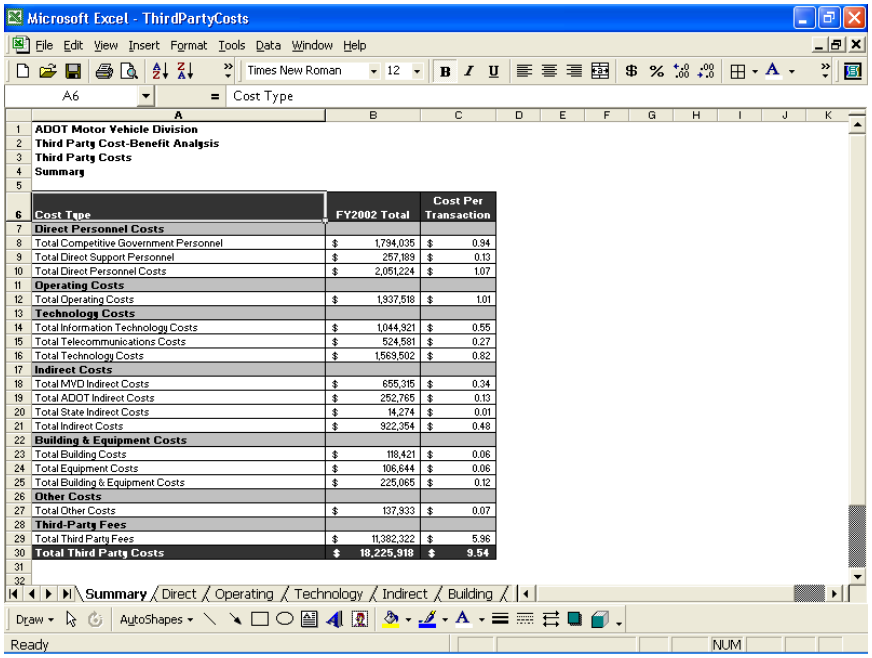
h. **Transactions** – includes detailed transaction counts grouped by Title transactions, Registration Transactions, Renew-by-Mail transactions, Vehicle Inspection transactions, Drivers License transactions, and Inquiry transactions. Headcount data is also included.

Figure 12 – MVDCosts.xls file – Transactions worksheet



3. **ThirdPartyCosts.xls**
   a. **Summary** – summarizes the total costs by category from the detailed worksheets listed below.

Figure 13 – ThirdPartyCosts.xls file – Summary worksheet



Microsoft Excel - ThirdPartyCosts

File Edit View Insert Format Tools Data Window Help

Times New Roman 12

A6 = Cost Type

	A	B	C
1	**ADOT Motor Vehicle Division**		
2	**Third Party Cost-Benefit Analysis**		
3	**Third Party Costs**		
4	**Summary**		
5			
6	**Cost Type**	**FY2002 Total**	**Cost Per Transaction**
7	**Direct Personnel Costs**		
8	Total Competitive Government Personnel	$ 1,794,035	$ 0.94
9	Total Direct Support Personnel	$ 257,189	$ 0.13
10	Total Direct Personnel Costs	$ 2,051,224	$ 1.07
11	**Operating Costs**		
12	Total Operating Costs	$ 1,937,518	$ 1.01
13	**Technology Costs**		
14	Total Information Technology Costs	$ 1,044,321	$ 0.55
15	Total Telecommunications Costs	$ 524,581	$ 0.27
16	Total Technology Costs	$ 1,569,502	$ 0.82
17	**Indirect Costs**		
18	Total MVD Indirect Costs	$ 655,315	$ 0.34
19	Total ADOT Indirect Costs	$ 252,765	$ 0.13
20	Total State Indirect Costs	$ 14,274	$ 0.01
21	Total Indirect Costs	$ 922,354	$ 0.48
22	**Building & Equipment Costs**		
23	Total Building Costs	$ 118,421	$ 0.06
24	Total Equipment Costs	$ 106,644	$ 0.06
25	Total Building & Equipment Costs	$ 225,065	$ 0.12
26	**Other Costs**		
27	Total Other Costs	$ 137,933	$ 0.07
28	**Third-Party Fees**		
29	Total Third Party Fees	$ 11,382,322	$ 5.96
30	**Total Third Party Costs**	**$ 18,225,918**	**$ 9.54**
31			
32			

Summary | Direct | Operating | Technology | Indirect | Building

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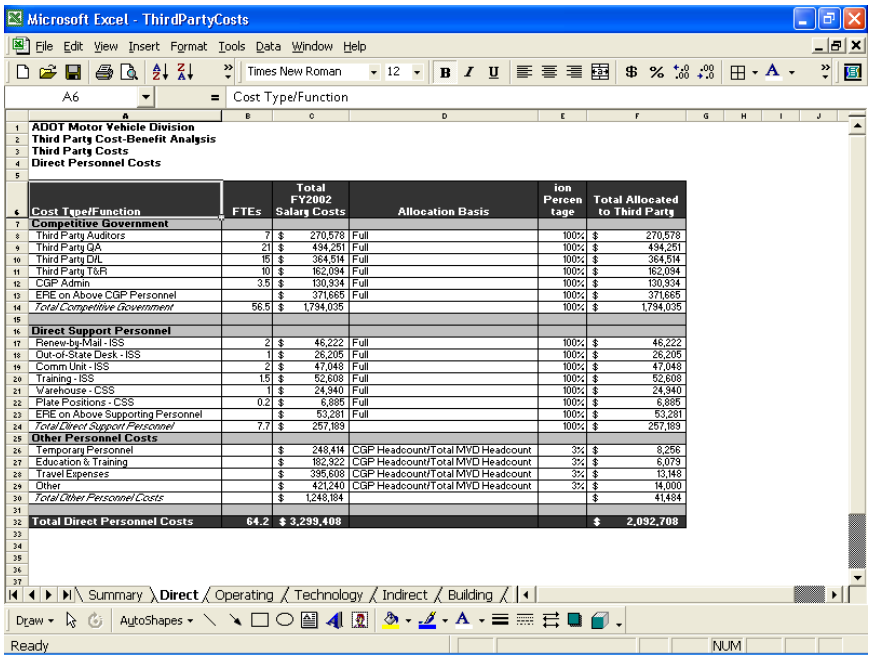
   b. **Direct** – includes direct costs for MVD personnel that support the Third Party program, other direct support personnel costs and other personnel costs.

Figure 14 – ThirdPartyCosts.xls file – Direct worksheet



Microsoft Excel - ThirdPartyCosts

File Edit View Insert Format Tools Data Window Help

Times New Roman 12

A6 = Cost Type/Function

	A	B	C	D	E	F
1	**ADOT Motor Vehicle Division**					
2	**Third Party Cost-Benefit Analysis**					
3	**Third Party Costs**					
4	**Direct Personnel Costs**					
5						
6	**Cost Type/Function**	**FTEs**	**Total FY2002 Salary Costs**	**Allocation Basis**	**ion Percentage**	**Total Allocated to Third Party**
7	**Competitive Government**					
8	Third Party Auditors	7	$ 270,578	Full	100%	$ 270,578
9	Third Party QA	21	$ 434,251	Full	100%	$ 434,251
10	Third Party DIL	15	$ 364,514	Full	100%	$ 364,514
11	Third Party T&R	10	$ 162,094	Full	100%	$ 162,094
12	CGP Admin	3.5	$ 130,934	Full	100%	$ 130,934
13	ERE on Above CGP Personnel		$ 371,665	Full	100%	$ 371,665
14	*Total Competitive Government*	56.5	$ 1,794,035		100%	$ 1,794,035
15						
16	**Direct Support Personnel**					
17	Renew-by-Mail - ISS	2	$ 46,222	Full	100%	$ 46,222
18	Out-of-State Desk - ISS	1	$ 26,205	Full	100%	$ 26,205
19	Comm Unit - ISS	2	$ 47,048	Full	100%	$ 47,048
20	Training - ISS	1.5	$ 52,608	Full	100%	$ 52,608
21	Warehouse - CSS	1	$ 24,940	Full	100%	$ 24,940
22	Plate Positions - CSS	0.2	$ 6,885	Full	100%	$ 6,885
23	ERE on Above Supporting Personnel		$ 53,281	Full	100%	$ 53,281
24	*Total Direct Support Personnel*	7.7	$ 257,189		100%	$ 257,189
25	**Other Personnel Costs**					
26	Temporary Personnel		$ 248,414	CGP Headcount/Total MVD Headcount	3%	$ 8,256
27	Education & Training		$ 182,922	CGP Headcount/Total MVD Headcount	3%	$ 6,079
28	Travel Expenses		$ 395,608	CGP Headcount/Total MVD Headcount	3%	$ 13,148
29	Other		$ 421,240	CGP Headcount/Total MVD Headcount	3%	$ 14,000
30	*Total Other Personnel Costs*		$ 1,248,184			$ 41,484
31						
32	**Total Direct Personnel Costs**	**64.2**	**$ 3,299,408**			**$ 2,092,708**
33						
34						
35						
36						
37						

