

Handitran Operational Audit June 2010

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HANDITRAN OPERATIONAL AUDIT



Office of the City Auditor

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Report #09-12

June 18, 2010

Executive Summary

*Implementation of
passenger scheduling
software has
increased ridership,
decreased trip
denials, and
increased rides per
hour*

Opportunities for Improvement

*Centralized medium
to track customer
complaints*

Records retention

*Source code escrow
for software*

*Disaster recovery
plan*

As part of the 2009 Annual Audit Plan, the City Auditor's Office conducted an audit of Handitran Operations. The audit was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The objectives of the audit were to determine whether:

- Handitran, a federally-subsidized transportation provider for handicapped and senior citizens, achieved maximum ridership, cost efficiency, customer satisfaction and safety;
- implementation of the Ecolane scheduling system resulted in improved service;
- Handitran customer service results in optimizing operations and ridership; and,
- supplementary taxi services met contractual requirements and provided efficient and reliable transportation.

The City Auditor's Office noted that Handitran ridership increased since the implementation of Ecolane, trip denials decreased and rides per hour increased. However, at times, a shortage of drivers resulted in vehicles being taken out of service. The City Auditor's Office also noted that customer complaints are not recorded in one central medium and Handitran records appear to be retained longer than considered necessary. The source code escrow for the new software had not been established and a disaster recovery plan for the Ecolane software could not be verified. Also, taxicab billings could not be reconciled to Ecolane system records.

These findings and recommendations are discussed in the Detailed Audit Findings section of this report.

Audit Scope and Methodology

Documentation, correspondence and transactions from January 2008 to December 2009 were included in the scope of this audit. The audit was conducted in accordance with generally accepted government auditing standards. The following methodology was used in completing the audit.

- Interviewed Handitran management and staff members in order to gain an understanding of transit operations.
- Reviewed transit scheduling software manuals, conducted test transactions and interviewed software vendor personnel in order to familiarize with Ecolane software.
- Observed Handitran scheduling and dispatch staff, and conducted sample transactions to determine if Ecolane software is operating as intended and is an enhancement to Handitran operations.
- Traveled on Handitran bus routes to observe the level of customer service provided to transit passengers.
- Conducted online survey to obtain passenger feedback on transit services.
- Examined maintenance and repair records for Handitran vehicles.
- Examined routine drug testing and criminal background history reviews conducted on Handitran and taxi staff.
- Obtained Federal Transit Administration (FTA) compliance information pertaining to federally-subsidized transportation services.
- Examined fare collection methodology and fare accountability to ensure adequate internal controls.
- Compared transit data for similar demand response handicap and elderly transportation providers in North Texas to assess Arlington's comparative performance.
- Examined Ecolane disaster recovery plan to ensure operational continuity after an adverse event.
- Examined if customer complaints are logged and resolved to satisfaction in a timely manner.
- Assessed if Handitran records retention was in compliance to FTA guidelines.
- Reviewed monthly taxi cab billings to ensure accuracy and contract compliance.

Background

In 1979, the City of Arlington established Handitran to provide transportation for the disabled and elderly. Handitran is subsidized by Federal funding administered by the FTA. Handitran provides transportation to Arlington residents and to residents of Pantego, a neighboring city, as a result of an interlocal agreement between the two cities. Handitran's primary mission is to provide door-to-door, first-come-first-served (demand response) transportation services to the disabled and elderly. In order to accommodate specific passenger transportation needs, passengers are classified as ambulatory or wheelchair bound.

Potential riders are first required to submit an application with a \$10 fee in order to qualify as passengers. Senior citizens must provide proof of age when applying for Handitran. Persons with disabilities who are under 65 years of age must have their physician certify the application. Residents that are 65 years old and residents with a physician-attested disability qualify to schedule transportation with Handitran. Census Bureau records show approximately 88,000 elderly and disabled residents in Arlington. Residents are provided with a dedicated phone number for trip scheduling. Trips can be scheduled a week in advance or on the day the request is made. Handitran also offers subscription service to passengers making recurring trips on regular intervals. Approximately 65% of trips on Handitran fall under the subscription category.

The fleet consists of 20 shuttle-sized vans equipped with wheelchair lifts. Handitran's passenger transportation is supplemented with taxicab service provided by Yellow Cab. The City entered into a contract with Yellow Cab to provide eight dedicated taxi cabs and one wheelchair minivan. The contract requires the City to pay \$13 for each ambulatory ride and \$18 for each wheelchair bound ride. Transportation services are available six days a week - 7am to 10pm on Monday through Friday, and Saturday from 8am to 9pm. Service is not available on Sundays and holidays recognized by the City of Arlington.

The cost of Handitran transportation is \$2 per one-way trip. Passengers have the option of purchasing a monthly pass, a book of tickets or paying as service is provided. Personal care attendants or service animals are not charged a fare.

Staff

Handitran's strategic direction is overseen by an advisory board appointed by the City Council. The Special Transportation Advisory Board consists of nine members, each appointed for a two-year term. The Board meets quarterly to discuss operational matters and decide on policy that guides Handitran.

