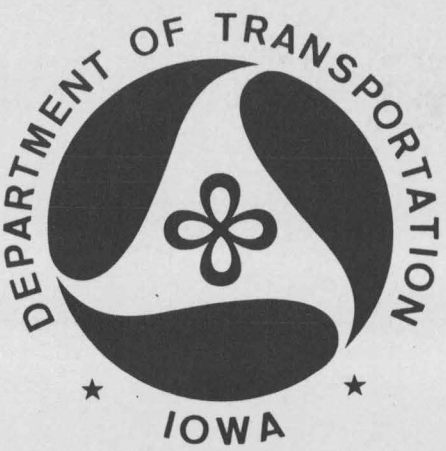

IOWA UNIFORM DATA MANAGEMENT SYSTEM

System Implementation #1

December 1, 1980

Federal Project Number
RPT-CRIM(001)-93-00

Member States

Arkansas
Iowa
Massachusetts
Michigan
North Carolina
South Carolina

Purpose

The Transportation Accounting Consortium was formed to pursue methods of simplifying existing billing and accounting systems related to the multiple federal funding sources (over 114). Transportation Accounting Consortium is a coalition of six states representing five (5) federal regions and the official task force assigned to study this issue under the White House Initiative on Rural Development.

The Consortium is a unique and dynamic approach to problem solving. With different methods tested in different states, with the same alternative tested in different states, and with the lessons learned in one state incorporated in the implementation efforts of another, the demonstration is developing practical approaches that have national application.

The Consortium is organized into four task forces, each addressing a different accounting issue: Bookkeeping, Financial Accountability, Billing and Program/Service Accountability. The task forces, which contain one representative from each state have developed work plans in a common format that incorporates an inventory and analysis, a development of alternative, an implementation phase, an information sharing program, an evaluation and a national dissemination of results involving the Federal Regional Councils.

Federal Project Number
RPT-CRIM(001)--93-00
Report 1 of 7

Uniform Data Management System:

SYSTEM IMPLEMENTATION #1

Prepared for the:
Iowa Department of Transportation

by: Greenwood and Crim, P.C., and
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on: December 1, 1980

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1. INTRODUCTION

The Uniform Data Management System (UDMS) was initiated in January, 1980. The broad purpose of the project is to develop a system of acquiring appropriate accounting information and operating data on Iowa's transit properties.

The development of the project is conceived to mature in the following phases:

Phase I of the project developed a computer program designed to accommodate and process transit financial and operating data and produce output based on the Section 15 reporting format. UDMS procedures were implemented in two transit properties as part of the Phase I activities.

Phase II of the project is to implement UDMS procedures in 19 Iowa transit properties. Five properties were implemented using fiscal year 1980 as the implementation period. Fourteen properties will be implemented using fiscal year 1981 as the implementation period.

Phase III of the project is the production of a users' manual. The manual will provide narrative assistance in employing UDMS procedures and input forms.

Phase IV of the project is to develop a set of performance standards based upon UDMS data characteristics. The performance standards will correlate relationships between financial and non-financial information and will provide an excellent data base

for management decisions. Three transit properties will be used to conduct performance audits in this phase.

The UDMS implementation process concurrently addresses the financial data element and the non-financial data element of the five implemented properties. However, the elements are dissimilar in nature and the format of this report generally provides separate discussion of the financial element and the non-financial element.

It is important to realize that at this stage of implementation, UDMS is chiefly directed at the proper collection and reporting of information. UDMS is a cumulative process. Interpretation and utilization of the information contained herein must appropriately await the establishment of an adequate data base and the development of performance standards.

2. IMPLEMENTATION PROBLEMS

Iowa's transit properties divide into three basic types: Large urban, small urban and regional transit properties. But in addition to these basic types, Iowa transit properties can be further divided by differences in organizational and operational structures. Generally these differences are more evident in regional properties than urban, but they are evident in both types.