Summary | Direct | Operating | Technology | Indirect | Building

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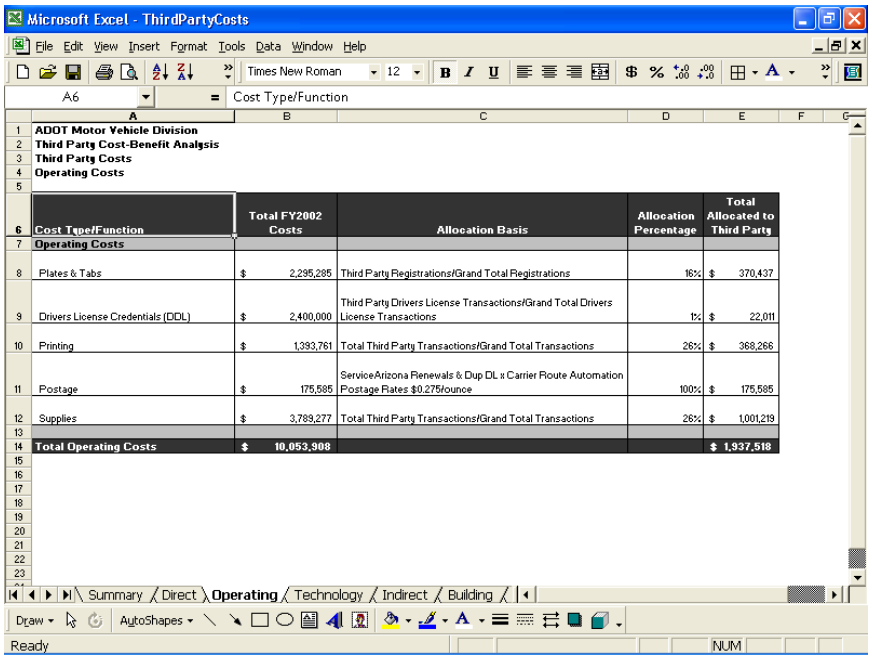
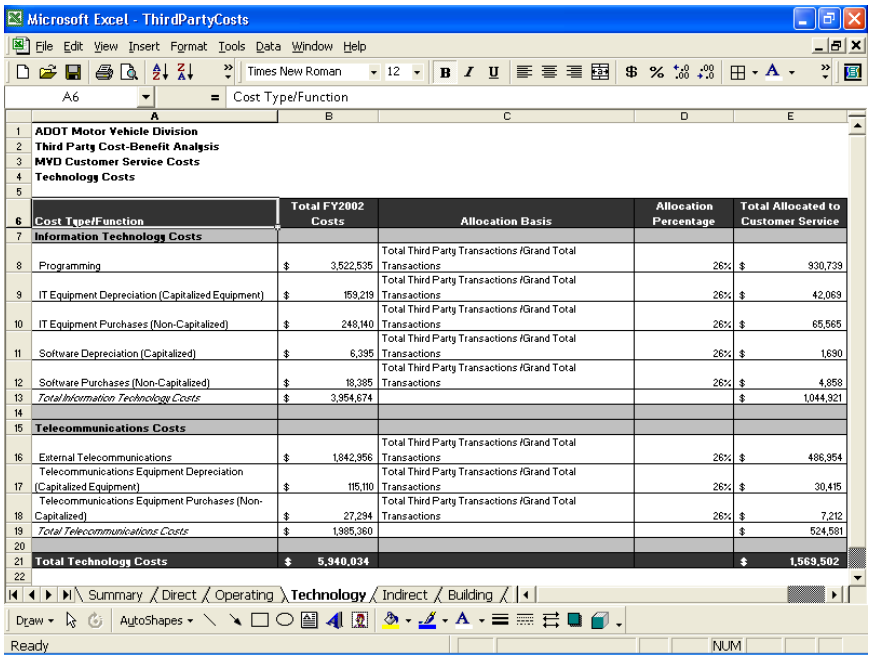
c. **Operating** – contains primary operating costs such as plates & tags, driver license credentials, printing, postage, and supplies.

Figure 15 – ThirdPartyCosts.xls file – Operating worksheet



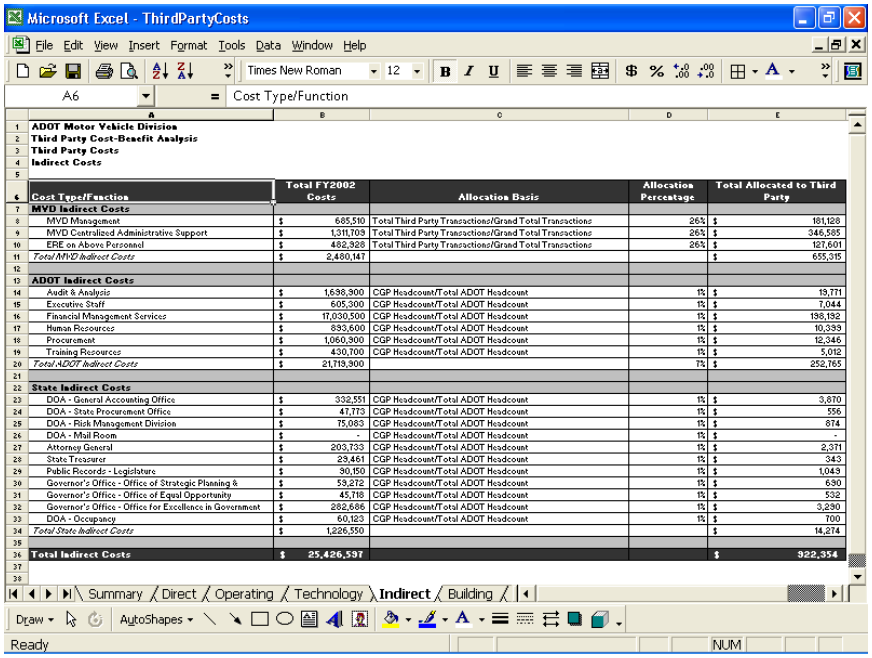
d. **Technology** – includes programming costs, IT equipment & software depreciation and purchases, external telecommunications costs, and telecommunications depreciation and purchases.

Figure 16 – ThirdPartyCosts.xls file – Technology worksheet



e. **Indirect** – includes indirect costs for functions that provide support to MVD personnel that support the Third Party Program including at the central MVD, ADOT, and State of Arizona levels.

Figure 17 – ThirdPartyCosts.xls file – Indirect worksheet



Microsoft Excel - ThirdPartyCosts

File Edit View Insert Format Tools Data Window Help

Times New Roman 12

A6 = Cost Type/Function

ADOT Motor Vehicle Division
Third Party Cost-Benefit Analysis
Third Party Costs
Indirect Costs

Cost Type/Function	Total FY2002 Costs	Allocation Basis	Allocation Percentage	Total Allocated to Third Party
MVD Indirect Costs				
MVD Management	$ 685,510	Total Third Party Transactions/Grand Total Transactions	26%	$ 181,128
MVD Centralized Administrative Support	$ 1,311,703	Total Third Party Transactions/Grand Total Transactions	26%	$ 346,585
ERE on Above Personnel	$ 482,928	Total Third Party Transactions/Grand Total Transactions	26%	$ 127,601
Total MVD Indirect Costs	$ 2,480,147			$ 655,315
ADOT Indirect Costs				
Audit & Analysis	$ 1,638,300	CGP Headcount/Total ADOT Headcount	1%	$ 19,771
Executive Staff	$ 605,300	CGP Headcount/Total ADOT Headcount	1%	$ 7,044
Financial Management Services	$ 17,030,500	CGP Headcount/Total ADOT Headcount	1%	$ 198,192
Human Resources	$ 833,600	CGP Headcount/Total ADOT Headcount	1%	$ 10,339
Procurement	$ 1,060,300	CGP Headcount/Total ADOT Headcount	1%	$ 12,346
Training Resources	$ 430,700	CGP Headcount/Total ADOT Headcount	1%	$ 5,012
Total ADOT Indirect Costs	$ 21,719,300		1%	$ 252,765
State Indirect Costs				
DOA - General Accounting Office	$ 332,551	CGP Headcount/Total ADOT Headcount	1%	$ 3,870
DOA - State Procurement Office	$ 47,773	CGP Headcount/Total ADOT Headcount	1%	$ 556
DOA - Risk Management Division	$ 75,083	CGP Headcount/Total ADOT Headcount	1%	$ 874
DOA - Mail Room	$ -	CGP Headcount/Total ADOT Headcount	1%	$ -
Attorney General	$ 203,733	CGP Headcount/Total ADOT Headcount	1%	$ 2,371
State Treasurer	$ 29,461	CGP Headcount/Total ADOT Headcount	1%	$ 343
Public Records - Legislature	$ 90,150	CGP Headcount/Total ADOT Headcount	1%	$ 1,043
Governor's Office - Office of Strategic Planning &	$ 53,272	CGP Headcount/Total ADOT Headcount	1%	$ 620
Governor's Office - Office of Equal Opportunity	$ 45,718	CGP Headcount/Total ADOT Headcount	1%	$ 532
Governor's Office - Office for Excellence in Government	$ 282,686	CGP Headcount/Total ADOT Headcount	1%	$ 3,290
DOA - Occupancy	$ 60,123	CGP Headcount/Total ADOT Headcount	1%	$ 700
Total State Indirect Costs	$ 1,226,550			$ 14,274
Total Indirect Costs	**$ 25,426,597**			**$ 922,354**

Summary | Direct | Operating | Technology | Indirect | Building

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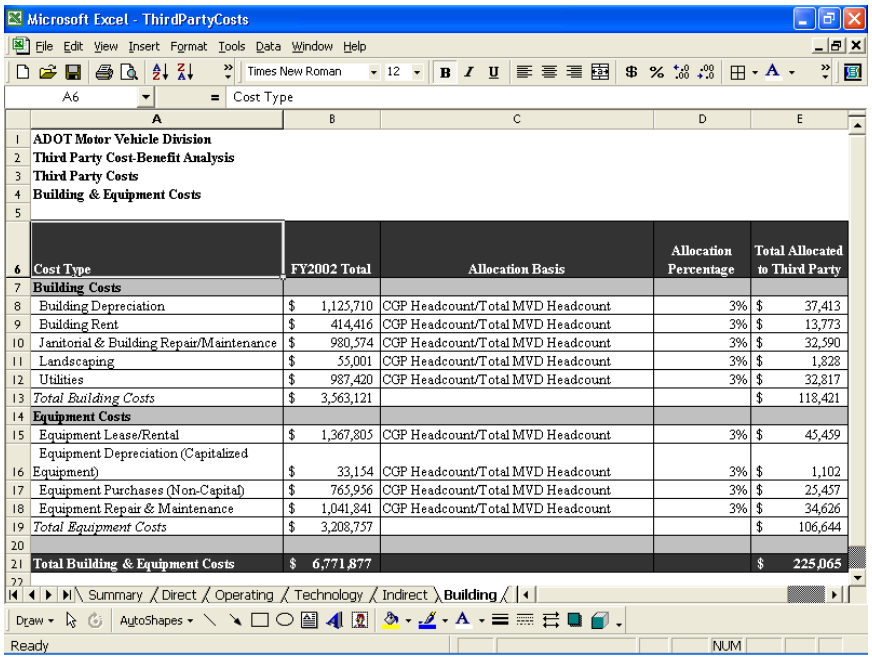
f. **Building** – includes building rent & depreciation, maintenance, utilities, and equipment purchases, depreciation, and maintenance.