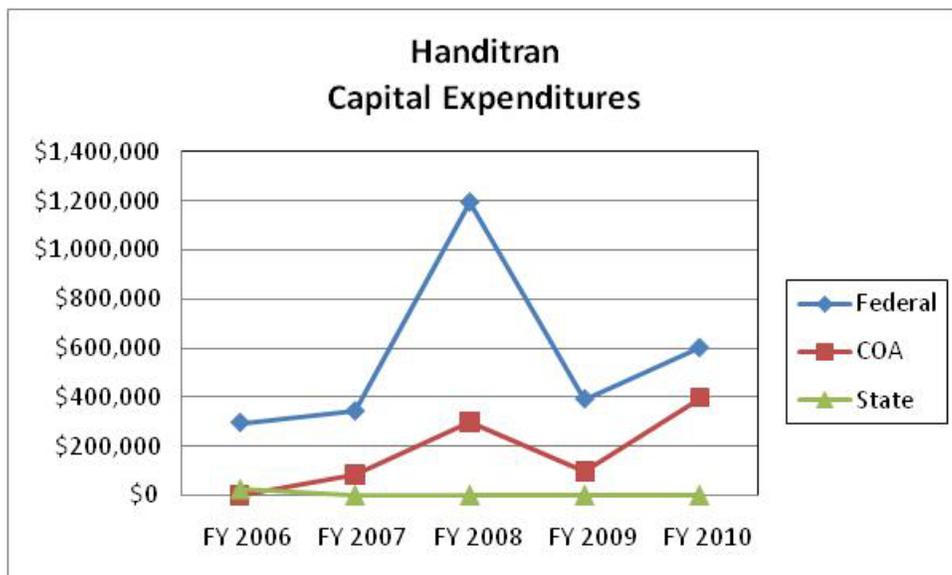
Management staff includes a Transit Manager, two operational supervisors, a customer service representative, two trip schedulers, three dispatchers, an Administrative Aide and approximately 14 full-time and 17 part-time bus drivers. Some employees are cross-trained to perform multiple duties, such as driving a vehicle, trip scheduling and trip dispatch. Handitran bus drivers are required to possess a commercial driver's license (CDL). The CDL certification process enhances safety and security for Handitran passengers.

Funding

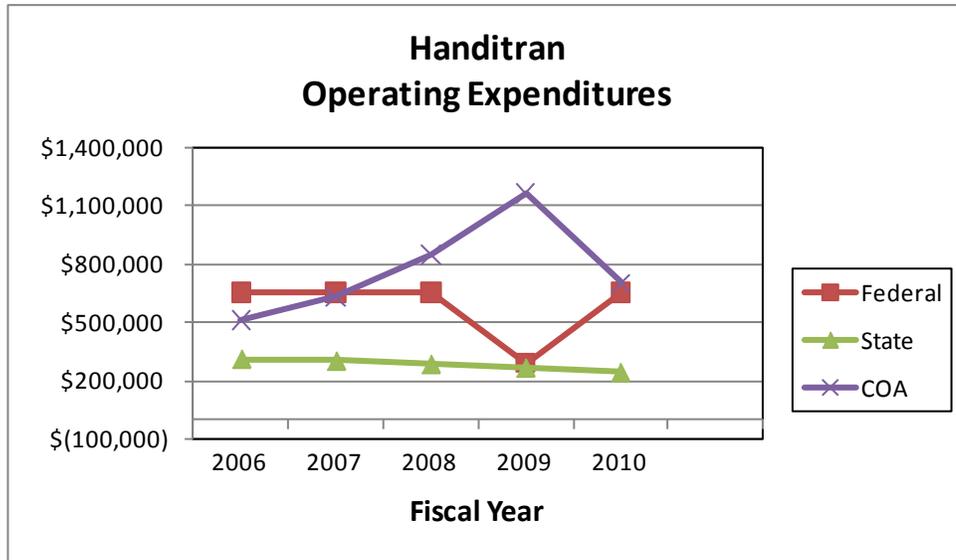
Handitran operations are funded by the following sources.

- Federal Funds – Department of Transportation funds, administered by the FTA
- State Funds –Texas Department of Transportation (TxDOT). The funds are administered by the same agency.
- City of Arlington Funds – The FTA requires matching funds from local agencies. Matching funds are provided by the City’s General Fund.

The following graphs show total funding sources for actual capital and operating Handitran expenditures for FY06 through FY09, and projected expenditures for FY2010.



Source: Handitran



Source: Handitran

As shown in the graphs, grants received from Federal and State sources declined between FY08 and FY09, therefore increasing the City's financial liability. Projected federal funding is expected to increase in FY10, resulting in less matching funds from the City's General Fund. Handitran management stated that the decline in State of Texas funding is due to the reallocation of transportation funds to other statewide transportation projects.

Funding received from the federal government is based on funds allocated to the North Texas region for rural and urbanized transportation. When population increases, rural transportation agencies are reclassified as urban transportation agencies, with additional funding from Federal sources. The reclassification process results in less funding for other agencies in the North Texas region.

Between FY06 and FY09, City funding increased by \$700,000 or 124%. In the future, it may cost the City of Arlington more to maintain Handitran operations. Handitran management expects to lessen the impact to the General Fund by using grants received from the American Reinvestment and Recovery Act (ARRA). The ARRA funds can be used during the next three years. Planned use of funds includes purchasing two buses, preventative maintenance and purchase of additional cab capacity.

Ecolane

A transportation study conducted by A&R Consulting, in 2005, identified deficiencies in the manual passenger scheduling system utilized by Handitran. At the same time, Microsoft support for the DOS-based software used for passenger scheduling was in the process of being discontinued. As a result, Handitran management began its search for an all-inclusive trip scheduling software in 2007. Ecolane dispatch software was selected through a competitive bid process. The software vendor is based in Helsinki, Finland and provides an all-encompassing web-based trip scheduling system. The new system became operational in September 2008, at

an approximate cost of \$116,000. Software maintenance and support costs total approximately \$16,000 per year.

Ecolane is capable of fully automating trip scheduling, providing Global Positioning Systems (GPS) enabled real time status on vehicles, fully automating vehicle routes and providing information for administrative purposes. The system is designed to optimize ridership automatically, achieved by the system scheduling trips based on available vehicles on the day of service. Schedule changes that are primarily initiated by passengers (e.g., last minute cancellations or moving a scheduled passenger to another available vehicle in order to maintain on time performance) are conducted manually by dispatch staff.

Automated trip scheduling begins with the establishment of passenger profiles for all authorized riders. The profile contains individual needs, frequent trip locations and information pertaining to primary residence. When a passenger calls the trip scheduling desk, Handitran representatives can easily access passenger data to build the desired trip. Passengers are also scheduled on subscription trips, where trips occur on routine intervals.

