BACK OFFICE OPERATIONS FOR NATIONAL HOT LANE PROJECTS

Submitted as Part of the
HOUSTON HOT LANE NETWORK
Value Pricing Project 126XXIA005

Prepared for the

TEXAS DEPARTMENT OF TRANSPORTATION

Houston District

And the

FEDERAL HIGHWAY ADMINISTRATION

Prepared by

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College Station, Texas

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Back Office Operations for National HOT Lane Projects

The purpose of this research was to collect information on peer agency experience for "back office operations" for high occupancy toll (HOT) lanes. Information was requested from the following HOT lane projects as of August 2008:

- I-394 Express Lanes (MnPASS)   Minneapolis, Minnesota
- I-15 Managed Lanes (FasTrak)   San Diego, California
- 91 Express Lanes   Orange County, California
- I-25 Express Lanes   Denver, Colorado
- I-15 HOV/Toll Lanes   Salt Lake City, Utah

The following technical memorandum outlines the research methodology and summarizes the results.

Scope of the Research

HOT lanes are limited-access highway lanes that provide free or reduced cost access to qualifying high occupancy vehicles (HOV) and also provide access to other paying vehicles not meeting passenger occupancy requirements. HOT lanes utilize sophisticated electronic toll collection and traffic information systems. Back office operations refers to the types of management, administrative, financial, and systems integration functions that are required to support the operation of the HOT lanes and may include some or all of the following:

- Customer services
- Account management
- Transponder management
- Electronic toll collection (revenue management)
- Violations processing
- Hardware configuration and maintenance
- Network administration
- Reporting
- Financial controls and processes
- Management operation and maintenance

The term back office operations does not have the exact same meaning for all HOT lane projects. For example, some projects refer to customer services as "front office operations." In the request for information, narrative was provided to explain the research purpose was to understand functions other than direct operation and maintenance of the lane.

Methodology

Information was collected by sending a request for information to the appropriate contact for the lead agency for each HOT lane project. The request was in the form of an electronic message (email) with an attached document prepared in MS Word. The document was 10 questions within four pre-formatted pages. A sample of the document is included as Appendix A.

Each respondent could complete the information request by answering questions and entering data directly into the document using the "tracking changes" tool in MS Word.

Response

Responses were received from the lead agency for four of the five projects. The responding agency and project are as follows:

- I-394 MnPASS   Minnesota Department of Transportation
- I-15 FasTrak   SANDAG
- 91 Express Lanes   Orange County Transportation Authority
- I-25 Express Lanes   E-470 Public Highway Authority

In the case of the fifth project, the I-15 HOV/toll lane in Salt Lake City, a representative of the Utah Department of Transportation explained the department is now using a monthly sticker for single occupant vehicles. The department is moving to electronic toll collection by the fall of 2010. Information on the Utah I-15 monthly sticker program is also included as an appendix to this technical memorandum.

Results

A summary of the HOT lane back office operations data reported is provided in the table on the following page. The specific response from the agency for each HOT lane project is provided in an appendix to this memorandum.

Summary of Findings

Type of Pricing

- Two projects use dynamic pricing for HOT lanes: I-394 MnPASS and I-15 FasTrak.
- Two projects use time of day pricing: 91 Express Lanes and I-25 Express Lanes.

Number of Active Accounts

- The number of active accounts is 9,366 for I-394 MnPASS, 14,203 for I-15 FasTrak, and 118,272 for 91 Express Lanes. Colorado reports 260,000 toll accounts; however, this number represents all toll accounts for the E-470 system and does not isolate HOT lane accounts.
- The average number of monthly applications processed as a percent of total active accounts is similar for all projects, ranging from 0.4% for I-15 FasTrak to 1.2% for I-394 MnPASS.
- Respondents were also asked the number of accounts closed in an average month. All responses are similarly low. The average number of monthly accounts closed as a percent of total active accounts is below 1% for all respondents except I-15 FasTrak. SANDAG reports 1% to 2% of accounts closed in an average month.

Summary of the HOT Lane Back Office Operations Data Reported as of August 2008

Description	MnPASS I-394 Express Lanes	FasTrak I-15 Managed Lanes	91 Express Lanes	I-25 Express Lanes
Source of Information	**MnDOT**	**SANDAG**	**OCTA**	**E-470**
Distance	11 miles, 3 mi. reversible, 8 mi. diamond	8 miles, center median*	10 miles, 4 lanes	7 miles, 2 lanes, 1/1 HOV/HOT
Does the HOT lane have multiple access points?	Yes	Yes	No	Yes
Is there a different toll for each access point?	Yes each segment, No each access	No, will switch to per mile pricing in 2009	No	No
Does your agency implement time of day pricing?	No	For maximum toll rate	Yes	Yes
Does your agency implement dynamic pricing?	Yes	Yes	No	No
Total number of active accounts	9,366	14,203	118,272	260,000 for E-470, NWP & CTE
Average monthly applications processed, % of total active accounts	108 / 1.2%	55 / 0.4%	845 / 0.7%	2,600 for E-470, NWP & CTE / 1.0%
Average monthly accounts closed for any reason, % of total active accounts	48 / 0.5%	150 - 284 / 1 to 2%	535 / 0.5%	300 for E-470, NWP & CTE / 0.1%
Average number of monthly contacts for account maintenance, percent of total active accounts	6,668 / 71%	2,226 / 16%	46,473 / 39%	30,000 for E-470, NWP & CTE / 12%
Total number of transponders in active status	11,768	24,812	176,324	515,000 for E-470, NWP & CTE
Transponders per account	1.26	1.75	1.49	1.98
Average monthly transponders issued, % of total transponders in active status	191 / 2%	378 / 2%	2,569 / 1%	3,235 / 6%
Average monthly transponders returned for any reason, % of total transponders in active status	315 / 3%	728 / 3%	1,933 / 1%	1,200 / 0.2%
Does your agency charge a fee for getting the transponder	No	Yes	No	No
Does your agency charge a monthly fee for using the transponder	Yes, $1.50/mo	Yes	Yes, varies	No
Daily transactions on the HOT lane for an average weekday	3,725	3,977	41,079	4,244
Traffic on HOT lane for an average weekday	3,725	14,247 HOT and HOV	41,079	12,723 HOT and HOV
Percent of accounts with a daily transaction	40%	28%	35%	*account data not comparable
Daily toll revenues collected for an average weekday	$4,200	$4,200	$135,800	$8,962
Average toll per transaction	$1.13	$1.06	$3.31	$2.11
Annual revenues at 250/weekday/year	$1,050,000	$1,050,000	$33,950,000	$2,240,616
Approximate cost of back office operation, % of annual revenues	$1,064,392 / 101%	$850,000 / 81%	All functions $5.7 mil/year / 17%	$518,251 / 23%
Total Staffing	6	7-10	43	4

* San Diego I-15 Managed Lanes/Express Lanes expanded September 2008 to 16-mile facility with multiple ingress/egress points.