Figure 18 – ThirdPartyCosts.xls file – Building worksheet



Microsoft Excel - ThirdPartyCosts

File Edit View Insert Format Tools Data Window Help

Times New Roman 12

A6 = Cost Type

ADOT Motor Vehicle Division
Third Party Cost-Benefit Analysis
Third Party Costs
Building & Equipment Costs

Cost Type	FY2002 Total	Allocation Basis	Allocation Percentage	Total Allocated to Third Party
Building Costs				
Building Depreciation	$ 1,125,710	CGP Headcount/Total MVD Headcount	3%	$ 37,413
Building Rent	$ 414,416	CGP Headcount/Total MVD Headcount	3%	$ 13,773
Janitorial & Building Repair/Maintenance	$ 980,574	CGP Headcount/Total MVD Headcount	3%	$ 32,590
Landscaping	$ 55,001	CGP Headcount/Total MVD Headcount	3%	$ 1,828
Utilities	$ 987,420	CGP Headcount/Total MVD Headcount	3%	$ 32,817
Total Building Costs	$ 3,563,121			$ 118,421
Equipment Costs				
Equipment Lease/Rental	$ 1,367,805	CGP Headcount/Total MVD Headcount	3%	$ 45,459
Equipment Depreciation (Capitalized Equipment)	$ 33,154	CGP Headcount/Total MVD Headcount	3%	$ 1,102
Equipment Purchases (Non-Capital)	$ 765,956	CGP Headcount/Total MVD Headcount	3%	$ 25,457
Equipment Repair & Maintenance	$ 1,041,841	CGP Headcount/Total MVD Headcount	3%	$ 34,626
Total Equipment Costs	$ 3,208,757			$ 106,644
Total Building & Equipment Costs	**$ 6,771,877**			**$ 225,065**

Summary | Direct | Operating | Technology | Indirect | Building

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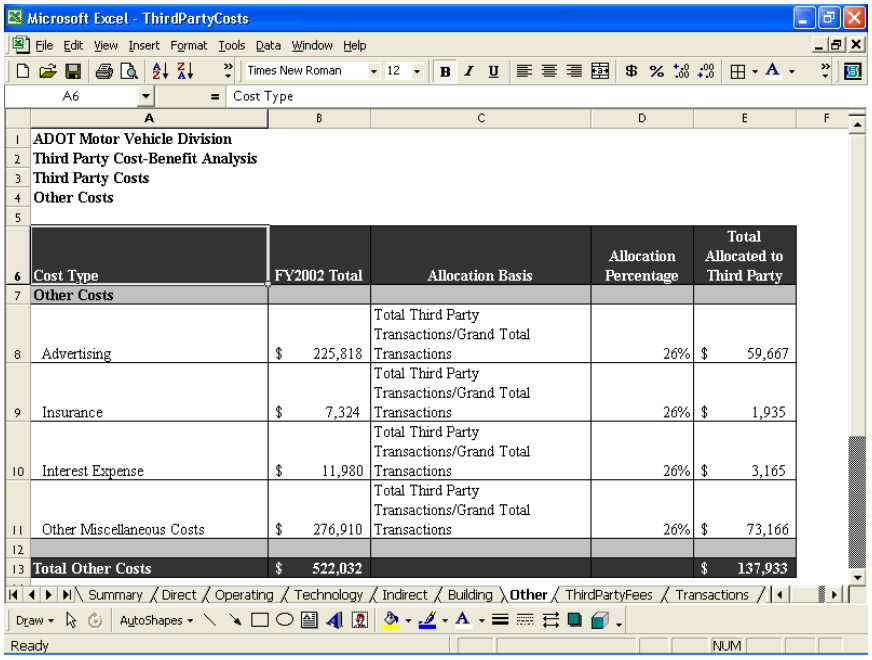
g. **Other** – includes other miscellaneous costs.

Figure 19 – ThirdPartyCosts.xls file – Other worksheet



Microsoft Excel - ThirdPartyCosts

File Edit View Insert Format Tools Data Window Help

Times New Roman 12

A6 = Cost Type

ADOT Motor Vehicle Division
Third Party Cost-Benefit Analysis
Third Party Costs
Other Costs

Cost Type	FY2002 Total	Allocation Basis	Allocation Percentage	Total Allocated to Third Party
Other Costs				
Advertising	$ 225,818	Total Third Party Transactions/Grand Total Transactions	26%	$ 59,667
Insurance	$ 7,324	Total Third Party Transactions/Grand Total Transactions	26%	$ 1,935
Interest Expense	$ 11,980	Total Third Party Transactions/Grand Total Transactions	26%	$ 3,165
Other Miscellaneous Costs	$ 276,910	Total Third Party Transactions/Grand Total Transactions	26%	$ 73,166
Total Other Costs	**$ 522,032**			**$ 137,933**

Summary / Direct / Operating / Technology / Indirect / Building / **Other** / ThirdPartyFees / Transactions

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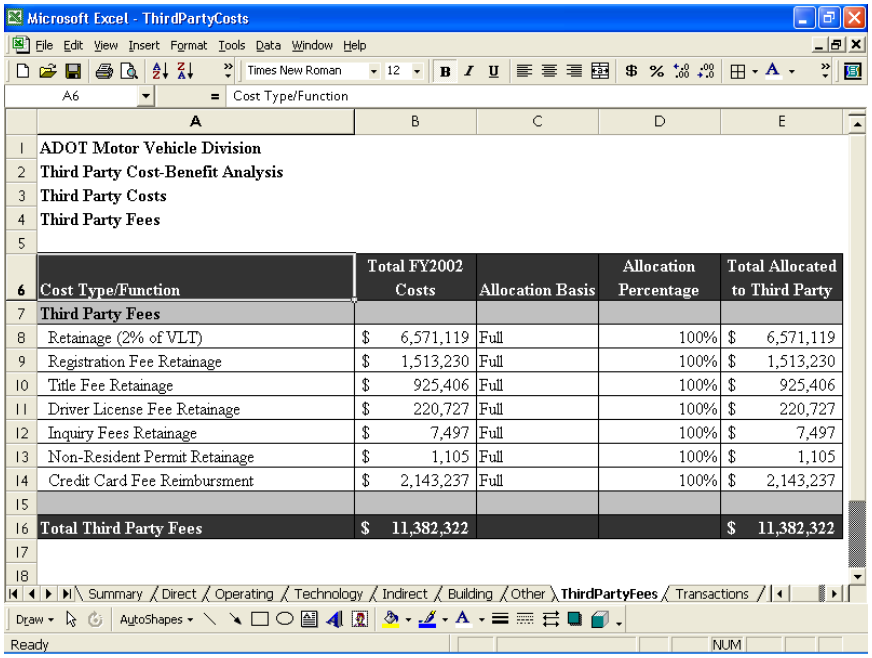
h. **ThirdPartyFees** – includes retainage of 2% of VLT, transaction fee retainage, and credit card fee reimbursements.

Figure 20 – ThirdPartyCosts.xls file – ThirdPartyFees worksheet



Microsoft Excel - ThirdPartyCosts

File Edit View Insert Format Tools Data Window Help

Times New Roman 12

A6 = Cost Type/Function

ADOT Motor Vehicle Division
Third Party Cost-Benefit Analysis
Third Party Costs
Third Party Fees

Cost Type/Function	Total FY2002 Costs	Allocation Basis	Allocation Percentage	Total Allocated to Third Party
Third Party Fees				
Retainage (2% of VLT)	$ 6,571,119	Full	100%	$ 6,571,119
Registration Fee Retainage	$ 1,513,230	Full	100%	$ 1,513,230
Title Fee Retainage	$ 925,406	Full	100%	$ 925,406
Driver License Fee Retainage	$ 220,727	Full	100%	$ 220,727
Inquiry Fees Retainage	$ 7,497	Full	100%	$ 7,497
Non-Resident Permit Retainage	$ 1,105	Full	100%	$ 1,105
Credit Card Fee Reimbursment	$ 2,143,237	Full	100%	$ 2,143,237
Total Third Party Fees	**$ 11,382,322**			**$ 11,382,322**

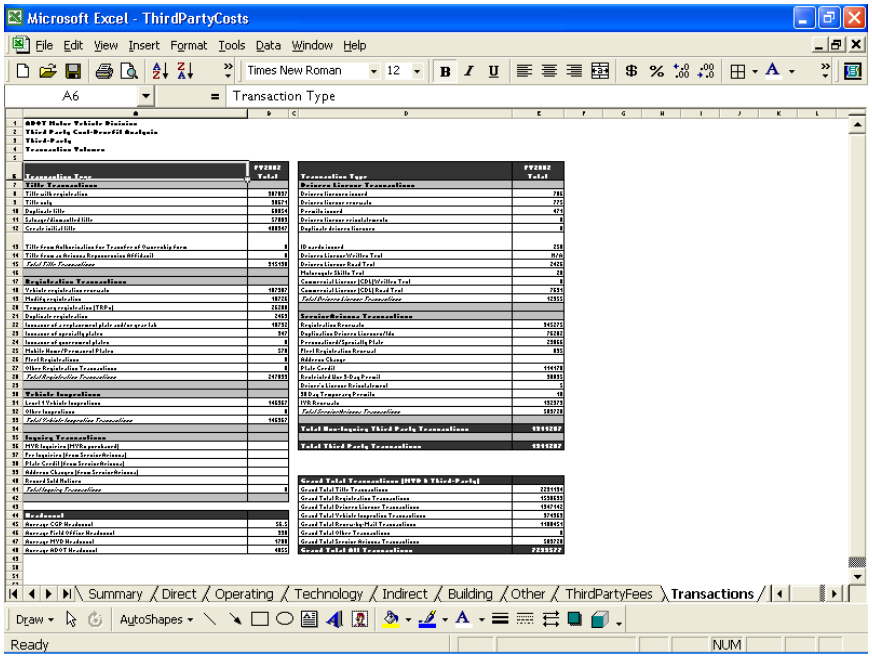
Summary / Direct / Operating / Technology / Indirect / Building / Other / **ThirdPartyFees** / Transactions

Draw AutoShapes

Ready NUM

i. **Transactions** – includes detailed transaction counts grouped by Title transactions, Registration Transactions, Service Arizona transactions, Vehicle Inspection transactions, Drivers License transactions, and Inquiry transactions. Headcount data is also included.