Trips are dispatched via mobile data terminals (MDT) installed in each bus. The MDT provides trip information, routing and trip navigation to drivers. Taxicabs are equipped with Blackberry data phones that function as MDT's. Drivers update Ecolane at the beginning and end of each scheduled trip, enabling real time trip and vehicle status. The MDT devices are provided by Mentor Engineering. MDT implementation cost approximately \$113,000 and yearly software maintenance costs are approximately \$4,900. Efficiencies gained as a result of Ecolane implementation include:

- Reduction in passenger trip declines
- Reduction in vehicle mileage
- Reduction in vehicle operating costs
- Enhancements in passenger safety

Details for the above are discussed in the operational status section of this report.

Operational Status

Currently, Handitran is in the process of continuing to enhance its transportation service to the handicapped and the elderly. Management is reliant on its newly acquired Ecolane software to expand and streamline the current services it offers. Handitran has also purchased a new telephone system, which would enable them to communicate more efficiently with its passengers. Enhanced capacity with its phone system includes increased call queues, call transfer ability, caller ID, ability to monitor calls and voice mail. Trip schedulers use caller ID to access customer profiles prior to taking the call, thus speeding up the trip schedule process. Call monitoring for quality assurance purposes can also be performed.

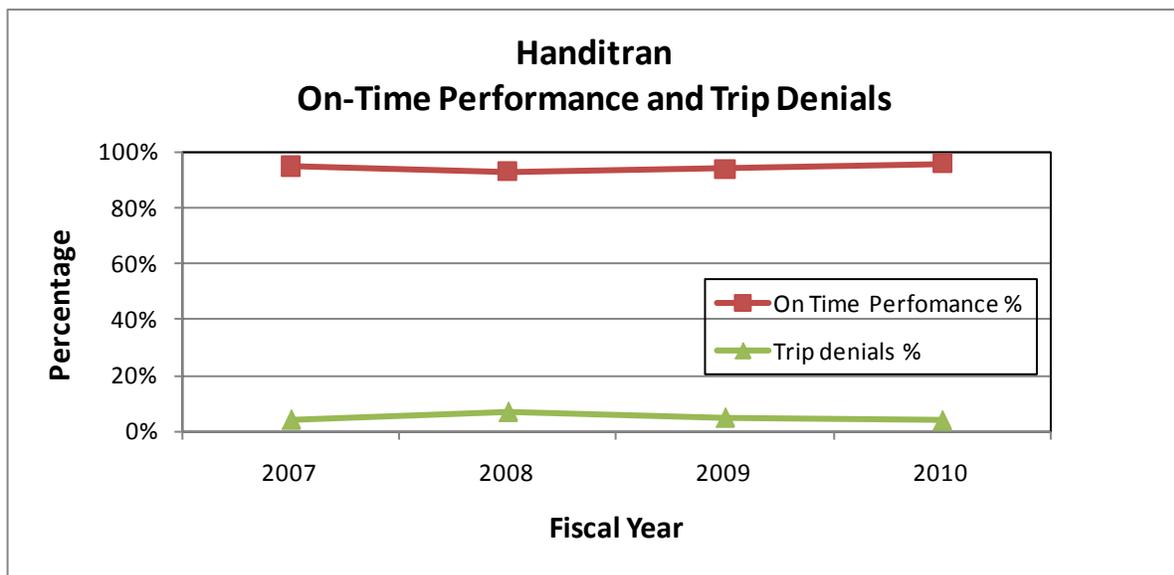
Passenger volume has remained steady. A total of 101,657 rides were provided in FY07, 101,350 in FY08, and 96,736 in FY09, as reflected in data provided to the FTA. Ecolane records

show 43,852 passenger trips as of January 31, 2010. Handitran managers project overall ride volume to surpass FY07 totals during the current fiscal year.

Handitran uses three key targets to assess its own performance, all indicative of the level of passenger service they provide.

- On-time performance – Percentage of time Handitran drivers pickup and deliver passengers within the allocated service window.
- Rides Per Hour – The average amount of trips delivered by each Handitran vehicle during its service hours.
- Trip Denials – The amount of declined trips due to lack of capacity.

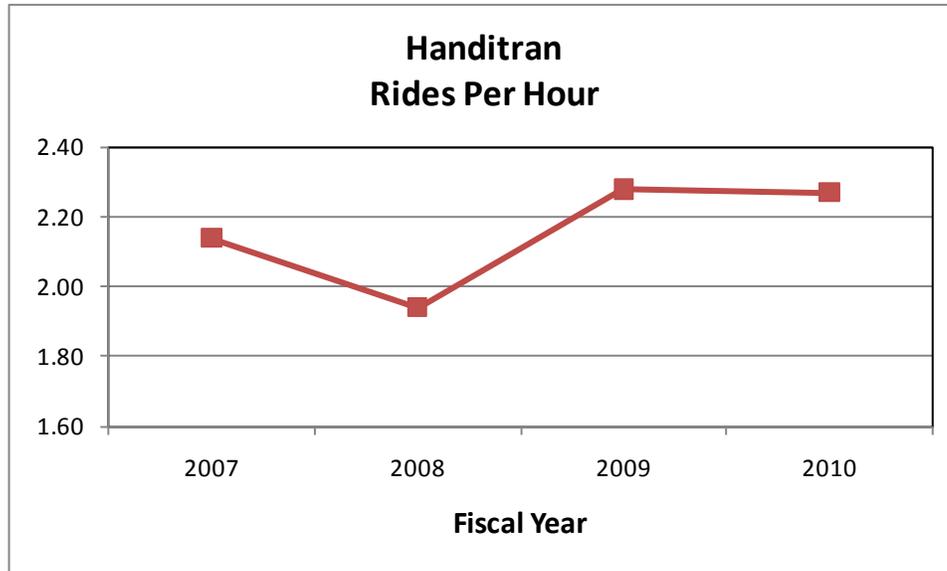
The following chart shows Handitran's on-time performance and trip denial percentages.