** EXpressToll is the automatic, electronic toll collection method available on E-470, the Northwest Parkway (NWP) and the I-25 tolled Express Lanes Colorado Tolling Enterprise (CTE)

Number of Transponders

- The number of transponders issued per account ranges from 1.26 for I-394 MnPASS to 1.96 for the I-25 Express Lanes.
- The only project that charges for receiving a transponder is I-15 FasTrak. On the other hand, three of four projects charge a monthly fee for using the transponder. Only I-25 does not charge a fee for using the transponder.

Transactions

- The HOT lane project with the largest number transactions (by far) is the 91 Express Lanes in Orange County. OCTA reports more than 41,000 average weekday HOT lane transactions for the 91 Express Lanes as compared to 3,725 daily transactions for I-394 MnPASS, 3,977 daily transactions for I-15 FasTrak, and 4,244 daily transactions for I-25 Express Lanes.

Toll Revenue

- The highest average toll is $3.31 per transaction for 91 Express Lanes. The next highest average toll per transaction is $2.11 for I-25 Express Lanes. I-394 MnPASS and I-15 FasTrak collect $1.13 and $1.06, respectively, per average HOT lane transaction.
- The highest annual revenue for a HOT Lane project is 91 Express Lanes, collecting $33.5 million per year. This compares to $2.2 million annual revenue for I-25 Express Lanes and $1.1 million each for I-394 MnPASS and I-15 FasTrak.

Back Office Operations

- The cost of back office operations for 91 Express Lanes is $5.7 million per year, and the number of staff is 43 employees. This is equivalent to $132,600 per employee. The cost of the back office is 17% of the annual toll revenue.
- SANDAG reports the cost of back office operations for I-15 FasTrak is $850,000 per year, and the number of staff is 7 to 10 employees. Assuming 7 employees, the cost of back office operations is $121,400 per employee. The cost of the back office is 81% of the annual toll revenue.
- The cost of back office operations for I-25 Express Lanes is $518,251 per year, and the number of staff is 4 employees. The cost of back office operation is equivalent to $129,600 per employee. The cost of the back office is 23% of the annual toll revenue.
- The toll revenues for I-394 MnPASS are $1.1 million, about equal to the cost of the back office operations. The staffing level is 6 employees, which means the cost of back office operations is equivalent to $177,400 per employee, higher per employee than any of the other HOT lane projects. Part of this difference may be the relatively recent introduction of the I-394 MnPASS project.

Appendices

HOT Lane Project (Name and Facility): _____

Information Provided by:

Name:_____Email:_____Phone:_____

Central System (Back Office Operation)[*]

1. **Which of these functions is considered part of the central system or "back office operation" for your HOT lane project?**

Function	Yes	No
Customer services		
Account management		
Transponder management		
Electronic toll collection (Revenue management)		
Violations processing		
Hardware configuration / maintenance		
Network administration		
Reporting		
Financial controls and processes		
Management operation and maintenance		
Other (Please specify)		

2. **Could you please provide the approximate annual cost of the back office operation?** *If your agency does not separate expenses by these functions, please estimate the cost of the back office operation as described above.*

   $ _____ for the dates from _____ to _____

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[*] The term "back office operation" may not be the correct term for some HOT Lane projects. For the purposes of this request for information, we are referring to the types of management, administrative, financial, and systems integration functions that are required to support the operation of HOT Lanes and may include some or all of the examples listed.

3. Do you provide the following customer service functions with an account management interface?

Customer Service Interface	Yes	No
Customer service center (walk-in facility)		
Call center for person to person response If Yes, what hours of operation? From _____ to _____		
Interactive voice response (IVR) system		
Web-based account management		

4. Number of Accounts

Dates covered for answers below: _____

Category	Response
Total number of active accounts.	
Average monthly applications processed.	
Average monthly accounts closed for any reason.	
Average number of monthly contacts for account maintenance.	

5. Does your agency offer different types of accounts?

____ **Individual**

____ **Corporate**

____ **Other. Please specify** _____

6. Number of Transponders

Dates covered for answers below: _____

Category	Response
Total number of transponders in active status.	
Average monthly transponders issued.	
Average monthly transponders returned for any reason.	
Does your agency charge a fee for getting the transponder?	
Does your agency charge a monthly fee for using the transponder?	

7. Number of Electronic Toll Collection Transactions

Dates covered for answers below: _____

Category	Response
Transactions – Daily transactions on the HOT lane for an average weekday.	
Traffic – Daily vehicles using HOT Lane for an average weekday.	
Revenues – Daily toll revenues collected for an average weekday.	
Violations – Daily violations for an average weekday.	

8. Types of Transactions

Category	Response
Does the HOT lane have multiple access points?	
Is there a different toll for each access point?	
Does your agency implement time of day pricing?	
Does your agency implement dynamic pricing?	

9. Staffing Plan

What is your staffing plan for each of the following functions? Please indicate if these functions are done by agency staff or a contractor (a contractor can be another public agency contracted for services or a private firm). If one staff person performs more than one function, please allocate approximate percent of time to each function performed. For example, part time 20 hours/week = 0.50 or 50%

Function	Number of Personnel			
	Agency Staff		Contractor	
	Full-Time	Part-Time	Full-Time	Part-Time
Customer services				
Account management				
Transponder management				
Electronic toll collection (Revenue management)				
Violations processing				
Hardware configuration / maintenance				
Network administration				
Reporting				
Financial controls and processes				
Other (specify)				
Other (specify)				
TOTAL Staff Back Office Operations				

10. Please provide a copy of the organization chart and staffing plan for your central system or back office operation.

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HOT Lane Project (Name and Facility): MnPASS I-394 Express Lanes

Information Provided by:

Name: Kenneth Buckeye and Khaled Shouman
Email: Kenneth.Buckeye@dot.state.mn.us, Khaled.Shouman@dot.state.mn.us
Phone: Kenneth Buckeye – 651-366-3737