The following represents the principal structural variations that exist in Iowa transit properties. They are identified here because implementation of the UDMS program must be geared to these variations.

1. "Transit operating agency" - an autonomous unit or agency providing direct transit services. Example: a free standing **transit authority that runs transit services.**

2. "Transit brokering agency" - an autonomous unit or agency contracting for transit services. Example: A government agency that contracts with another public agency for transit services.

3. "**Umbrellaed** transit operating agency" - a non-autonomous unit or agency providing direct transit services.

4. "**Umbrellaed** transit brokering agency" - a non-autonomous unit or agency contracting for transit services.

Because Iowa transit properties embody all four of these variations and combinations, **thereof, provisions for reporting financial** and non-financial information under UDMS needs to be established prior to implementation. (see also: Accounting and Reporting Release #2 for general rules as these variations apply to purchase of service agreements).

Financial Element

As a result of the numerous variations in organizational and operational structures, the initial problem in implementing the financial element of the UDMS system is not specific to the property involved; rather the problem is in the consistent interpretation and application of UDMS concepts among the properties regardless of the organizational and operational structure.

Before implementing financial element procedures, consideration also needs to be given to the level of financial detail to be collected, and the frequency of collecting and processing such data:

1. The level of detail desired for reporting transit fiscal activities depends largely on whether the general ledger accounts maintained by the property **are in an independent** general ledger for transit, or whether the transit accounts are maintained as part of a more encompassing general ledger. Viable accounting systems that reflect transit activity only as a portion of the total accounting system can be accessed periodically to extract accumulated activity from the transit accounts. If the financial information for UDMS input is gathered by accessing a larger accounting system, there must be, both (1) a thorough interfacing of the charts of accounts that accomplishes both the facilitation of UDMS coding, and provides a means of returning to source documentation from UDMS output; and (2), when there are allocated costs charged to transit accounts, a satisfaction that such allocations are both pragmatic and documentable.

2. The frequency of collecting and processing financial data for UDMS purposes depends largely upon recognizing the following factors.

   (1) The independence of the transit general ledger. UDMS financial activity can be feasibly processed monthly if one of the following elements exist in a transit property's structure:

   a. the property is an autonomous unit

   b. services are provided by autonomous lead agencies

      or

c. the property is regional and non-autonomous, but part or all of the services are provided by the property.

(2) The external reporting requirements, and

(3) The desires of transit management.

Non-Financial Element

As with financial implementation, the initial problem with implementing the non-financial element is not specific to the transit property, but rather the problem of applying UDMS concepts consistently and uniformly regardless of the structural variations. Two general considerations preceded the implementation of non-financial procedures: (1) an evaluation of the quality and extent of the non-financial data being collected prior to UDMS, and (2) an assessment of the non-financial reporting requirements of the property that exist beyond or in addition to UDMS.

1. Quality and extent of currently gathered data

Iowa's transit properties have been in existence for varying amounts of time, although a large number, particularly the regional systems, are fairly recent creations. Each property has developed its own methods and procedures of collecting and recording information. Some, particularly older urban properties, have developed extensive and detailed reporting tools. Some, particularly regional properties, report what is minimally required by their principal funding sources. The quality, i.e. the reliability of the information collected varies considerably.

The chief problem of implementing UDMS non-financial procedures is to be sure that the essential data is being collected and that it is being collected in a consistent and reliable manner. The approach that has been taken is to maintain or utilize the existing tools and forms of recording information if they are essentially adequate, and to redefine some elements to be consistent with UDMS definitions. Where there are no forms in place or they are inadequate, new standard forms have been initiated (see Implementation Procedures C.)

Finally, because of the structural variations in transit properties, it has been important to examine the methods used by the reporting entity in accumulating its information. Where the reporting entity is the operating service, it is important to be sure that management is getting carefully recorded information from operations, mechanics, dispatchers, etc. Where the reporting entity is a brokering agency it is important that summary information continually be verified with primary data.