Source: Ecolane and Handitran

On-time performance was at 96% as of January 31st 2010, per Ecolane records. This represents an increase from 93% for 2008. Trip denials were at 1% as of January 31st 2010, compared to a 7% denial rate in 2008.

Handitran rides per hour are shown in the following chart. As Handitran management and staff continue to increase utilization of Ecolane, rides per hour is expected to increase.



Source: Ecolane and Handitran

Ecolane's GPS-based navigation and trip scheduling has resulted in a reduction of 34,975 vehicle miles between 2007 and 2009, a reduction of 15%. As a result, Handitran management expects operational costs to be decreased, due to less fuel consumption, fewer vehicle repairs and lower labor costs. GPS-based navigation has also increased passenger safety. Handitran management can now determine the exact location of passengers that are in transit. For example, Handitran provides transportation to disabled minors and young adults that attend area specialty schools. Parents and guardians of these children can now be advised of exact locations and arrival times.

Passenger Survey

A survey of Handitran passengers was conducted in order to obtain feedback on the level of service provided. Due to resource limitations, bus and taxi drivers handed the survey forms to passengers. Surveys were also made available in the vehicles and on the Handitran website. Mailing surveys with a postage paid return envelope, phone contact with passengers or other individualized survey methodology was deemed cost prohibitive. The survey included 20 questions on topics such as complaint resolution, trip scheduling, trip routing, passenger safety and overall passenger service.

A total of 24 passengers responded to the survey, a low response rate compared to approximately 1,300 passengers that use Handitran on a regular basis. The total responses are not significant to perform statistically valid detailed analysis. However, a summary of results are listed below.

- 90% of respondents used Handitran on a daily or weekly basis
- 95% of respondents considered Handitran to be very important for individual transportation
- 85% of the respondents rated the trip scheduling process as above average
- 71% of the respondents rated the drivers as helpful or extremely helpful

- 81% of the respondents rated the amount of stops before reaching their destination as somewhat acceptable or acceptable
- 81% of the respondents agreed or strongly agreed that Handitran cared about its passengers

Detailed Audit Findings

1. Trip efficiency settings are not customized to individual drivers.

The newly implemented Ecolane route scheduling system consists of settings for automated passenger scheduling. System settings can be customized to match passenger and other operational needs (e.g., schedule a specific number of passengers per vehicle) to maximize trip efficiencies. Within Ecolane, trip efficiency refers to the time allocated to each driver for individual passenger pick up and drop off.

Ecolane trip efficiency ratings range from 1 to 1.9. A driver with a 1.9 rating is considered faster and is therefore allocated less time for passenger pick up and drop off. The Handitran driver trip efficiency rate is currently defaulted to 1, regardless of driver capabilities. Allocating too much time for passenger service can result in idle time, therefore reducing overall passenger volume.

Automated route scheduling systems, such as Ecolane, require customization in order to achieve desired operational results. Overall, customized ratings could result in shorter passenger service times and more transport capacity. Customized ratings could also enable Handitran to accommodate additional passengers.

Customized trip efficiency ratings would require updating as new drivers become more efficient as a result of training and experience. Customizing efficiency settings would also require consideration of passenger, vehicle and driver safety.

Recommendation:

The Transit Manager should consider customizing trip efficiency ratings to correspond to each individual driver's trip performance, ensuring passenger safety and adjusting ratings as necessary on an on-going basis.

Management's Response:

Concur. A review of how to incorporate trip efficiency ratings is underway. Using these ratings to correspond with individual trip performance will be incorporated into driver performance ratings. We expect to have the plan implemented for the next driver performance evaluation and shift selection process beginning December 1, 2010. (Status: Ongoing)

Target Date: December 2010

*Responsibility: Bob Johnson, Transit Manager
Jan Hodge, Operations Supervisor*

2. Key processes in Ecolane lack data field controls.

Exception reports generated from within Ecolane indicate that some data fields lack necessary data field controls. For example, Ecolane requires Handitran bus and Yellow Cab drivers to input mileage data when a passenger pick up or drop off is completed. However, Ecolane does not help prevent drivers from entering an erroneous mileage. Ecolane allows drivers to enter a

lower ending mileage than the mileage entered at the beginning of the trip, resulting in negative mileage. Ecolane also accepts a higher mileage entry than the system calculated. For example, a Handitran bus and a taxicab were shown as being driven 28,042 and 67,047 miles, respectively, in one day. Erroneous data entry results in what Ecolane refers to as “suspicious trips.”

Ecolane allows drivers to pick up the next passenger listed on the route schedule while the previously completed trip remains open. Ecolane also considers trips that have not been properly closed out or completed as “suspicious trips.”

Data field controls could alert the driver when an incorrect odometer reading is entered and would require the driver to enter data to complete a trip prior to beginning another. Without adequate data field controls, erroneous data entry that is not corrected in a timely manner could be included in data sent to agencies such as the FTA and TxDOT.

Recommendation:

The Transit Manager should seek assistance from the system vendor to introduce data field controls that would enable closure of each trip prior to beginning of another and alert drivers when incorrect mileage is entered.

Management’s Response:

Concur. The data field issue was caused by a technical limitation of the mobile data devices used by our contracted taxi service at the time of the audit review. Ecolane provided a replacement mobile data device in May 2010 which added the required functionality to meet the audit recommendation. (Status: Complete)

Target Date: May 2010

Responsibility: Paul Price, Operations Support Supervisor

3. Source Code Escrow for Ecolane software has not been established.

Exhibit A of the software contract with Ecolane requires the establishment of an escrow account to retain its source code. Source code escrows are established to protect system users in the event of vendor bankruptcy or insolvency. The contract requires the City of Arlington to establish an escrow account at the City’s cost and coordinate with the vendor to place its source code in escrow. However, no escrow account had been established. Per management, employee turnover within the Handitran Division and the Information Technology Department, since system implementation, contributed to the delay in escrow account establishment.