Central System (Back Office Operation)[*]

1. **Which of these functions is considered part of the central system or "back office operation" for your HOT lane project? Cofiroute USA is the contract operator**

Function	Yes	No
Customer services	X	
Account management	X	
Transponder management	X	
Electronic toll collection (Revenue management) Tolls are paid by credit card account. Revenues deposited to state account		
Violations processing		X
Hardware configuration / maintenance	X	
Network administration	X	
Reporting	X	
Financial controls and processes		DOT
Management operation and maintenance		
Other (Please specify)		

2. **Could you please provide the approximate annual cost of the back office operation?** *If your agency does not separate expenses by these functions, please estimate the cost of the back office operation as described above.*

$ 970,302 for the dates from April 2007 through March 2008 Source: Annual report Plus $160,000 for supplemental enforcement

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[*] The term "back office operation" may not be the correct term for some HOT Lane projects. For the purposes of this request for information, we are referring to the types of management, administrative, financial, and systems integration functions that are required to support the operation of HOT Lanes and may include some or all of the examples listed.

3. Do you provide the following customer service functions with an account management interface?

Customer Service Interface	Yes	No
Customer service center (walk-in facility) DOT provides space If Yes, what hours of operation? Monday-Friday 8:00 to 5:00 Of 1,300 new accounts April 2007-March 2008, 120 were walkins	X	
Call center for person to person response Of 1,300 new accounts, 77 were telephone sign-up	X	
Interactive voice response (IVR) system 28% of telephone calls	X	
Web-based account management Of 1,300 new accounts, 1,103 used the website	X	

4. Number of Accounts

Dates covered for answers below: April 2007 through March 2008

Category	Response
Total number of active accounts.	8,735 in April 07 9,366 in March 08
Average monthly applications processed.	1,300 for year = 108 avg/month
Average monthly accounts closed for any reason.	572 for year = 48 avg/month
Average number of monthly contacts for account maintenance.	5,615 calls to service center; 1,053 emails

5. Does your agency offer different types of accounts?

___**X**_ **Individual**

____ **Corporate**

____ **Other. Please specify _____**

6. Number of Transponders

Dates covered for answers below: April 2007 through March 2008

Category	Response
Total number of transponders in active status.	10,875 in April 07 11,768 in March 08
Average monthly transponders issued.	2,289 for year = 191 avg/mo 1,552 new accounts 315 addn to existing accounts 422 as replacements
Average monthly transponders returned for any reason.	1,145 returned = 95 avg/month included closed accounts, replacements, and recovered as lost/stolen
Does your agency charge a fee for getting the transponder?	No, although there is a minimum prepaid deposit of $40 to open the account
Does your agency charge a monthly fee for using the transponder?	$1.50/ month lease

7. Number of Electronic Toll Collection Transactions
Dates covered for answers below: April 2007 through March 2008

Category	Response
Transactions – Daily transactions on the HOT lane for an average weekday. Revenue Transactions [Assuming 254 weekdays/year]	EB 517,066 trips 2,050/avg wkday WB 425,342 1,675 avg/wkday Total 3,725/wkday
Traffic – Daily vehicles using HOT Lane for an average weekday.	N/A
Revenues – Daily toll revenues collected for an average weekday.	Annual EB $745,664 $1.44 avg toll/trip WB $337,434 $0.79 avg toll/trip Avg toll $1.15/trip Weekday Avg $4,200
Violations – Daily violations for an average weekday.	N/A

8. Types of Transactions

Category	Response
Does the HOT lane have multiple access points?	Total 11 miles; 3 miles barrier separated reversible lane; 8 miles diamond lane with striped buffer and access at various points
Is there a different toll for each access point?	There are 2 toll charges, one if access only diamond lane and a second if use also the barrier separated reversible lane
Does your agency implement time of day pricing?	See below
Does your agency implement dynamic pricing?	Yes

• The MnPASS lane will be separated from regular lanes by double-white lines. It is illegal to cross these lines.
• Safely merge into the MnPASS lane at designated "MnPASS Access " entry points. You may enter and exit the MnPASS lanes only at designated points.
• When traveling in the MnPASS lane, an overhead sensor reads your transponder, and the posted fee is automatically deducted from your prepaid MnPASS account.
• The fee will be posted on overhead signs just before the entrances to the MnPASS lane and will vary based on real-time traffic levels in the MnPASS lane.
• The operation is fully electronic — no tollbooths, gates or arms, no slowing down or stopping required to drop coins
• You will pay the price displayed on the sign when you enter the lane based on your trip. There are two segments of the road - the diamond lane West of Hwy 100 and the reversible section East of Hwy 100 into downtown Minneapolis. You will pay the first price if you travel only one section of the road. If you use both sections of the road you will pay the full trip price which is the bottom price on the sign. You do not add the two numbers together.
•The average peak period fee varies between $1.00 and $4.00 depending on the level of congestion in the MnPASS Express Lanes, and $8.00 is the maximum toll that is charged at this time. This ensures that traffic in the MnPASS Express Lanes continues to flow at about 50 to 55 mph.

9. Staffing Plan Contracted to Cofiroute USA

What is your staffing plan for each of the following functions? Please indicate if these functions are done by agency staff or a contractor (a contractor can be another public agency contracted for services or a private firm). If one staff person performs more than one function, please allocate approximate percent of time to each function performed. For example, part time 20 hours/week = 0.50 or 50%

Function	Number of Personnel			
	Agency Staff		Contractor	
	Full-Time	Part-Time	Full-Time	Part-Time
Customer services			2	
Account management			.5	
Transponder management			.5	
Electronic toll collection (Revenue management)				
Violations processing				
Hardware configuration / maintenance			1	
Network administration			1	
Reporting			1	
Financial controls and processes				
Other (specify)				
Other (specify)				
TOTAL Staff Back Office Operations			6	

10. Please provide a copy of the organization chart and staffing plan for your central system or back office operation. Not provided

HOT Lane Project: I-15 Managed Lanes/ Express Lanes

Information Provided by: San Diego Association of Governments (SANDAG),
additional data is published regularly and available from SANDAG's Web site:
www.sandag.org/index.asp?committeeid=53&fuseaction=committees.detail

Contact: Derek Toups, Associate Regional Planner
Email: dto@sandag.org   **Phone:** 619-699-1907