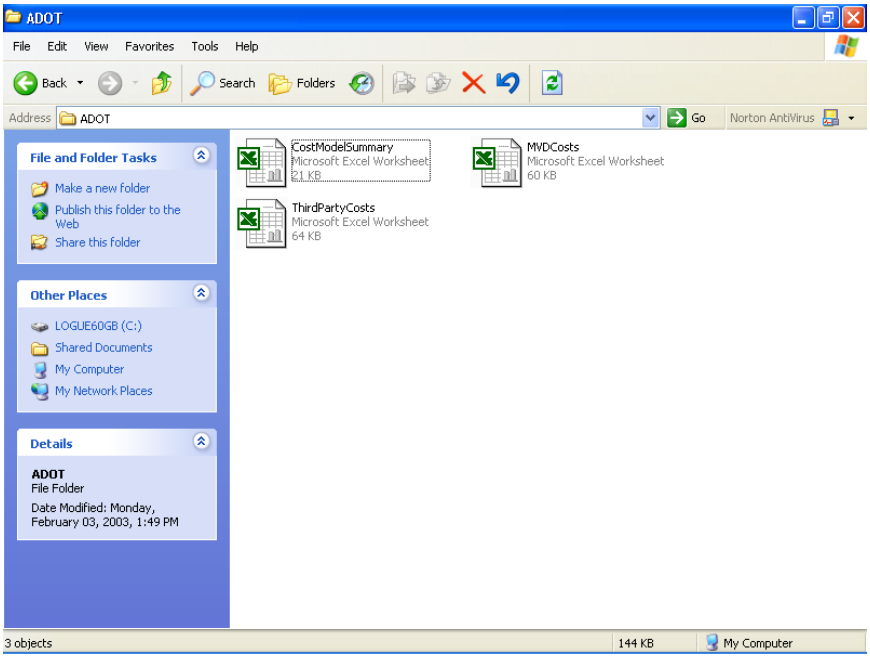
Figure 21 – ThirdPartyCosts.xls file – Transactions worksheet



Using the Model

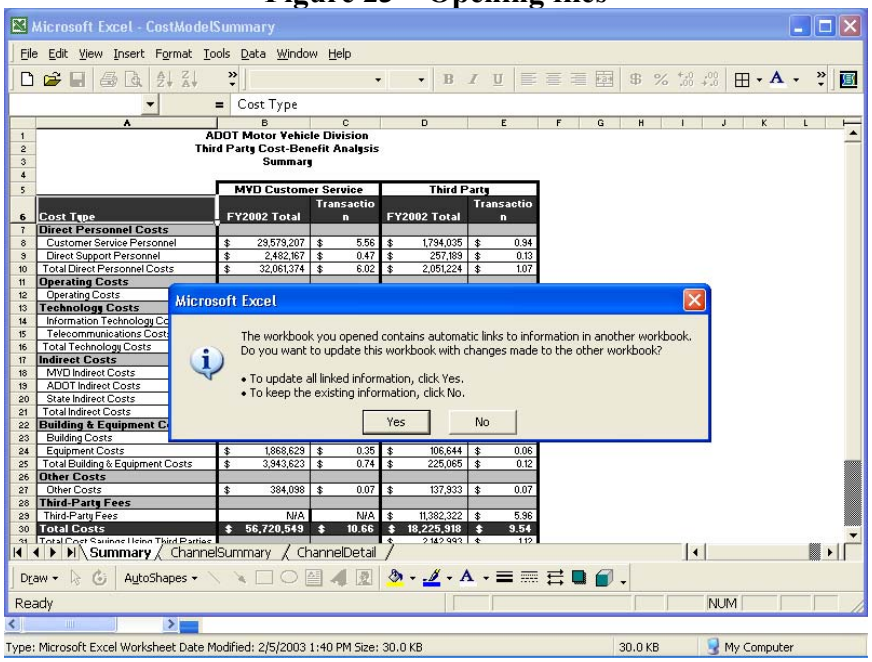
To use the model, first copy the model to a single subdirectory of your computer or network.

Figure 22 – Cost Model files



Then open the CostModelSummary.xls workbook. When prompted if you wish to update links, click on "Yes." Then open up the Cost Model-MVD Customer Service Costs.xls and Cost Model-Third Party Costs.xls workbooks and also click on "Yes" when prompted to update the links. The model is then fully ready for use and review. Click on the tags on the bottom left portion of the screen to access the different worksheets.

Figure 23 – Opening files



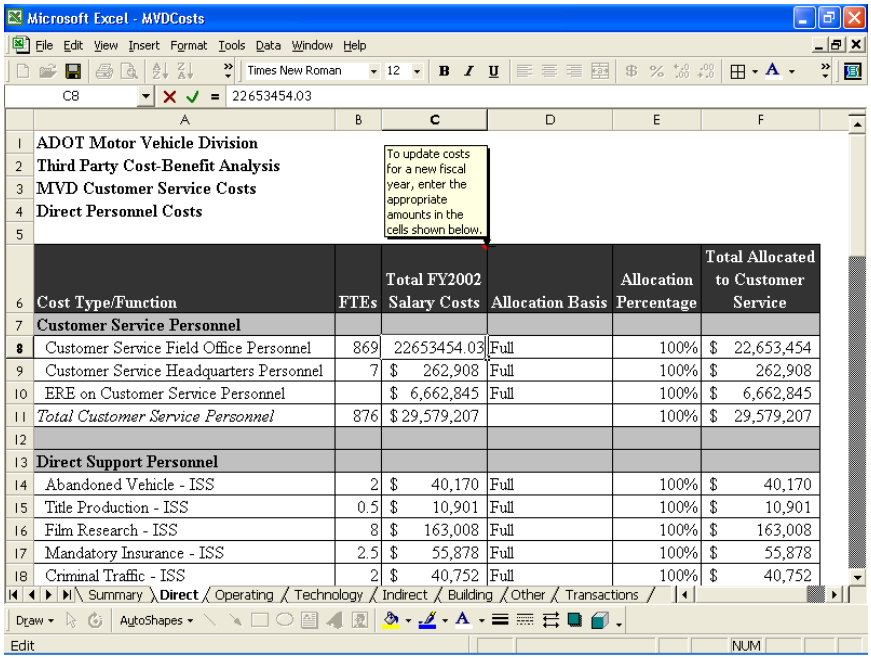
Note that all costs are allocated to MVD Customer Service or Third Party. Depending on the cost type, the allocation is either by transaction counts or by headcount. Each detailed worksheet lists the allocation method used and shows the allocation percentage, which is calculated based upon formulas using the appropriate transaction or headcount totals from the Transactions worksheet.

Updating the Model

Updates to the model would typically be made in three different situations:

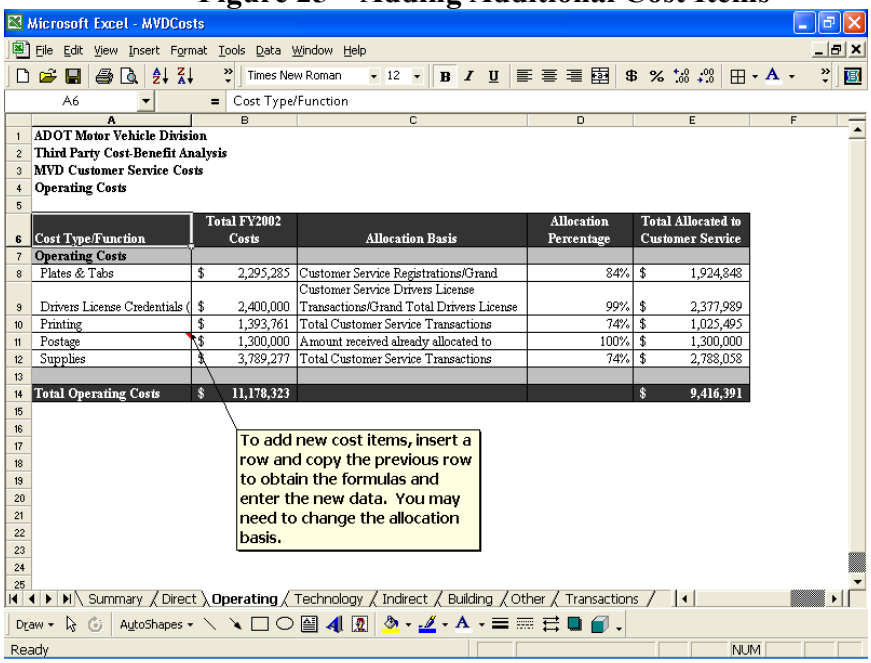
1. **Updating for New Period** – for example if the analysis were to be updated for a different fiscal year, such as FY2003, or other period. To perform this update, all of the cost and transaction data need to be gathered from the various sources, as listed in the Assumptions, and then the data need to be entered in the appropriate cells (currently the FY2002 Cost cell for each cost item). No changes need to be made to the Allocation Basis, Allocation Percentage, or Total Amount Allocated cells. Transaction counts must all be reentered in the appropriate cells in the Transactions worksheets. Excel automatically recalculates all worksheets and all links.