The City of Arlington is one of three users of Ecolane software in the United States. Considering the number of users in the United States, combined with fact that the vendor is located in Helsinki, Finland, establishment of escrow to account for Ecolane source code is imperative to continuing efficient Handitran operations. In the event of insolvency, third party programmers could continue to service the software with the use of its source code that is held in escrow. Since there is no established escrow account, the City would be unable to maintain the software in the event of vendor insolvency.

Recommendation:

The Transit Manager in conjunction with the City's Chief Information Officer should coordinate with Ecolane to establish an escrow account for the software source code.

Management's Response:

Concur. A contract with Iron Mountain (a third party data storage company), Ecolane and the City of Arlington has been executed. The source code is now in an escrow account. (Status: Complete)

Target Date: April 2010

*Responsibility: Louis Carr, Chief Information Officer
Bob Johnson, Transit Manager*

4. Ecolane reports that could be used to improve Handitran operational efficiency are underutilized.

Ecolane system reports that contain Handitran operational efficiency information are underutilized.

- Daily Vehicle Productivity Report – This report lists vehicle productivity for each driver and can be generated for specific time periods. This report highlights deadhead (vehicle without passengers) hours and miles, service time estimated by system, actual time taken for passenger service and average rides per hour for each vehicle.
- Agency Billing Summary Report – This is a cumulative report that identifies variances between estimated and actual passenger miles and hours for any given period. Ecolane estimates passenger miles and travel times based on GPS and traffic conditions. The estimate algorithms are intended to deliver optimum passenger service. The variance between estimates and actual service times are a result of drivers deviating from system assigned routes and drop off/pick up order. The City Auditor's Office generated an Ecolane report for the month of July 2009. The report showed vehicles being driven 2,700 additional miles over estimates.
- Driver Performance Summary – This report identifies on-time performance for any specific time period. On-time performance shows the percentage of time each driver delivered and picked up passengers within the established parameters. The ratio identifies driver deficiencies and strengths.

Documentation to indicate report utilization or consistent use of the reports listed above was not evident. The reports could be used to identify operational deficiencies, provide information to be used during employee performance appraisals, identify training needs and provide information to help reward deserving employees. Handitran management is in the process of learning how to optimize the use of Ecolane and its managerial tools. Prior to the introduction of Ecolane, no

specific driver rating methodology existed. Drivers were rated based on categories that could be easily substantiated such as safety and City of Arlington employee performance parameters.

Recommendation:

The Transit Manager should allocate supervisory staff members to review and document Ecolane reports that would assist in monitoring and increasing operational efficiency. Use of system reports to optimize service should also be documented.

Management's Response:

Concur. Routine review of Ecolane service delivery reports has been implemented. Among the reports currently monitored are: Driver performance; System on time performance; Trouble trips; Billing summary; Vehicle manifests; Average trip distance and duration. Driver performance is routinely monitored and included in the computation for their shift selection criteria. (Status: Complete)

Target Date: January 2010

Responsibility: Bob Johnson, Transit Manager

5. Ecolane written Business Disaster Recovery plan, risk assessments for its data centers and documented test results for its disaster recovery plan needs to be verified.

Ecolane confirmed the existence of a disaster recovery plan and testing of the plan verbally. However, Ecolane declined to provide requested information regarding its business recovery plan, risk assessments for their data centers and test results for the business recovery plan. Documented information pertaining to restoration of internet connectivity at their data centers was also not provided. The vendor cited disaster recovery information being used by competitors as the primary reason for not providing the information. The initial request for proposal for Handitran route scheduling system did not include a disaster recovery plan as a requirement for the new system.

The basic disaster recovery information provided by Ecolane indicates providing the day's passenger manifest to Handitran via email as part of the disaster recovery plan. Handitran can then dispatch the buses via a two way radio and taxi cabs via cell phones. However, the manual dispatch process is challenging, as discussed below.

- Contacting scheduled passengers would be difficult, considering the customer master file within Ecolane would not be accessible.
- Locating passengers that had already been dropped off at destinations (i.e. shopping centers, physician offices) would be difficult.
- Additional staff that would be required to call passengers already on schedule and to manually route 20 vehicles does not exist. Ecolane records indicate that the average number of trips scheduled per day is in excess of 400.

Given these challenges, a disaster recovery plan that is documented in detail and tested is vital to continue operations in the event of a disaster. Redundant internet connectivity is also vital to Handitran's continuity of operations. Arlington's internet connectivity is provided by the City's

Information Technology Department. All passenger scheduling and vehicle routing is performed in Ecolane. Therefore, if the system is off-line, scheduling, updating the system with completed trips, bus routing activity and trip lookup tasks could not be processed.

Recommendation:

The Handitran Manager, in conjunction with the Chief Information Officer, should contact Ecolane to ensure an adequate written and tested business continuity plan for the software exists, including tested redundant internet activity.

Management's Response:

Concur. Ecolane has stated they have a proprietary business continuity plan in effect. (Status: Complete)

Target Date: May 2010

*Responsibility: Louis Carr, Chief Information Officer
Bob Johnson, Transit Manager*

6. Customer complaints are not recorded in one centralized medium.

Customer complaints received by Handitran are not recorded in one centralized database. Instead, complaint data is retained in multiple mediums and collection of such would involve extensive manual resources. Some labor-intensive processes would include examining a large volume of customer folders for complaints. Customer complaints received within the Handitran Division are recorded and tracked as follows.

- Telephone complaints and the resolution of such complaints received by Handitran staff are recorded onto an internally created manual complaint form and then filed in the customer's folder. Some telephone complaints are also logged in a Word document in the City's shared I: drive. Steps taken to resolve complaints are also documented in the same Word document.
- Complaints received by the City's Action Center are logged in the Everest complaint tracking system. Resolutions are also documented in Everest. However, the Everest software does not interface to the Handitran software.

A centralized customer complaint tracking system enables query of data for analysis. Data retained in multiple mediums cannot be queried for analysis. Additionally, policy and procedures for customer complaint management do not exist.