Central System Operation

1. **Which of these functions is considered part of the central system or "back office operation" for your HOT lane project?**

Function	Yes	No
Customer services		Part of "Front office" or CSC
Account management		CSC responsibility
Transponder management		CSC responsibility
Electronic toll collection (Revenue management)	Yes	
Violations processing	SANDAG may begin violations processing in back-office beginning in 2009	Currently, all enforcement of HOT lanes is provided by the California Highway Patrol
Hardware configuration / maintenance	Network HW, yes!	Lane HW, no! (Lane Mtce)
Network administration	Yes	
Reporting	System reporting generated in back-office	Reports accessible from Web
Financial controls and processes	Yes (independent acct/auditor) – reports direct to Project Controls Manager	
Management operation and maintenance	Contractor provides both front and back office operations and maintenance	
Other (Please specify)		

*** For specific scope of work for SANDAG I-15 Back office / Front office and Maintenance contract: www.sandag.org/index.asp?rfpid=127&fuseaction=rfps.detail ***

2. **Could you please provide the approximate annual cost of the back office operation?** *If your agency does not separate expenses by these functions, please estimate the cost of the back office operation as described above.*

    An existing Maintenance and Operations contract with TransCore, L.P., expires December 31, 2008, is valued at approximately $875,000 per year. This includes $65,000/month fixed fee for operation of Customer Service Center (CSC), technical support/staffing, network management, toll collection system maintenance, and financial/reporting. The majority of the fixed price contract is for CSC staffing (4 full-time), plus a part time operational manager and part time project accountant. Additional budget is provided for unanticipated work, i.e., change orders.

3. **Do you provide the following customer service functions with an account management interface?**

Customer Service Interface	Yes	No
Customer service center (walk-in facility)	Walk-in CSC facility is open Monday – Friday, From _ 8 AM _ to _ 5 PM _	
Call center for person to person response If Yes, what hours of operation?	(888) 889-1515, live operators available during regular CSC hours noted above. General information also available via 511 IVR.	
Interactive voice response (IVR) system	Currently, limited info on 511 IVR. Additional IVR capability will be implemented in early 2009	
Web-based account management	Not at present. Mail/fax/email application form available at www.sandag.org/fastrak Web-based account management will also be implemented in early 2009	

4. **Number of Accounts**

    Dates covered for answers below: _ July 2007 _ to _ June 2008 _

Category	Response
Total number of active accounts.	July 2007 – 16,416; June 2008 – 14,203
Average monthly applications processed.	Averaged 55 new applications per month during previous fiscal year. However, much higher rate of new accounts in previous years.
Average monthly accounts closed for any reason.	Historically, very few account closures (normal attrition, 1-2%). Averaged 284 accounts closed/month after March 2007 related to policy adopting monthly account maintenance fee and transponder lease fee
Average number of monthly contacts for account maintenance.	Average 2,226 contacts per month

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5. Does your agency offer different types of accounts?

   _X_   Individual

   _X_   Corporate

            Other. Please specify _____

6. Number of Transponders

Dates covered for answers below: _July 2007_ to _June 2008_

Category	Response
Total number of transponders in active status.	July 2007 – 28,662 June 2008 – 24,812
Average monthly transponders issued.	Average 378 transponders per month
Average monthly transponders returned for any reason.	Average 728 transponders per month
Does your agency charge a fee for getting the transponder?	Yes. See below.
Does your agency charge a monthly fee for using the transponder?	Yes. See below.

Note: Total transponders issued in June 2007 were removed due to transponder recall program inflating the number of transponders issued

A $40 deposit is required to obtain a transponder, and a $1 per transponder lease fee is charged each month thereafter. The deposit will be refunded when the transponder is returned in good condition to the FasTrak Customer Service Center. If you open your FasTrak account by credit card, the transponder deposit is waived. The $1 per transponder monthly fee will also be waived for frequent usage of the I-15 FasTrak lanes.

Effective May 1, 2007, monthly minimum usage fees will be assessed for inactive I-15 FasTrak accounts. The fee will be calculated as follows: $3.50 per account + ($1.00 x # of transponders) minus the total cost in tolls paid:

- If your I-15 tolls exceed the fee amount, the fees will be waived.

- If your I-15 tolls don't exceed the fee amount, you will only be charged the difference.

- If you do not incur FasTrak tolls on I-15 during the calendar month, you will be charged a minimum of $4.50 (plus $1 for each additional transponder on the account).

7. Number of Electronic Toll Collection Transactions

Dates covered for answers below: January 2007   to   December 2007

Category	Response
Transactions – Daily transactions on the HOT lane for an average weekday.	Average number of toll transactions 3,977
Traffic – Daily vehicles using HOT Lane for an average weekday.	Average number of total vehicles 14,723 (see note)
Revenues – Daily toll revenues collected for an average weekday.	Daily Average toll revenue $4,200
Violations – Daily violations for an average weekday.	No Violation Enforcement system is available. CHP issues roughly 80 citations per month on HOT lanes.

Note: Total vehicles average March 2008 14,247, of which 9,903 were HOV; 4,271 FasTrak; and 72 invalid reads

8. **Types of Transactions**

Category	Response
Does the HOT lane have multiple access points?	Currently, limited access on two ends of 8-mile reversible facility. Multiple entry/exit ramps at both ends (2 SB and 3 NB). Beginning in Sept 2008, will have multiple ingress/egress for expanded 16-mile facility
Is there a different toll for each access point?	Not at present. Switch to per-mile pricing will occur in early 2009. Details are available in the SANDAG Board report that was attached to the transmittal email of this questionnaire.
Does your agency implement time of day pricing?	Yes, time of day for maximum toll rate
Does your agency implement dynamic pricing?	Yes

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9. Staffing Plan

Function	Agency Staff		Contractor	
	Full-Time	Part-Time	Full-Time	Part-Time
Customer services			4.0 PY	
Account management				
Transponder management				
Electronic toll collection (Revenue management)		1.0 PY		
Violations processing				
Hardware configuration / maintenance				1 Mngr, 1 Engr, 3 Tech's
Network administration				3 Engrs
Reporting				
Financial controls and processes				0.5 PY
Other (specify) CSC/VPC Project Manager				
Other (specify) ETC Operations Manager				0.5 PY
SUB-TOTALS		**1.0 PY**	**4.0 PY**	**2 - 4 PY**
TOTAL Operations / Maintenance Staff	**7-10 PY's**			

Note: PY = "Person Year"