Figure 24 – Updating Costs for New Period



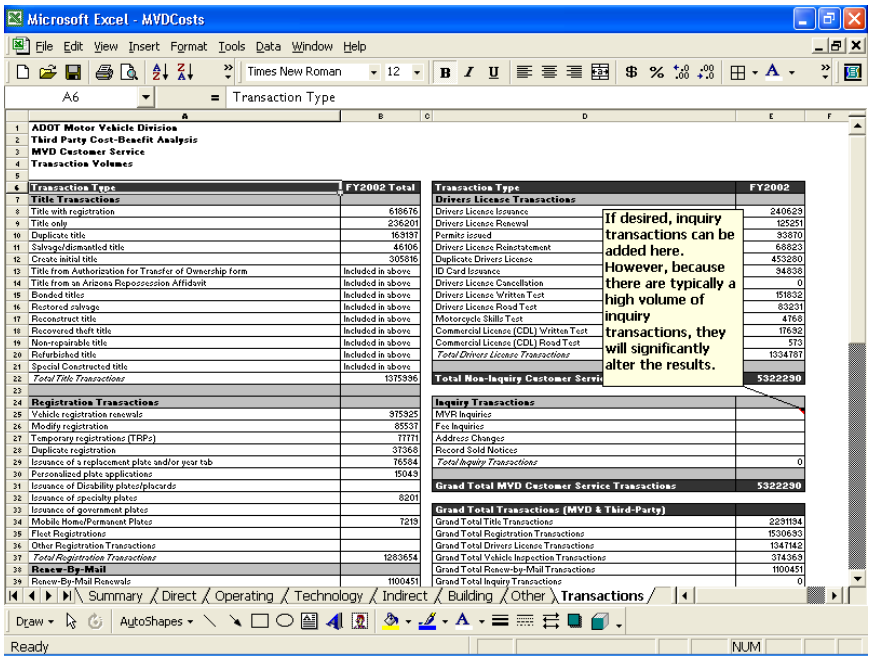
2. **Adding Additional Cost Items** – If additional cost items are to be added, then go to the appropriate worksheet for the cost type, insert a row at the appropriate place, and copy the previous row and update the data. Depending on the allocation basis for the new cost item, you may need to change the Excel formula that points to the appropriate cells in the Transactions worksheet. The remainder of the calculations should be automatic.

Figure 25 – Adding Additional Cost Items



3. **Using Inquiry Transactions in Transaction Counts** – depending on the purpose of the analysis, Inquiry Transactions may be included in the total transaction counts. Inquiry transactions include MVR Inquiries, Fee Inquiries, Address Changes, and Record Sold Notices. Since these inquiry transactions can be high volume, inclusion may significantly alter the results. If desired, the appropriate inquiry transaction totals can be entered in the respective Transaction worksheets in both workbooks. If inquiry transactions are not to be included, then those cells can be erased, but not deleted.

Figure 26 – Using Inquiry Transactions in Transaction Counts



APPENDIX E - COST MODEL SUMMARY FORMULAS

Table 24 – Formulas for CostModelSummary.xls worksheet (columns A – C)

	A	B	C
1	**Summary**		
2			
3		**MVD Customer Service**	
4	**Cost Type**	**FY2002 Total**	**Cost Per Transaction**
5	**Direct Personnel Costs**		
6	Customer Service Personnel	='C:\ADOT\[MVDCosts.xls]Summary'!B8	='C:\ADOT\[MVDCosts.xls]Summary'!C8
7	Direct Support Personnel	='C:\ADOT\[MVDCosts.xls]Summary'!B9	='C:\ADOT\[MVDCosts.xls]Summary'!C9
8	Total Direct Personnel Costs	='C:\ADOT\[MVDCosts.xls]Summary'!B10	='C:\ADOT\[MVDCosts.xls]Summary'!C10
9	**Operating Costs**		
10	Operating Costs	='C:\ADOT\[MVDCosts.xls]Summary'!B12	='C:\ADOT\[MVDCosts.xls]Summary'!C12
11	**Technology Costs**		
12	Information Technology Costs	='C:\ADOT\[MVDCosts.xls]Summary'!B14	='C:\ADOT\[MVDCosts.xls]Summary'!C14
13	Telecommunications Costs	='C:\ADOT\[MVDCosts.xls]Summary'!B15	='C:\ADOT\[MVDCosts.xls]Summary'!C15
14	Total Technology Costs	='C:\ADOT\[MVDCosts.xls]Summary'!B16	='C:\ADOT\[MVDCosts.xls]Summary'!C16
15	**Indirect Costs**		
16	MVD Indirect Costs	='C:\ADOT\[MVDCosts.xls]Summary'!B18	='C:\ADOT\[MVDCosts.xls]Summary'!C18
17	ADOT Indirect Costs	='C:\ADOT\[MVDCosts.xls]Summary'!B19	='C:\ADOT\[MVDCosts.xls]Summary'!C19
18	State Indirect Costs	='C:\ADOT\[MVDCosts.xls]Summary'!B20	='C:\ADOT\[MVDCosts.xls]Summary'!C20
19	Total Indirect Costs	='C:\ADOT\[MVDCosts.xls]Summary'!B21	='C:\ADOT\[MVDCosts.xls]Summary'!C21
20	**Building & Equipment Costs**		
21	Building Costs	='C:\ADOT\[MVDCosts.xls]Summary'!B23	='C:\ADOT\[MVDCosts.xls]Summary'!C23
22	Equipment Costs	='C:\ADOT\[MVDCosts.xls]Summary'!B24	='C:\ADOT\[MVDCosts.xls]Summary'!C24
23	Total Building & Equipment Costs	='C:\ADOT\[MVDCosts.xls]Summary'!B25	='C:\ADOT\[MVDCosts.xls]Summary'!C25
24	**Other Costs**		
25	Other Costs	='C:\ADOT\[MVDCosts.xls]Summary'!B27	='C:\ADOT\[MVDCosts.xls]Summary'!C27
26	**Third-Party Fees**		
27	Third-Party Fees	N/A	N/A
28	**Total Costs**	**=B8+B10+B14+B19+B23+B25**	**=C8+C10+C14+C19+C23+C25**
29	Total Cost Savings Using Third Parties		

Table 25 – Formulas for CostModelSummary.xls worksheet (columns D – E)

	D	E
1		
2		
3	**Third Party**	
4	**FY2002 Total**	**Cost Per Transaction**
5		
6	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!B8	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!C8
7	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!B9	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!C9
8	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!B10	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!C10
9		
10	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!B12	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!C12
11		
12	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!B14	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!C14
13	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!B15	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!C15
14	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!B16	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!C16
15		
16	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!B18	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!C18
17	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!B19	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!C19
18	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!B20	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!C20
19	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!B21	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!C21
20		
21	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!B23	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!C23
22	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!B24	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!C24
23	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!B25	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!C25
24		
25	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!B27	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!C27
26		
27	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!B29	='C:\ADOT\[ThirdPartyCosts.xls]Summary'!C29
28	**=D8+D10+D14+D19+D23+D25+D27**	**=E8+E10+E14+E19+E23+E25+E27**
29	='C:\ADOT\[ThirdPartyCosts.xls]Transactions'!$E$34*(C28-E28)	=C28-E28

APPENDIX F - MVD COST MODEL FORMULAS

Table 26 – Formulas for MVDCosts.xls file, Summary worksheet

	A	B	C
1	**MVD Customer Service Costs**		
2	**Summary**		
3			
4	**Cost Type**	**FY2002 Total**	**Cost Per Transaction**
5	**Direct Personnel Costs**		
6	=Direct!A9	=Direct!F9	=B6/Transactions!$E$29
7	=Direct!A30	=Direct!F30	=B7/Transactions!$E$29
8	=Direct!A38	=SUM(B6:B7)	=B8/Transactions!$E$29
9	**Operating Costs**		
10	=Operating!A12	=Operating!E12	=B10/Transactions!$E$29
11	**Technology Costs**		
12	=Technology!A11	=Technology!E11	=B12/Transactions!$E$29
13	=Technology!A17	=Technology!E17	=B13/Transactions!$E$29
14	Total Technology Costs	=B12+B13	=C12+C13
15	**Indirect Costs**		
16	=Indirect!A9	=Indirect!E9	=B16/Transactions!$E$29
17	=Indirect!A18	=Indirect!E18	=B17/Transactions!$E$29
18	=Indirect!A32	=Indirect!E32	=B18/Transactions!$E$29
19	=Indirect!A34	=SUM(B16:B18)	=B19/Transactions!$E$29
20	**Building & Equipment Costs**		
21	=Building!A11	=Building!E11	=B21/Transactions!$E$29
22	=Building!A17	=Building!E17	=B22/Transactions!$E$29
23	=Building!A19	=Building!E19	=B23/Transactions!$E$29
24	**Other Costs**		
25	=Other!A11	=Other!E11	=B25/Transactions!$E$29
26	**Total MVD Customer Service Costs**	**=B8+B10+B14+B19+B23+B25**	**=C8+C10+C14+C19+C23+C25**