The City of Arlington, as a whole, utilizes the Everest complaint system to log complaints received by the City's Action Center. Handitran management had inquired about utilizing Everest as a sole complaint tracker for Handitran, including logging complaints received directly by Handitran staff. However, they were advised against utilization of Everest due to technical

limitations. Three members of Handitran staff have been given access to Everest to retrieve complaints received by the Action Center.

The Ecolane passenger scheduling system consists of a passenger feedback menu capable of logging customer complaints. However, it is not currently in use. The feedback menu appears to have the capacity to query data fields. Handitran management believes activation and customization of the feedback menu requires vendor assistance. Utilizing the Ecolane feedback menu would require a transfer of Handitran related complaints entered in Everest. The transfer could be performed manually or through an interface between the two systems.

Recommendation:

The Transit Manager should seek assistance from the Ecolane software vendor, to activate the passenger feedback menu and record passenger complaints in Ecolane, including transferring the complaints recorded in the Everest system.

Management's Response:

Concur. Ecolane has included a service report module. This customer service module allows any Handitran staff member to immediately enter feedback information directly into Ecolane. This information can be shared, responses tracked, and historical information to be retained. (Status: Complete)

Target Date: December 2009

Responsibility: Bob Johnson, Transit Manager

7. Past Handitran transit records should be retained as required by applicable record retention guidelines.

Currently, Handitran documents such as passenger applications and daily vehicle manifests, dating back to 1979, are stored at several warehouse locations. Information provided by the City's Records Division indicates that as of 10/23/09, 164 boxes were in offsite storage and another 60 boxes were stored at the Handitran facility. Each year, Handitran is charged \$9 for each box in storage, averaging approximately \$2,400 in storage expenditures during FY09.

FTA records retention guidelines that apply to grantee contractors, subcontractors and sub grantees indicate that records must be retained for three years from the date of submission of the final FSR upon project completion or, if waived, the date it would have been due. However, the City of Arlington's retention schedule varies, ranging from two years to permanent.

Handitran documents listed in the City's records retention schedule are not specific (e.g., FY2009 manifests). Instead, the record descriptions are generic in nature. For example, the City's records retention schedule indicates retention of policy, procedure and guideline documentation pertaining to the FTA. However, what is actually retained are manifests and grant-related documentation pertaining to Handitran. The State and Local Records Management Division of the Texas State Library approved the City's current retention schedule in March of

1997. Based on the information retained by the City's Record Division, locating any specific document in storage would be time-consuming due to the current cataloging process.

Ridership and vehicles used for passengers transported by Handitran have increased steadily in the past and are expected to continue in to the future. As a result, the volume of paper records will increase accordingly. However, the recently implemented Ecolane ride scheduling system is capable of maintaining electronic driver manifests, which would eliminate the need to store paper copies of daily driver manifests.

Recommendation:

The Transit Manager should submit an updated records retention schedule to the State of Texas. Once approved by the state, Handitran documents should be retained as authorized.

Management's Response:

Concur. Handitran has updated the records retention schedule to reflect current requirements. Knowledge Services, who maintain records for the City, is requesting approval of the retention schedule from the State of Texas. Once approved, Handitran will bring its storage and disposal of records into compliance with the new schedule. (Status: Ongoing)

Target Date: August 2010

Responsibility: Bob Johnson, Transit Manager

8. Repairs associated with non-routine normal wear and tear needs to be approved by Handitran Management prior to repair activity.

Service records for Handitran buses list several repairs that appear to be related to accidents or other non-routine wear. Information provided by Handitran managers and fleet service manager shows no associated records indicating an accident or other incidents that may have caused the damage to the buses. Observed repairs include replacement of windshields, rear bumpers and mirrors.

On-going Handitran policy requires a driver to file an accident or incident report when a vehicle is damaged. However, damage that is not obvious and visible to Handitran managers can go unreported. Fleet Services staff repairs the damage that is not reported during routine maintenance. Damage repair without Handitran management's approval or knowledge prevents drivers from being held accountable for damage caused to the vehicles. The Fleet Services Manager for the City states that prior approval is only obtained if the repair estimate exceeds \$1,000.

Damage repair to Handitran vehicles and routine body repair related to normal use are categorized as "cab and sheet metal repair" in the City's fleet management system. Handitran vehicle repair reports provided to internal audit show a total of 261 repair orders that were categorized as cab and sheet metal repair for FY 08 and FY09. Review of the 261 repair orders for cab and sheet metal repairs identified nine repair orders, under \$1,000, that appear to be body repairs not associated with routine wear. Documentation to show management's approval of repairs or an accident report that shows how the damage was caused was not available.

Recommendation:

The Transit Manager should require supervisory approval for all non-routine repair work done on the Handitran fleet. The approval should be followed up with an assessment to determine the cause and responsible parties.

Management's Response:

Concur. Requiring approval of all non-routine repairs will allow supervisory staff to determine possible causes of damage, and take appropriate steps to respond, including disciplinary action for preventable damage. (Status: Complete)

Target Date: January 2010

Responsibility: Bob Johnson, Transit Manager

9. Collection of fares owed to Handitran is not consistent.

Non-paying passengers are allowed to ride buses and taxis after signing a fare-owed receipt. The City charges \$4 for delinquent payments, per ride. This \$4 charge is for the \$2 unpaid fare plus a \$2 penalty. The bus and taxi drivers submit the fare-owed receipts to Handitran's Administrative Aide at the end of each shift. The Administrative Aide begins the collection process, via letters and occasional telephone calls.

The \$2 penalty was introduced by the Special Transportation Advisory Board to encourage passengers to pay the fare at time of transport, instead of signing a fare-owed receipt. The City Auditor's Office could not determine if the penalty has resulted in more passengers paying the fare at time of transport.

The existing policy requires collection activity to begin within a week. A second letter is to be mailed within two weeks. The third and final notice of service suspension is required to be mailed within five weeks of the delinquency date.

A review of passengers in collection and suspended status show gaps in collection consistency, such as five weeks between second and third letters or as of December 3, 2009, no collection activity for delinquencies dating to November 18, 2009. Handitran management cites lack of adequate resources for administrative tasks as a reason for the inconsistency.