10. Please provide a copy of the organization chart and staffing plan for your central system or back office operation.

See org chart, next page

SANDAG

- Sonya Solinsky — Administrative Assistant
- Kerry Walcott — Department Manager
- Christine Faschini — Contract Manager
- Marlo Gooch — Project Controls Manager
  - David Rodriguez — Accountant/Auditor

- Gordon Shugars — Program Manager
  - James Callahan ** — Installation / Maintenance Supervisor
    - Mel Rubi — Electronic Technician
    - Marti Nimke — Associate Hardware Engineer
    - Craig Ambrose — Material Control Administrator
  - Fares Ibrahim — CSC Operations Manager
    - Michelle Schneider — CSC Customer Service Rep.
    - Ilene Vargas — CSC Customer Service Rep.
    - Jacqueline Macias — CSC Customer Service Rep.
  - Michael Hoffa — System Engineer
  - Lina Ibrahim — Test Engineer
  - Gilbert Schmidt ** — System Manager
  - Francesco Balderacchi ** — Database Programmer

** As Required to Support Project

HOT Lane Project (Name and Facility): _OCTA – 91 Express Lanes

Information Provided by: Name: Ellen Lee Email: elee@octa.net Phone:714.560.5988
And J. Mittermeier Email: jmittermeier@cofirouteusa.com, Phone: 714-637-9191

Central System (Back Office Operation)[*]

1. **Which of these functions is considered part of the central system or "back office operation" for your HOT lane project?**

Function	Yes	No
Customer services	√	
Account management	√	
Transponder management	√	
Electronic toll collection (Revenue management)	√	
Violations processing	√	
Hardware configuration / maintenance	√	
Network administration	√	
Reporting	√	
Financial controls and processes	√	
Management operation and maintenance	√	
Other (Please specify) Accounting, Traffic Operations, Roadway Operations, ETTM Maintenance (In-lane equipment)		

2. **Could you please provide the approximate annual cost of the back office operation?** *If your agency does not separate expenses by these functions, please estimate the cost of the back office operation as described above.*

$ _____$5.7 Million_____ for the dates from _____7/1/07_ to 6/30/08_____
Please note that $5.7 million includes other functions such as accounting, traffic operations, roadway operations and ETTM maintenance and other expenses.

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[*] The term "back office operation" may not be the correct term for some HOT Lane projects. For the purposes of this request for information, we are referring to the types of management, administrative, financial, and systems integration functions that are required to support the operation of HOT Lanes and may include some or all of the examples listed.

3. Do you provide the following customer service functions with an account management interface?

Customer Service Interface	Yes	No
Customer service center (walk-in facility)	√	
Call center for person to person response If Yes, what hours of operation? From ___9am__ to _6 pm_____	√	
Interactive voice response (IVR) system	√	
Web-based account management	√	

4. Number of Accounts
from Cofiroute
Dates covered for answers below: ___July 1, 2007 through May 30, 2008____

Category	Response
Total number of active accounts.	118,272
Average monthly applications processed.	845
Average monthly accounts closed for any reason.	535
Average number of monthly contacts for account maintenance.	46,473 This includes phone, web, email and US mail

5. Does your agency offer different types of accounts?

__√__ **Individual**

____ **Corporate**

__√__ **Other. Please specify ___Special Access Accounts_____**

Special Access accounts are available for customers who always drive with three or more people in their vehicle, drive a motorcycle, a zero emission vehicle, or have a disabled veteran or disabled person license plate issued by the DMV.

24

6. Number of Transponders

Dates covered for answers below: ___7/1/07-6/30/08_____

Category	Response
Total number of transponders in active status.	176,324
Average monthly transponders issued. Includes replacement transponders	2,569
Average monthly transponders returned for any reason. Includes defective transponders	1,933
Does your agency charge a fee for getting the transponder?	No
Does your agency charge a monthly fee for using the transponder?	Dependent on which type of accounts.

Different types of customer accounts designed to fit a variety of customers' needs, depending on how much you intend to use the 91 Express Lanes. The three account types are described below.

91 Express Club
> Customers who take more than 20 one-way trips on the 91 Express Lanes per month can benefit from a 91 Express Club™ account. 91 Express Club members pay a $20 per-transponder monthly-membership fee and receive a $1.00 per-trip discount for all tolled trips on the 91 Express Lanes.

Standard Plan
> The Standard plan is designed for customers who take between 2 and 25 one-way trips on the 91 Express Lanes per month. Customers who select the Standard Plan pay a minimum of $7 in tolls each calendar month for each Transponder assigned to their account. The $7 minimum applies only to tolls on the 91 Express Lanes.

Convenience Plan
> The Convenience Plan works best for customers who routinely spend less than $7 in tolls per month per Transponder on the 91 Express Lanes. With the Convenience Plan, infrequent 91 Express Lanes users never have to worry about minimum monthly tolls. Convenience Plan accounts have no monthly toll requirements, but require a one-time non-refundable $75 per Transponder enrollment fee.

7. Number of Electronic Toll Collection Transactions

Dates covered for answers below: _____7/1/07-6/30/08_____

Category	Response
Transactions – Daily transactions on the HOT lane for an average weekday.	41,079
Traffic – Daily vehicles using HOT Lane for an average weekday.	41,079
Revenues – Daily toll revenues collected for an average weekday.	$135,800
Violations – Daily violations for an average weekday.	3%

8.   Types of Transactions

Category	Response
Does the HOT lane have multiple access points?	No
Is there a different toll for each access point?	No
Does your agency implement time of day pricing?	Yes
Does your agency implement dynamic pricing?	No