Table 27 – Formulas for MVDCosts.xls file, Direct worksheet

	A	B	C	D	E	F
1	**MVD Customer Service Costs**					
2	**Direct Personnel Costs**					
3						
4	**Cost Type/Function**	**FTEs**	**Total FY2002 Costs**	**Allocation Basis**	**Allocation Percentage**	**Total Allocated to Customer Service**
5	**Customer Service Personnel**					
6	Customer Service Field Office Personnel	869	22653454.03	Full	1	=C6*E6
7	Customer Service Headquarters Personnel	7	262907.89	Full	1	=C7*E7
8	ERE on Customer Service Personnel		6662844.81	Full	1	=C8*E8
9	*Total Customer Service Personnel*	=SUM(B6:B8)	=SUM(C6:C8)		1	=SUM(F6:F8)
10						
11	**Direct Support Personnel**					
12	Abandoned Vehicle - ISS	2	40170	Full	1	=C12*E12
13	Title Production - ISS	0.5	10901	Full	1	=C13*E13
14	Film Research - ISS	8	163008	Full	1	=C14*E14
15	Mandatory Insurance - ISS	2.5	55878	Full	1	=C15*E15
16	Criminal Traffic - ISS	2	40752	Full	1	=C16*E16
17	Microfilm - ISS	4	81504	Full	1	=C17*E17
18	Civic Traffic - ISS	2	40752	Full	1	=C18*E18
19	Medical Review - ISS	1	25590	Full	1	=C19*E19
20	Training - ISS	14	491008	Full	1	=C20*E20
21	Technical Support - ISS	20	492860	Full	1	=C21*E21
22	Out-of-State Desk - ISS	3	78615	Full	1	=C22*E22
23	Renew-by-Mail - ISS	1	23111	Full	1	=C23*E23
24	Audit - TSG	1	38654	Full	1	=C24*E24
25	Warehouse - CSS	5.3	132182	Full	1	=C25*E25
26	Plate Positions - CSS	0.9	30982	Full	1	=C26*E26
27	Dishonored checks - CGP	2.8	72677	Full	1	=C27*E27
28	Motor Vehicle Enforcement Services	4	104404	Full	1	=C28*E28
29	ERE on Direct Support Personnel		=C8/(C6+C7)*(SUM(C12:C	Full	1	=C29*E29
30	*Total Direct Support Personnel*	=SUM(B12:B29)	=SUM(C12:C29)		1	=SUM(F12:F29)
31	**Other Personnel Costs**					
32	Temporary Personnel		248414	Headcount	=Transactions!$E$43/Transactio	=C32*E32
33	Education & Training		182922	Headcount	=Transactions!$E$43/Transactio	=C33*E33
34	Travel Expenses		395608	Headcount	=Transactions!$E$43/Transactio	=C34*E34
35	Other		421240	Headcount	=Transactions!$E$43/Transactio	=C35*E35
36	*Total Other Personnel Costs*		=SUM(C32:C35)		1	=SUM(F32:F35)
37						
38	**Total Direct Personnel Costs**	**=B9+B30**	**=C9+C30+C36**			**=F9+F30+F36**

Table 28 – Formulas for MVDCosts.xls file, Operating worksheet

	A	B	C	D	E
1	**MVD Customer Service Costs**				
2	**Operating Costs**				
3					
4	**Cost Type/Function**	**Total FY2002 Costs**	**Allocation Basis**	**Allocation Percentage**	**Total Allocated to Customer Service**
5	**Operating Costs**				
6	Plates & Tabs	2295284.98	Registrations	=(Transactions!$B$35/Transactions!$E$33)	=B6*D6
7	Drivers License Credentials (DDL)	2400000	DL Transactions	=(Transactions!$E$18/Transactions!$E$34)	=B7*D7
8	Printing	1393761.06	Transactions	=(Transactions!$E$29/Transactions!$E$39)	=B8*D8
9	Postage	1300000	Full	1	=B9*D9
10	Supplies	=1735479+104758+1949040	Transactions	=(Transactions!$E$29/Transactions!$E$39)	=B10*D10
11					
12	**Total Operating Costs**	**=SUM(B6:B10)**			**=SUM(E6:E10)**

Table 29 – Formulas for MVDCosts.xls file, Technology worksheet

	A	B	C	D	E
1	**MVD Customer Service Costs**				
2	**Technology Costs**				
3					
4	**Cost Type/Function**	**Total FY2002 Costs**	**Allocation Basis**	**Allocation Percentage**	**Total Allocated to Customer Service**
5	**Information Technology Costs**				
6	Programming	3522535	Transactions	=(Transactions!$E$29/Transactions!$E$39)	=B6*D6
7	IT Equipment Depreciation (Capitalized Equipment)	=796094/5	Transactions	=(Transactions!$E$18/Transactions!$E$34)	=B7*D7
8	IT Equipment Purchases (Non-Capitalized)	248140	Transactions	=(Transactions!$E$29/Transactions!$E$39)	=B8*D8
9	Software Depreciation (Capitalized)	=31976/5	Transactions	=(Transactions!$E$29/Transactions!$E$39)	=B9*D9
10	Software Purchases (Non-Capitalized)	18385	Transactions	=(Transactions!$E$29/Transactions!$E$39)	=B10*D10
11	*Total Information Technology Costs*	=SUM(B6:B10)			=SUM(E6:E10)
12					
13	**Telecommunications Costs**				
14	External Telecommunications	1842956	Transactions	=(Transactions!$E$29/Transactions!$E$39)	=B14*D14
15	Telecommunications Equipment Depreciation (Capitalized Equipment)	=575552/5	Transactions	=(Transactions!$E$29/Transactions!$E$39)	=B15*D15
16	Telecommunications Equipment Purchases (Non-Capitalized)	27294	Transactions	=(Transactions!$E$29/Transactions!$E$39)	=B16*D16
17	*Total Telecommunications Costs*	=SUM(B14:B16)			=SUM(E14:E16)
18					
19	**Total Technology Costs**	**=B11+B17**			**=E11+E17**

Table 30 – Formulas for MVDCosts.xls file, Indirect worksheet

	A	B	C	D	E
1	**MVD Customer Service Costs**				
2	**Indirect Costs**				
3					
4	**Cost Type/Function**	**Total FY2002 Costs**	**Allocation Basis**	**Allocation Percentage**	**Total Allocated to Customer Service**
5	**MVD Indirect Costs**				
6	MVD Management	685510	Transactions	=Transactions!$E$29/Transactions!$E$39	=B6*D6
7	MVD Centralized Administrative Support	1311709	Transactions	=Transactions!$E$29/Transactions!$E$39	=B7*D7
8	ERE on Above Personnel	482927.5542	Transactions	=Transactions!$E$29/Transactions!$E$39	=B8*D8
9	*Total MVD Indirect Costs*	=SUM(B6:B8)			=SUM(E6:E8)
10					
11	**ADOT Indirect Costs**				
12	Audit & Analysis	1698900	Headcount	=Transactions!$E$43/Transactions!$E$45	=B12*D12
13	Executive Staff	605300	Headcount	=Transactions!$E$43/Transactions!$E$45	=B13*D13
14	Financial Management Services	17030500	Headcount	=Transactions!$E$43/Transactions!$E$45	=B14*D14
15	Human Resources	893600	Headcount	=Transactions!$E$43/Transactions!$E$45	=B15*D15
16	Procurement	1060900	Headcount	=Transactions!$E$43/Transactions!$E$45	=B16*D16
17	Training Resources	430700	Headcount	=Transactions!$E$43/Transactions!$E$45	=B17*D17
18	*Total ADOT Indirect Costs*	=SUM(B12:B17)			=SUM(E12:E17)
19					
20	**State Indirect Costs**				
21	DOA - General Accounting Office	332551	Headcount	=Transactions!$E$43/Transactions!$E$45	=B21*D21
22	DOA - State Procurement Office	47773	Headcount	=Transactions!$E$43/Transactions!$E$45	=B22*D22
23	DOA - Risk Management Division	75083	Headcount	=Transactions!$E$43/Transactions!$E$45	=B23*D23
24	DOA - Mail Room	0	Headcount	=Transactions!$E$43/Transactions!$E$45	=B24*D24
25	Attorney General	=6877+196856	Headcount	=Transactions!$E$43/Transactions!$E$45	=B25*D25
26	State Treasurer	29461	Headcount	=Transactions!$E$43/Transactions!$E$45	=B26*D26
27	Public Records - Legislature	90150	Headcount	=Transactions!$E$43/Transactions!$E$45	=B27*D27
28	Governor's Office - Office of Strategic Planning & Budgeting	59272	Headcount	=Transactions!$E$43/Transactions!$E$45	=B28*D28
29	Governor's Office - Office of Equal Opportunity	45718	Headcount	=Transactions!$E$43/Transactions!$E$45	=B29*D29
30	Governor's Office - Office for Excellence in Government	282686	Headcount	=Transactions!$E$43/Transactions!$E$45	=B30*D30
31	DOA - Occupancy	60123	Headcount	=Transactions!$E$43/Transactions!$E$45	=B31*D31
32	*Total State Indirect Costs*	=SUM(B21:B31)			=SUM(E21:E31)
33					
34	**Total Indirect Costs**	**=B9+B18+B32**			**=E9+E18+E32**

Table 31 – Formulas for MVDCosts.xls file, Building worksheet

	A	B	C	D	E
1	**MVD Customer Service Costs**				
2	**Building & Equipment Costs**				
3					
4	**Cost Type**	**Total FY2002 Costs**	**Allocation Basis**	**Allocation Percentage**	**Total Allocated to Customer Service**
5	**Building Costs**				
6	Building Depreciation	=(43587600/40)+3602(	Headcount	=Transactions!$E$43/Transactions!$E$44	=B6*D6
7	Building Rent	414416.23	Headcount	=Transactions!$E$43/Transactions!$E$44	=B7*D7
8	Janitorial & Building Repair/Maintenance	980573.99	Headcount	=Transactions!$E$43/Transactions!$E$44	=B8*D8
9	Landscaping	55000.9	Headcount	=Transactions!$E$43/Transactions!$E$44	=B9*D9
10	Utilities	987419.56	Headcount	=Transactions!$E$43/Transactions!$E$44	=B10*D10
11	*Total Building Costs*	=SUM(B6:B10)			=SUM(E6:E10)
12	**Equipment Costs**				
13	Equipment Lease/Rental	1367805.34	Headcount	=Transactions!$E$43/Transactions!$E$44	=B13*D13
14	Equipment Depreciation (Capitalized Equipment)	=165771/5	Headcount	=Transactions!$E$43/Transactions!$E$44	=B14*D14
15	Equipment Purchases (Non-Capital)	765956	Headcount	=Transactions!$E$43/Transactions!$E$44	=B15*D15
16	Equipment Repair & Maintenance	1041841	Headcount	=Transactions!$E$43/Transactions!$E$44	=B16*D16
17	*Total Equipment Costs*	=SUM(B13:B16)			=SUM(E13:E16)
18					
19	**Total Building & Equipment Costs**	**=B11+B17**			**=E11+E17**