Recommendation:

The Transit Manager should reconsider the frequency of collection letters to ensure consistency and also consider utilizing a function within Ecolane to automatically generate an invoice or statements to passengers with delinquent fares.

The Transit Manger should evaluate if assessment of the fare owed penalty has achieved its intended results.

Management's Response:

Concur. Ecolane does not have a module to assist in managing collection letters. Renewed emphasis on fare owed customers has resulted in more consistent billing and collections.

The fare owed penalty of \$2.00 was introduced in 2008 in an effort to reduce fare owed status and encourage payment. After a brief positive effect, the fare owed penalty has not decreased the instances of fare owed status, nor sped the increase in payment. The intended result has not been achieved. In May, the Special Transit Advisory Committee approved sending the recommendation to City Council for approval. (Status: Complete)

Target Date: March 2010

Responsibility: Bob Johnson, Transit Manager

10. Handitran buses at times are removed from service due to driver shortages.

Review of bus scheduling for CY08 and CY09 identified instances where buses were removed from service. For example, driver shortages resulted in a bus that normally runs from 6:30 a.m. to 5:15 p.m. being taken out of service for an entire day due to lack of drivers. When buses are removed from service, scheduled passengers are required to be transferred to other vehicles. The additional passenger load could result in service delays and could reduce Handitran's overall passenger capacity for the day. For example, passenger capacity is reduced if, due to the reduced number of buses in service, Handitran is unable to accommodate passengers who request same day trips.

The table below identifies the number of instances where vehicles were taken out of service due to lack of drivers. Instances include full- and part-time shifts and months with greater than ten occurrences.

Month/Year	Number of Instances
January 2008	18
February 2008	25
March 2008	26
April 2008	13
February 2009	21
March 2009	24
August 2009	16

The reason that buses are removed from service can be attributed to drivers being on light duty or out on sick leave (regular and/or family and medical leave). Drivers assigned to light duty usually perform minor administrative tasks such as answering telephones. Current City of Arlington policy grants a total of 120 days of light duty to any employee. While on light duty, the employee can perform light duties in their own department or within another City department. If performing light duties at another department, the employee's department, in this case Handitran, is still responsible for employee wages during light duty assignments. A report

provided by Handitran indicates that five drivers utilized a total of 1,374 hours of combined light duty in CY2008. Another four drivers utilized 1,220 hours of combined light duty in CY2009.

Current dispatchers and schedulers are cross-trained to drive buses, which could be used to rotate in place of a driver on leave. Part-time staff does not increase operational costs for Handitran as much as full-time employees. Labor costs are only incurred when they are called to work. There are two vacant part-time bus driver positions. Once filled, these would offer additional capacity.

Recommendation:

Handitran Transit Manager should consider a job rotational program, and utilizing part time drivers to offset driver shortages.

Management's Response:

Concur. An increase in the number of part-time drivers available to fill in when other drivers are sick or on vacation will reduce or eliminate the amount of schedules that must be closed due to absences. To that end, Handitran is in the process of hiring four part-time drivers. We anticipate these drivers to be trained and prepared to drive Handitran buses in August of this year. (Status: Ongoing)

Target Date: August 2010

Responsibility: Bob Johnson, Transit Manager

11. Handitran prepaid tickets can be reproduced or abused.

Handitran pre-paid bus tickets lack unique identifiers or numbering, therefore making them easy to counterfeit. A reproduced bus ticket could easily be turned in by a driver, in lieu of cash fares paid by passengers.

Handitran passengers can purchase prepaid bus tickets in booklets of 12 for \$24. Tickets books are sold by bus and taxi drivers, as well as at the Handitran office. Drivers are issued 10 booklets at a time and revenue from ticket book sales are to be turned in with other fare collections at the end of shifts.

Passengers could easily reproduce the prepaid Handitran tickets using a color laser printer. Once redeemed, Handitran staff has no methodology in place to verify the authenticity of the ticket or if the passenger has purchased tickets in the past. All ticket sales are recorded manually in the daily cash summary sheet, without identifying the passengers that purchased the tickets.

The Dallas Area Rapid Transit offers daily, weekly, and monthly season passes or single ride fare at time of Para transit trip. The Fort Worth T's Mobility Impaired Transportation System (MITS), offers 10-ride ticket booklets which include bar codes to validate the ticket. Handitran introduced prepaid tickets as a low cost transportation option for its riders, where the cost of prepaid tickets was less than the cash fare. The cost of prepaid tickets now equals the actual fare. Passengers therefore do not save money by purchasing prepaid tickets in advance.

Recommendation:

The Transit Manager should discontinue the use of prepaid bus tickets and continue with monthly pass and cash fares for all passengers.

Management's Response:

Concur. The cost to convert the ticket books to a secure fare type, and the administrative time necessary to manage the ticket fare type are prohibitive. An effort to eliminate the possibility of fraud or abuse in any process is a priority. In May, the Special Transit Advisory Committee approved sending the recommendation to City Council for approval.

Research on future use of technology such as pre-loaded secure trip swipe cards will be investigated and implemented when available and cost effective. (Status: Ongoing)

Target Date: August 2010

Responsibility: Bob Johnson, Transit Manager

12. Some Handitran revenue is not tracked and managed through Ecolane Software.

Ecolane software currently tracks and manages daily passenger revenue. However, Handitran revenue such as payment of past fares owed, sale of monthly passes and prepaid tickets are accounted for manually by noting in the daily cash summary sheet. Handitran revenue accountability policy in use now was drafted prior to introduction of the Ecolane software, resulting in multiple manual processes for revenue accountability. Absence of checks and balances or reconciliation to an electronic source for manually collected revenue may contribute to abuse or theft.

The daily cash summary sheet shows overages when past due amounts are paid back and shortages when passengers ride without paying (fare owed). If passengers pay cash for a monthly pass or prepaid tickets, the money collected could be excluded from the daily cash summary with ease.