9. Staffing Plan

What is your staffing plan for each of the following functions? Please indicate if these functions are done by agency staff or a contractor (a contractor can be another public agency contracted for services or a private firm). If one staff person performs more than one function, please allocate approximate percent of time to each function performed. For example, part time 20 hours/week = 0.50 or 50%
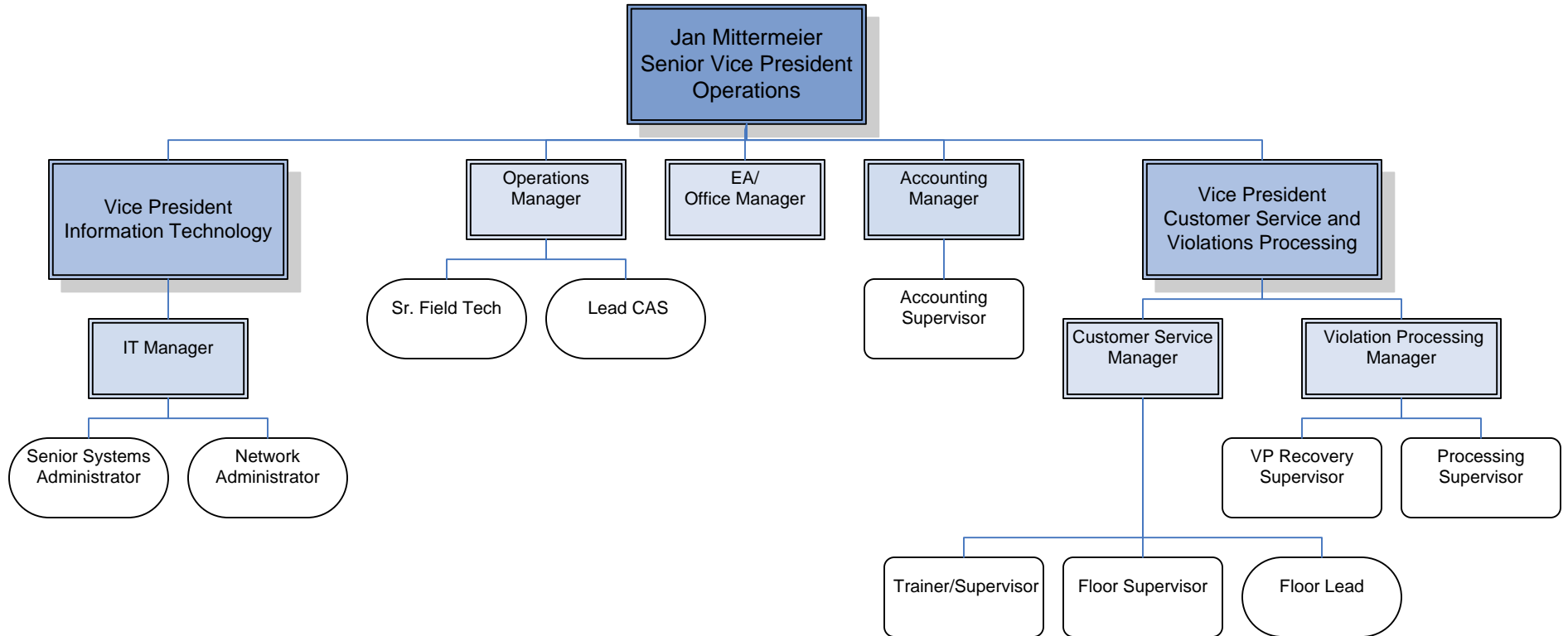
Function	Number of Personnel			
	Agency Staff		Contractor	
	Full-Time	Part-Time	Full-Time	Part-Time
Customer services			(e & g)	
Account management			(e & g)	
Transponder management			(g & j)	
Electronic toll collection (Revenue management)			(d & j)	
Violations processing			(e & k)	
Hardware configuration / maintenance			(f & d)	
Network administration			(f)	
Reporting			(f, h & j)	
Financial controls and processes			(j)	
Subtotal			43	
Other (specify) Executive Staff (a)			3	
Other (specify) Quality Assurance (i)			1	
TOTAL Staff Back Office Operations			47	
Roadway Operations (b)			6	
Traffic Operations (c)			7	
GRAND TOTAL			60	

10. Please provide a copy of the organization chart and staffing plan for your central system or back office operation.

91 EXPRESS LANES PROJECT

June 19, 2008

Jan Mittermeier
Senior Vice President
Operations

Vice President
Information Technology

Operations
Manager

EA/
Office Manager

Accounting
Manager

Vice President
Customer Service and
Violations Processing

IT Manager

Sr. Field Tech

Lead CAS

Accounting
Supervisor

Customer Service
Manager

Violation Processing
Manager

Senior Systems
Administrator

Network
Administrator

VP Recovery
Supervisor

Processing
Supervisor

Trainer/Supervisor

Floor Supervisor

Floor Lead

Texas Transportation Institute
HOT Lane Operation Questionnaire
Cofiroute Staffing Plan
June 19, 2008

RESPONSE:

9. Staffing Plan

   a. Executive Staff (3)
      (Includes Senior Vice President in charge of 91 Express Lanes operation for
      contractor, Vice President in charge of Customer Services and Vice President in
      charge of Information Systems and Technology)

   b. Roadway Operations (6)
      (Provides freeway service patrol, tows disabled vehicles, changes tires, adds gas,
      etc, removes debris from traffic lanes, performs image reviews, monitors traffic
      for violators, works closely with California Highway Patrol and Caltrans, inspects
      roadway for safety problems, manages contracts for roadway cleaning,
      maintenance and repairs, responds to traffic emergencies to assist police, fire and
      coroner, manages traffic breaks, and manages traffic flow to ensure safety of
      construction contractors performing major repairs or reconstruction)

   c. Traffic Operations (7)
      (Includes staffing for 24/7 traffic operations center. Staff dispatch tow trucks and
      emergency vehicles, monitor information and price signs, coordinate accident
      response among emergency responders, and perform manual image reviews to
      verify license plate OCR reads)

   d. ETTM Maintenance (3)
      (Includes three electronic technicians. Staff maintains cameras, loops, loop
      cabinets, signs and other in-lane equipment, maintains generators and air-
      conditioners, monitors and maintains toll zone computers and performance of in-
      lane system, works closely with in-lane software and equipment vendors and
      performs other miscellaneous facility maintenance)

   e. Processes (11.5)
      (Staff establishes customer accounts, responds to customer written and email
      enquiries or requests, scans and electronically files all incoming mail, processes
      and mails violation notices, processes customer payments for violations or other,
      manages collection contract with outside collection firm, performs administrative
      reviews, arranges for Administrative Hearings, manages customer accounts and
      reviews and approves judgments before filed by judgment attorney)

f. Systems Administration (4)
    (Manages primary data center and two smaller data closets, monitors and
    maintains servers and other electronic equipment including UPS, installs software
    upgrades, maintains Web server, manages network, monitors telecommunications
    system, generates data base reports for various purposes, posts Web updates,
    manages intranet, works closely with back office software vendor, works closely
    with IT staff of other toll agencies, purchases and configures all servers, firewalls,
    and PCs, prepares annual IT strategic plan and budget for OCTA approval, and
    develops and maintains security protocol)

g. Customer Service (17.5)
    (Staff serves customers at walk-in center. Customers can walk into center or call
    in to establish an account, add or delete vehicles, make payments, add or delete
    credit cards and/or obtain other information or assistance, manages transponder
    inventory, mails or issues transponders to customers, accepts and processes
    customer account applications, establishes customer accounts and responds to
    customer concerns or complaints. Approximately 80% of 91 Express Lanes
    customers use walk in center, primarily by telephone)

h. Support Services (2)
    (Includes Office Manager and Receptionist)

i. Quality Assurance (1)
    (Develops a variety of statistical reports, manages system change requests,
    monitors system and telephone help desk requests, and develops testing plan for
    deployment of software upgrades.)