Table 32 – Formulas for MVDCosts.xls file, Other worksheet

	A	B	C	D	E
1	**MVD Customer Service Costs**				
2	**Other Costs**				
3					
4	**Cost Type**	**Total FY2002 Costs**	**Allocation Basis**	**Allocation Percentage**	**Total Allocated to Customer Service**
5	**Other Costs**				
6	Advertising	225818	Transactions	=(Transactions!$E$29/Transactions!$E$39)	=B6*D6
7	Insurance	7323.78	Transactions	=(Transactions!$E$29/Transactions!$E$39)	=B7*D7
8	Interest Expense	11979.9	Transactions	=(Transactions!$E$29/Transactions!$E$39)	=B8*D8
9	Other Miscellaneous Costs	=2186+274724	Transactions	=(Transactions!$E$29/Transactions!$E$39)	=B9*D9
10					
11	**Total Other Costs**	**=SUM(B6:B9)**			**=SUM(E6:E9)**

Table 33 – Formulas for MVDCosts.xls file, Transactions worksheet

	A	B	C	D	E
1	**MVD Customer Service**				
2	**Transaction Volumes**				
3					
4	**Transaction Type**	**FY2002 Total**		**Transaction Type**	**FY2002 Total**
5	**Title Transactions**			**Drivers License Transactions**	
6	Title with registration	618676		Drivers License Issuance	240629
7	Title only	236201		Drivers License Renewal	125251
8	Duplicate title	169197		Permits issued	93870
9	Salvage/dismantled title	46106		Drivers License Reinstatement	68823
10	Create initial title	305816		Duplicate Drivers License	453280
11	Ownership form	Included in above		ID Card Issuance	94838
12	Title from an Arizona Repossession Affidavit	Included in above		Drivers License Cancellation	0
13	Bonded titles	Included in above		Drivers License Written Test	151832
14	Restored salvage	Included in above		Drivers License Road Test	83231
15	Reconstruct title	Included in above		Motorcycle Skills Test	4768
16	Recovered theft title	Included in above		Commercial License (CDL) Written Test	17692
17	Non-repairable title	Included in above		Commercial License (CDL) Road Test	573
18	Refurbished title	Included in above		*Total Drivers License Transactions*	=SUM(E6:E17)
19	Special Constructed title	Included in above			
20	*Total Title Transactions*	=SUM(B6:B19)		**Total Non-Inquiry Customer Service Transactions**	**=B20+B35+B38+B44+E18**
21					
22	**Registration Transactions**			**Inquiry Transactions**	
23	Vehicle registration renewals	975925		MVR Inquiries	
24	Modify registration	85537		Fee Inquiries	
25	Temporary registrations (TRPs)	77771		Address Changes	
26	Duplicate registration	37368		Record Sold Notices	
27	Issuance of a replacement plate and/or year tab	76584		*Total Inquiry Transactions*	=SUM(E23:E26)

APPENDIX G - THIRD PARTY COST MODEL FORMULAS

Table 34 – Formulas for ThirdPartyCosts.xls file, Summary worksheet

	A	B	C
1	**Third Party Costs**		
2	**Summary**		
3			
4	**Cost Type**	**FY2002 Total**	**Cost Per Transaction**
5	**Direct Personnel Costs**		
6	=Direct!A12	=Direct!F12	=B6/Transactions!$E$34
7	=Direct!A22	=Direct!F22	=B7/Transactions!$E$34
8	=Direct!A30	=SUM(B6:B7)	=B8/Transactions!$E$34
9	**Operating Costs**		
10	=Operating!A12	=Operating!E12	=B10/Transactions!$E$34
11	**Technology Costs**		
12	=Technology!A11	=Technology!E11	=B12/Transactions!$E$34
13	=Technology!A17	=Technology!E17	=B13/Transactions!$E$34
14	Total Technology Costs	=B12+B13	=C12+C13
15	**Indirect Costs**		
16	=Indirect!A9	=Indirect!E9	=B16/Transactions!$E$34
17	=Indirect!A18	=Indirect!E18	=B17/Transactions!$E$34
18	=Indirect!A32	=Indirect!E32	=B18/Transactions!$E$34
19	=Indirect!A34	=SUM(B16:B18)	=B19/Transactions!$E$34
20	**Building & Equipment Costs**		
21	=Building!A11	=Building!E11	=B21/Transactions!$E$34
22	=Building!A17	=Building!E17	=B22/Transactions!$E$34
23	=Building!A19	=Building!E19	=B23/Transactions!$E$34
24	**Other Costs**		
25	=Other!A11	=Other!E11	=B25/Transactions!$E$34
26	**Third-Party Fees**		
27	=ThirdPartyFees!A14	=ThirdPartyFees!E14	=B27/Transactions!$E$34
28	**Total Third Party Costs**	**=B8+B10+B14+B19+B23+B25+B27**	**=C8+C10+C14+C19+C23+C25+C27**

Table 35 – Formulas for ThirdPartyCosts.xls file, ThirdPartyFees worksheet

	A	B	C	D	E
1	**Third Party Costs**				
2	**Third Party Fees**				
3					
4	**Cost Type/Function**	**Total FY2002 Costs**	**Allocation Basis**	**Allocation Percentage**	**Total Allocated to Third Party**
5	**Third Party Fees**				
6	Retainage (2% of VLT)	6571119.16	Full	1	=B6*D6
7	Registration Fee Retainage	1513230	Full	1	=B7*D7
8	Title Fee Retainage	925406	Full	1	=B8*D8
9	Driver License Fee Retainage	220727.35	Full	1	=B9*D9
10	Inquiry Fees Retainage	7497	Full	1	=B10*D10
11	Non-Resident Permit Retainage	1105	Full	1	=B11*D11
12	Credit Card Fee Reimbursment	2143237.04	Full	1	=B12*D12
13					
14	**Total Third Party Fees**	**=SUM(B6:B12)**			**=SUM(E6:E12)**

Table 36 – Formulas for ThirdPartyCosts.xls file, Direct worksheet

	A	B	C	D	E
1	**Third Party Costs**				
2	**Direct Personnel Costs**				
3					
4	**Cost Type/Function**	**FTEs**	**Total FY2002 Costs**	**Allocation Basis**	**Allocation Percentage**
5	**Competitive Government Program Personnel**				
6	Third Party Auditors	7	270578	Full	1
7	Third Party QA	21	494250.55	Full	1
8	Third Party D/L	15	364513.71	Full	1
9	Third Party T&R	10	162093.7	Full	1
10	CGP Admin	3.5	130933.765	Full	1
11	ERE on Above CGP Personnel		371665.2091425	Full	1
12	*Total Competitive Government Personnel*	=SUM(B6:B11)	=SUM(C6:C11)		1
13					
14	**Direct Support Personnel**				
15	Renew-by-Mail - ISS	2	46222	Full	1
16	Out-of-State Desk - ISS	1	26205	Full	1
17	Comm Unit - ISS	2	47048	Full	1
18	Training - ISS	1.5	52608	Full	1
19	Warehouse - CSS	1	24940	Full	1
20	Plate Positions - CSS	0.2	6885	Full	1
21	ERE on Above Supporting Personnel		53281.1604	Full	1
22	*Total Direct Support Personnel*	=SUM(B15:B21)	=SUM(C15:C21)		1
23	**Other Personnel Costs**				
24	Temporary Personnel		248414	Headcount	=Transactions!$B$43/Transactions!$B$45
25	Education & Training		182922	Headcount	=Transactions!$B$43/Transactions!$B$45
26	Travel Expenses		395608	Headcount	=Transactions!$B$43/Transactions!$B$45
27	Other		421240	Headcount	=Transactions!$B$43/Transactions!$B$45
28	*Total Other Personnel Costs*		=SUM(C24:C27)		
29					
30	**Total Direct Personnel Costs**	**=B12+B22**	**=C12+C22+C28**		

Table 37 – Formulas for ThirdPartyCosts.xls file, Operating worksheet

	A	B	C	D	E
1	**Third Party Costs**				
2	**Operating Costs**				
3					
4	**Cost Type/Function**	**Total FY2002 Costs**	**Allocation Basis**	**Allocation Percentage**	**Total Allocated to Third Party**
5	**Operating Costs**				
6	Plates & Tabs	2295284.98	Registrations	=Transactions!$B$26/Transactions!$E$40	=B6*D6
7	Drivers License Credentials (DDL)	2400000	DL Transactions	=Transactions!$E$17/Transactions!$E$41	=B7*D7
8	Printing	1393761.06	Transactions	=Transactions!$E$32/Transactions!$E$46	=B8*D8
9	Postage	=(SUM(Transactions!E20:E23)+Transactions!E29)*0.275	Calculated	1	=B9*D9
10	Supplies	=1735479+104758+1949040	Transactions	=Transactions!$E$32/Transactions!$E$46	=B10*D10
11					
12	**Total Operating Costs**	**=SUM(B6:B10)**			**=SUM(E6:E10)**