Recommendation:

Handitran management should consider utilizing Ecolane software to include tracking and managing all revenue sources systematically. Daily collections should be reconciled to system sources.

Management's Response:

Concur. Handitran Operations Support discovered a data tracking issue in the Ecolane system that prevented accurate revenue management. The software issue was resolved in June 2010 and is currently in use. (Status: Complete)

Target Date: June 2010
Responsibility: Paul Price, Operations Support Manager

13. Handitran deposits are not made in a timely manner.

Handitran FY 2009 deposits show lag times between transaction date and when the funds were deposited. A sample of 20 deposits reviewed show delays as much as three business days. Although the City Auditor's Office found no exceptions or misuse of funds due to delayed deposits, the City of Arlington's Cash Handling Policy requires deposits to be made on the next business day, if cash receipts exceed \$100.

The Handitran Administrative Aide conducts Handitran cash accountability and the deposit is prepared and taken to the City's designated drop off point by Handitran's customer service representative. Handitran management attributes the deposit delays to a shortage of administrative staff. Multiple tasks assigned to the customer service representative also appear to contribute to the deposit delays. Handitran management intends to hire additional part time staff for administrative tasks, which should alleviate some backlog.

Recommendation:

The Transit Manger should ensure that deposits are made on a timely basis, as required by City policy.

Management's Response:

Concur. Re-aligned processes and review of internal controls have proven effective in ensuring deposits are made on a timely basis. (Status: Complete)

Target Date: April 2010
Responsibility: Bob Johnson, Transit Manager

14. Ecolane vehicle configuration needs to be enhanced to list the wheelchair lift equipped taxi as a special vehicle type.

Passengers are automatically scheduled to each vehicle type, based on individual need, passenger preference and availability. Currently, Ecolane lists two vehicle types: Handitran buses and Yellow Cab taxi sedans. However, the actual fleet also includes a Yellow Cab wheelchair minivan that is capable of servicing wheelchair bound passengers who live in areas that a lift-equipped Handitran bus cannot operate due to its size.

Since vehicle types in Ecolane do not show the lift equipped minivan as a special vehicle unit, passengers who need to be transported in the minivan have to be manually scheduled. Including the minivan as an additional vehicle type would help eliminate the need for re-scheduling. Handitran operations would be enhanced because it would enable automated minivan scheduling.

Recommendation:

The Transit Manager, in conjunction with the Information Technology Department, should seek assistance from Ecolane to include the wheelchair-equipped minivan as a special vehicle type.

Management's Response:

Concur. Handitran has asked Ecolane to provide a cost quote to develop a special vehicle type specifically for the wheelchair-equipped minivan. Once obtained, staff will review the impact versus the cost and determine next steps. (Status: Ongoing)

Target Date: August 2010

Responsibility: Paul Price, Operations Support Supervisor

15. Taxicab billing cannot be reconciled to Ecolane records.

A sample of randomly selected monthly taxi cab billings could not be reconciled to Ecolane records. The Ecolane Fare Summary Report is intended to list total passengers transported in Handitran's own vehicles and Yellow Cab taxis. The report can be generated for a specific time period, however variances were observed when attempting to reconcile Ecolane to total trips shown on Yellow Cab bills.

Manual manifests are produced by cab drivers and submitted to Handitran staff, along with daily cash receipts. The daily taxi manifest data is entered into a spreadsheet by Handitran staff and used to verify the accuracy of monthly taxi billings. The cost of transporting Handitran passengers in Yellow Cabs are billed at the end of each month. The contract specifies payment of \$13 for each ambulatory passenger and \$18 for each wheelchair bound passenger. Even though the monthly taxi bill is based on the Handitran spreadsheet, it does not match monthly taxi trip totals shown in Ecolane.

A detailed review of taxi billings identified the following as possible causes of variances to system records.

- Ecolane does not appear to recognize last minute escorts (personal care attendants) brought on by passengers. Escorts pay a regular fare, usually cash or prepaid ticket. Taxi drivers manually list escorts on the manifest and the escorts are accounted for at the end of day by the Handitran cashier. These escorts are listed in the taxi bill, but are not shown on Ecolane figures.
- Passenger cancellations or no shows may not log accurately on Ecolane passenger totals, causing taxi bills to show a lower passenger count for the day than what is shown in Ecolane.
- Ecolane may not be accurately transferring cumulative daily totals to the month end report. For example, monthly passenger total reports generated for the month of January 2009, on two different occasions, resulted in different passenger totals.

- Taxi cabs use a Nokia data phone to communicate with Ecolane. This PDA device does not have the capacity to accommodate an escort or personal care assistant that does not show up for the scheduled ride. Additional care attendants are scheduled when the trip is planned. If the passenger fails to show for the ride, drivers can perform a “no show” action on the PDA devices that is communicated back to Ecolane. However, the same cannot be done for escorts that accompany the passenger. Manual manifests maintained by the drivers reflect the accurate no show passengers, resulting in Ecolane records showing more passengers than the taxi billing.

Taxi billing should be ideally matched to the passenger scheduling source, rather than manually generated records. If manual records are lost, Handitran management would be unable to verify the accuracy of the Yellow cab billings. Uniformity to passenger scheduling sources is also desired, considering payment to Yellow Cab taxi services are paid with Federal funds.

Analysis of Ecolane reports would require vendor assistance to examine data tables and report queries. Report accuracy should be verified in a system test environment and include manual tabulation of data.

Recommendation:

The Transit Manager should seek assistance from Ecolane to determine the cause of errors in the system generated fare summary report for passengers transported in Yellow Cab taxis. An accurate fare summary report should be utilized to verify the accuracy of monthly Yellow Cab billing

Management's Response:

Concur. Handitran Operations Support discovered a data tracking issue in the Ecolane system that prevented accurate revenue management. The software issue was resolved in June 2010 and is currently in use. (Status: Complete)

Target Date: June 2010

Responsibility: Paul Price, Operations Support Supervisor