j. Accounting (4)
    (Processes all payments, balances cash and other receipts, prepares journal
    entries, prepares interoperability transactions, reconciles various accounts and
    reports, works closely with OCTA Accounting, prepares internal control policies
    and procedures, maintains purchase order logs, maintains vendor lists, reviews all
    purchase orders and enters into accounting system, audits transponder inventory,
    maintains fixed asset listing, and works closely with interoperability accounting
    staff)

k. Violations Enforcement Supervisor (1)
    (Reviews all judgment files and approves for filing, responds to collection
    contractor and judgment attorney questions and provides data and other
    information, handles difficult or unusual violation cases, and performs
    investigations as necessary)

HOT Lane Project (Name and Facility): I-25 Express Lanes, Colorado Tolling
Enterprise; Back Office Services provided by E-470 Public Highway Authority
Information Provided by:

Name: Dave Kristick Email:_dkristick@e-470.com__Phone:303-537-3701

Central System (Back Office Operation)[*]

1. **Which of these functions is considered part of the central system or "back office operation" for your HOT lane project?**

Function	Yes	No
Customer services	X	
Account management	X	
Transponder management	X	
Electronic toll collection (Revenue management)	X	
Violations processing	X	
Hardware configuration / maintenance	X	
Network administration	X	
Reporting	X	
Financial controls and processes	X	
Management operation and maintenance	X	
Other (Please specify)		

2. **Could you please provide the approximate annual cost of the back office operation?** *If your agency does not separate expenses by these functions, please estimate the cost of the back office operation as described above.*

   $518,251 for the dates from July 1, 2007 to   June 30, 2008

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[*] The term "back office operation" may not be the correct term for some HOT Lane projects. For the purposes of this request for information, we are referring to the types of management, administrative, financial, and systems integration functions that are required to support the operation of HOT Lanes and may include some or all of the examples listed.

3. Do you provide the following customer service functions with an account management interface?

Customer Service Interface	Yes	No
Customer service center (walk-in facility)	X	
Call center for person to person response If Yes, what hours of operation? From 7 AM to 6 PM	X Monday- Friday	
Interactive voice response (IVR) system	X	
Web-based account management	X	

4. Number of Accounts

Dates covered for answers below: as of June 30, 2008

Category	Response
Total number of active ExpressToll accounts.	260,000 for E-470, NWP & CTE
Average monthly applications processed.	2600 for E-470, NWP & CTE
Average monthly accounts closed for any reason.	300 for E-470, NWP & CTE
Average number of monthly contacts for account maintenance.	30000 for E-470, NWP & CTE

EXpressToll is the automatic, electronic toll collection method available on E-470, the Northwest Parkway (NWP), and the I-25 tolled Express Lanes Colorado Tolling Enterprise (CTE)

5. Does your agency offer different types of accounts?

X___ Individual

X____Commercial

X____ Other. Please specify - Non-revenue

6. Number of Transponders

Dates covered for answers below: 2008 6/5/2008

Category	Response
Total number of transponders in active status.	515,000 for E-470, NWP & CTE
Average monthly transponders issued.	3,235
Average monthly transponders returned for any reason.	1,200
Does your agency charge a fee for getting the transponder?	No
Does your agency charge a monthly fee for using the transponder?	No

7. Number of Electronic Toll Collection Transactions

Dates covered for answers below: Month of June 2008 information

Category	Response
Transactions – Daily transactions on the HOT lane for an average weekday.	4244 HOT Only
Traffic – Daily vehicles using HOT Lane for an average weekday.	12,723 HOT and HOV
Revenues – Daily toll revenues collected for an average weekday.	$186,178 Monthly
Violations – Daily violations for an average weekday.	15,341

8. Types of Transactions

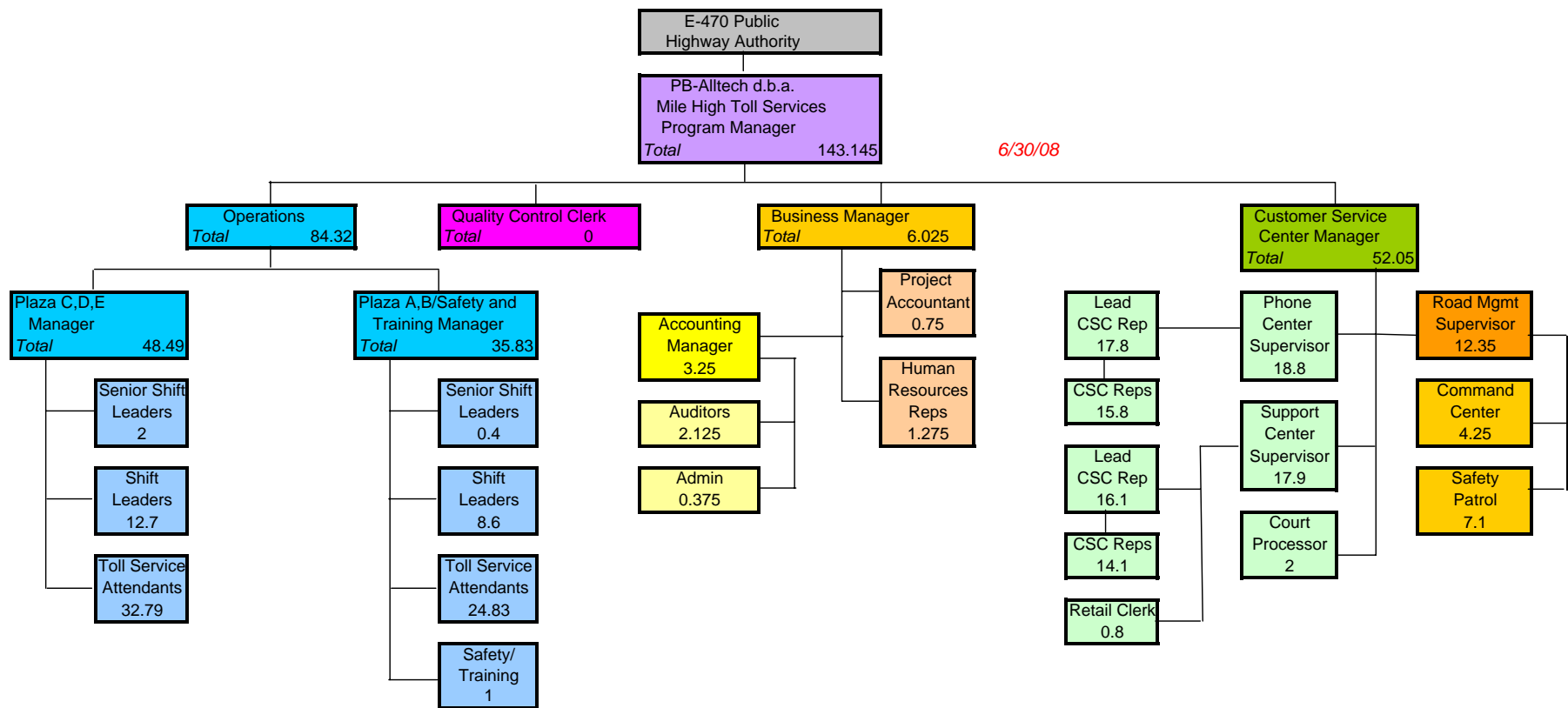| Category	Response
Does the HOT lane have multiple access points?	Yes
Is there a different toll for each access point?	No – Single gantry
Does your agency implement time of day pricing?	Yes
Does your agency implement dynamic pricing?	No