Table 38 – Formulas for ThirdPartyCosts.xls file, Technology worksheet

	A	B	C	D	E
1	**MVD Customer Service Costs**				
2	**Technology Costs**				
3					
4	**Cost Type/Function**	**Total FY2002 Costs**	**Allocation Basis**	**Allocation Percentage**	**Total Allocated to Customer Service**
5	**Information Technology Costs**				
6	Programming	3522535	Transactions	=Transactions!$E$34/Transactions!$E$46	=B6*D6
7	IT Equipment Depreciation (Capitalized Equipment)	=796094/5	Transactions	=Transactions!$E$34/Transactions!$E$46	=B7*D7
8	Capitalized)	248140	Transactions	=Transactions!$E$34/Transactions!$E$46	=B8*D8
9	Software Depreciation (Capitalized)	=31976/5	Transactions	=Transactions!$E$34/Transactions!$E$46	=B9*D9
10	Software Purchases (Non-Capitalized)	18385	Transactions	=Transactions!$E$34/Transactions!$E$46	=B10*D10
11	*Total Information Technology Costs*	=SUM(B6:B10)			=SUM(E6:E10)
12					
13	**Telecommunications Costs**				
14	External Telecommunications	1842956	Transactions	=Transactions!$E$34/Transactions!$E$46	=B14*D14
15	Telecommunications Equipment Depreciation (Capitalized Equipment)	=575552/5	Transactions	=Transactions!$E$34/Transactions!$E$46	=B15*D15
16	Telecommunications Equipment Purchases (Non-Capitalized)	27294	Transactions	=Transactions!$E$34/Transactions!$E$46	=B16*D16
17	*Total Telecommunications Costs*	=SUM(B14:B16)			=SUM(E14:E16)
18					
19	**Total Technology Costs**	**=B11+B17**			**=E11+E17**

Table 39 – Formulas for ThirdPartyCosts.xls file, Indirect worksheet

	A	B	C	D	E
1	**Third Party Costs**				
2	**Indirect Costs**				
3					
4	**Cost Type/Function**	**Total FY2002 Costs**	**Allocation Basis**	**Allocation Percentage**	**Total Allocated to Third Party**
5	**MVD Indirect Costs**				
6	MVD Management	685510	Transactions	=Transactions!$E$32/Transactions!$E$46	=B6*D6
7	MVD Centralized Administrative Support	1311709	Transactions	=Transactions!$E$32/Transactions!$E$46	=B7*D7
8	ERE on Above Personnel	482927.5542	Transactions	=Transactions!$E$32/Transactions!$E$46	=B8*D8
9	*Total MVD Indirect Costs*	=SUM(B6:B8)			=SUM(E6:E8)
10					
11	**ADOT Indirect Costs**				
12	Audit & Analysis	1698900	Headcount	=Transactions!$B$43/Transactions!$B$46	=B12*D12
13	Executive Staff	605300	Headcount	=Transactions!$B$43/Transactions!$B$46	=B13*D13
14	Financial Management Services	17030500	Headcount	=Transactions!$B$43/Transactions!$B$46	=B14*D14
15	Human Resources	893600	Headcount	=Transactions!$B$43/Transactions!$B$46	=B15*D15
16	Procurement	1060900	Headcount	=Transactions!$B$43/Transactions!$B$46	=B16*D16
17	Training Resources	430700	Headcount	=Transactions!$B$43/Transactions!$B$46	=B17*D17
18	*Total ADOT Indirect Costs*	=SUM(B12:B17)		=SUM(D12:D17)	=SUM(E12:E17)
19					
20	**State Indirect Costs**				
21	DOA - General Accounting Office	332551	Headcount	=Transactions!$B$43/Transactions!$B$46	=B21*D21
22	DOA - State Procurement Office	47773	Headcount	=Transactions!$B$43/Transactions!$B$46	=B22*D22
23	DOA - Risk Management Division	75083	Headcount	=Transactions!$B$43/Transactions!$B$46	=B23*D23
24	DOA - Mail Room	0	Headcount	=Transactions!$B$43/Transactions!$B$46	=B24*D24
25	Attorney General	=6877+196856	Headcount	=Transactions!$B$43/Transactions!$B$46	=B25*D25
26	State Treasurer	29461	Headcount	=Transactions!$B$43/Transactions!$B$46	=B26*D26
27	Public Records - Legislature	90150	Headcount	=Transactions!$B$43/Transactions!$B$46	=B27*D27
28	Governor's Office - Office of Strategic Planning & Budgeting	59272	Headcount	=Transactions!$B$43/Transactions!$B$46	=B28*D28
29	Governor's Office - Office of Equal Opportunity	45718	Headcount	=Transactions!$B$43/Transactions!$B$46	=B29*D29
30	Governor's Office - Office for Excellence in Government	282686	Headcount	=Transactions!$B$43/Transactions!$B$46	=B30*D30
31	DOA - Occupancy	60123	Headcount	=Transactions!$B$43/Transactions!$B$46	=B31*D31
32	*Total State Indirect Costs*	=SUM(B21:B31)			=SUM(E21:E31)
33					
34	**Total Indirect Costs**	**=B9+B18+B32**			**=E9+E18+E32**

Table 40 – Formulas for ThirdPartyCosts.xls file, Building worksheet

	A	B	C	D	E
1	**Third Party Costs**				
2	**Building & Equipment Costs**				
3					
4	**Cost Type**	**Total FY2002 Costs**	**Allocation Basis**	**Allocation Percentage**	**Total Allocated to Third Party**
5	**Building Costs**				
6	Building Depreciation	=(43587600/40)+36020	Headcount	=Transactions!$B$43/Transactions!$B$45	=B6*D6
7	Building Rent	414416.23	Headcount	=Transactions!$B$43/Transactions!$B$45	=B7*D7
8	Repair/Maintenance	980573.99	Headcount	=Transactions!$B$43/Transactions!$B$45	=B8*D8
9	Landscaping	55000.9	Headcount	=Transactions!$B$43/Transactions!$B$45	=B9*D9
10	Utilities	987419.56	Headcount	=Transactions!$B$43/Transactions!$B$45	=B10*D10
11	*Total Building Costs*	=SUM(B6:B10)			=SUM(E6:E10)
12	**Equipment Costs**				
13	Equipment Lease/Rental	1367805.34	Headcount	=Transactions!$B$43/Transactions!$B$45	=B13*D13
14	Equipment Depreciation (Capitalized Equipment)	=165771/5	Headcount	=Transactions!$B$43/Transactions!$B$45	=B14*D14
15	Equipment Purchases (Non-Capital)	765956	Headcount	=Transactions!$B$43/Transactions!$B$45	=B15*D15
16	Equipment Repair & Maintenance	1041841	Headcount	=Transactions!$B$43/Transactions!$B$45	=B16*D16
17	*Total Equipment Costs*	=SUM(B13:B16)			=SUM(E13:E16)
18					
19	**Total Building & Equipment Costs**	**=B11+B17**			**=E11+E17**

Table 41 – Formulas for ThirdPartyCosts.xls file, Other worksheet

	A	B	C	D	E
1	**Third Party Costs**				
2	**Other Costs**				
3					
4	**Cost Type**	**Total FY2002 Costs**	**Allocation Basis**	**Allocation Percentage**	**Total Allocated to Third Party**
5	**Other Costs**				
6	Advertising	225818	Transactions	=Transactions!$E$32/Transactions!$E$46	=B6*D6
7	Insurance	7323.78	Transactions	=Transactions!$E$32/Transactions!$E$46	=B7*D7
8	Interest Expense	11979.9	Transactions	=Transactions!$E$32/Transactions!$E$46	=B8*D8
9	Other Miscellaneous Costs	=2186+274724	Transactions	=Transactions!$E$32/Transactions!$E$46	=B9*D9
10					
11	**Total Other Costs**	**=SUM(B6:B10)**			**=SUM(E6:E10)**

Table 42 – Formulas for ThirdPartyCosts.xls file, Transactions worksheet

	A	B	C	D
1	**Third-Party**			
2	**Transaction Volumes**			
3				
4	**Transaction Type**	**FY2002 Total**		**Transaction Type**
5	**Title Transactions**			**Drivers License Transactions**
6	Title with registration	307037		Drivers licenses issued
7	Title only	90671		Drivers license renewals
8	Duplicate title	60054		Permits issued
9	Salvage/dismantled title	57089		Drivers license reinstatements
10	Create initial title	400347		Duplicate drivers licenses
11	form	0		ID cards issued
12	Title from an Arizona Repossession Affidavit	0		Drivers License Written Test
13	*Total Title Transactions*	=SUM(B6:B12)		Drivers License Road Test
14				Motorcycle Skills Test
15	**Registration Transactions**			Commercial License (CDL) Written Test
16	Vehicle registration renewals	187907		Commercial License (CDL) Road Test
17	Modify registration	10726		*Total Drivers License Transactions*
18	Temporary registration (TRPs)	26280		
19	Duplicate registration	2469		**ServiceArizona Transactions**
20	Issuance of a replacement plate and/or year tab	18732		Registration Renewals
21	Issuance of specialty plates	347		Duplication Drivers Licenses/Ids
22	Issuance of government plates	0		Personalized/Specialty Plate
23	Mobile Home/Permanent Plates	578		Fleet Registration Renewal
24	Fleet Registrations	0		Address Change
25	Other Registration Transactions	0		Plate Credit
26	*Total Registration Transactions*	=SUM(B16:B25)		Restricted Use 3-Day Permit
27				Driver's License Reinstatement
28	**Vehicle Inspections**			90 Day Temporary Permits
29	Level 1 Vehicle Inspections	146967		IVR Renewals
30	Other Inspections	0		*Total ServiceArizona Transactions*
31	*Total Vehicle Inspection Transactions*	=SUM(B29:B30)		
32				**Total Non-Inquiry Third Party Transactions**
33	**Inquiry Transactions**			
34	MVR Inquiries (MVRs purchased)			**Total Third Party Transactions**
35	Fee Inquiries (from ServiceArizona)			
36	Plate Credit (from ServiceArizona)			
37	Address Changes (from ServiceArizona)			
38	Record Sold Notices			**Grand Total Transactions (MVD & Third-Party)**
39	*Total Inquiry Transactions*	=SUM(B34:B38)		Grand Total Title Transactions
40				Grand Total Registration Transactions
41				Grand Total Drivers License Transactions
42	**Headcount**			Grand Total Vehicle Inspection Transactions
43	Average CGP Headcount	56.5		Grand Total Renew-by-Mail Transactions
44	Average Field Office Headcount	990		Grand Total Other Transactions
45	Average MVD Headcount	1700		Grand Total Service Arizona Transactions
46	Average ADOT Headcount	4855		**Grand Total All Transactions**

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