9. Staffing Plan

What is your staffing plan for each of the following functions? Please indicate if these functions are done by agency staff or a contractor (a contractor can be another public agency contracted for services or a private firm). If one staff person performs more than one function, please allocate approximate percent of time to each function performed. For example, part time 20 hours/week = 0.50 or 50%

| | Number of Personnel | | | |
| | Agency Staff | | Contractor | |
Function	Full-Time	Part-Time	Full-Time	Part-Time
Customer services 300 to 500 contacts per month.			1	
Account management				
Transponder management				
Electronic toll collection (Revenue management)				
Violations processing			2	
Hardware configuration / maintenance				
Network administration				
Reporting month reporting 5 hours CS			1	
Financial controls and processes				
Other (specify)				
Other (specify)				
TOTAL Staff Back Office Operations			4	

10. Please provide a copy of the organization chart and staffing plan for your central system or back office operation.

Next page is the E-470 Public Highway Authority organizational chart.
Staff dedicated to I-25 Express Lanes (CTE) = 4

E-470 Public Highway Authority Organizational Chart

E-470 Public Highway Authority

PB-Alltech d.b.a. Mile High Toll Services Program Manager
Total 143.145   *6/30/08*

- **Operations** — *Total* 84.32
  - **Plaza C,D,E Manager** — *Total* 48.49
    - Senior Shift Leaders 2
    - Shift Leaders 12.7
    - Toll Service Attendants 32.79
  - **Plaza A,B/Safety and Training Manager** — *Total* 35.83
    - Senior Shift Leaders 0.4
    - Shift Leaders 8.6
    - Toll Service Attendants 24.83
    - Safety/Training 1

- **Quality Control Clerk** — *Total* 0

- **Business Manager** — *Total* 6.025
  - Accounting Manager 3.25
    - Auditors 2.125
    - Admin 0.375
  - Project Accountant 0.75
  - Human Resources Reps 1.275

- **Customer Service Center Manager** — *Total* 52.05
  - Lead CSC Rep 17.8
    - CSC Reps 15.8
  - Lead CSC Rep 16.1
    - CSC Reps 14.1
  - Retail Clerk 0.8
  - Phone Center Supervisor 18.8
  - Support Center Supervisor 17.9
  - Court Processor 2
  - Road Mgmt Supervisor 12.35
    - Command Center 4.25
    - Safety Patrol 7.1

Monthly Sticker Program for SOVs on the Utah I-15 HOV/Toll Lane System in Salt Lake City.

Information provided by Catherine R. Cutler, P.E., Electronic Tolling Manager, Utah Department of Transportation.

(1) How many SOV stickers were placed in circulation the first month of the program (and when was that)? How many are in circulation this month?

700 stickers in August 2006; 1736 in circulation now

(2) What is the measure you use to monitor HOV lane performance in order to know how many SOV stickers to issue? Speed, volume, some other measure of congestion?

Speed and volume of all lanes (HOV & GP)

(3) Do you have any data on how often in a month the subscriber actually uses the HOV/Toll lane with the SOV sticker?

No - we currently have no way of tracking that information.

(4) How does one apply for a sticker? Mail, fax, email, web application? Are there eligibility requirements?

Web application; no eligibility requirements (other than it can't be a vehicle over 12,000 GVW, or a vehicle towing a trailer)

(5) What is the cost of the sticker to the subscriber? What are the revenues earned by the state?

The sticker cost is $50/month; current revenues total ~$1.5M since 08/06.

(6) Do you maintain a "waiting list" and, if so, what is the basis of that list – is it first come first serve? Is there a category for "regular subscriber"? If so, what are the benefits?

Currently, we have a limit of 2200 stickers. As we have not yet reached that limit, we do not yet maintain a waiting list. We may institute a waiting list this fall when we open an additional six miles of our Express Lane; this list would be geographically based to capture residents who would use the new six miles.

(7) How do you issue monthly stickers? Is a new sticker mailed every month by U.S. mail? Is it something one can get online? How else does a subscriber access the sticker?

Our system bills for the following month on the 15th, 17th and 18th. After we receive the list of successful billings, we send stickers out in the US mail. You cannot print a decal off online but you can request to receive a decal online. You can come to the Traffic Operation Center and pick a sticker up in person.

(8) Do you have any data you can share on the state expense to administer the SOV sticker program?

The cost for last year's administration of the program totaled ~$164,000.

(9) Do you have information on violation rates

The University of Utah conducted a survey in 2007 and found 9% violation in the morning and 12% violation in the afternoon.