2. Total reporting requirements

Paramount in the development of UDMS, was the desire to create a single, comprehensive reporting system for Iowa transit properties. Toward that end UDMS was modeled after Section 15 requirements, but was expanded to meet the special reporting demands of regional/social service transit providers.

While it is anticipated that UDMS will become the encompassing reporting system it was designed to be, there remain other reporting requirements. Those additional reporting requirements needed to be addressed and integrated into the UDMS implementation process.

It was important to determine all the reporting requirements of the transit property - local, state and federal - at the time of implementation. For all transit properties, the UDMS implementations were designed to satisfy the total reporting requirements that existed.

It is difficult to anticipate the changing governmental role in public transit, but the UDMS implementation process was designed to define the total reporting requirements of each transit property.

3. IMPLEMENTATION PROCEDURES

A. Provide manuals and materials, and present an overview of UDMS.

Financial and Non-Financial

Two orientation seminars were presented to provide transit properties with information on the UDMS system.

The first seminar was held on January 15, 1980, at the Iowa DOT Headquarters in Ames, Iowa. Volume II and Level C manuals of Section 15 were distributed to the property representatives. A financial overview of the UDMS chart of accounts was presented; an elementary level address was made regarding the nature and function of a balance sheet, revenue, and expense accounts. An overview of the non-financial information needed for UDMS reporting was presented; statistical sampling techniques and requirements were discussed for both fixed route and demand response systems. In addition, there was a presentation of the historical background of the developmental concepts that led to the recognized need for uniform reporting among Iowa transit properties.

The second seminar was on February 19, 1980, in Coralville, Iowa. Specific UDMS treatments for certain financial and non-financial data elements of fixed route systems were discussed.

B. Determining internal and external information requirements. Determine what data needs to be collected. Determine and develop the necessary procedures and forms to record information to be processed via the software developed in Phase I.

Financial

Following is a discussion of the activities performed with a small urban property.

Discussion with transit financial and operating personnel indicated the need for external financial reporting to be limited to the quarterly State Transit Assistance report. Financial information for internal usage is obtained from the city's transit accounts as needed. Data requirements for UDMS reporting were determined by applying the definitions of the UDMS chart of accounts to the financial transactions occurring within the system.

The determined procedure for recording the financial information for UDMS input is to extract from the city's accounting system; utilizing an interfacing of the city's chart of accounts and the UDMS chart of accounts, the information is coded in UDMS format on the four following forms:

Receipts summary

Disbursements summary

Cash summary

Journal entries

Following is a discussion of the activities performed with a regional transit property.

Discussions with the transportation Director and the transportation Manager indicated the need for the following external reports:

State Transit Assistance - quarterly

City of Davenport - monthly
(for reimbursement of one-half the operating costs of two vans)

Title IIIB - monthly

Internal financial reports are needed for monthly Board review. Data requirements for UDMS were determined by applying the definitions of the UDMS chart of accounts to the financial transactions occurring within the system.

The forms utilized monthly until June 30, 1980, to code information in the UDMS input format were the following:

Receipts Journal
Receipts Summary
Disbursements Journal
Cash Summary
Journal Entries
Bank Reconciliation

Beginning in July, 1980, the cash disbursements are being coded on check copies instead of creating a cash disbursements journal.

Non-Financial

In determining the internal and external information needs of the transit property, discussions were held with the transit operator or operators, the transit administrator, the planner and the district manager. Generally the information needs and the essential data

to support those needs differed between urban and regional properties.

For internal management needs, small urban properties were concerned most with route evaluation. The small urban property of Burlington was experimenting with new routes and needed to determine which of their existing routes were most successfully being well utilized. Another small urban property, Coralville, had similar interests but additionally, they were sharing a principal corridor with a University line-haul service (Cambus), and they wished to evaluate ridership on two services over the same route by peak and off-peak periods. Because Marshalltown, another small urban property, is a single bus service, route evaluation has limited management value; however, information was gathered in the same manner as the other urban properties.

Sampling techniques were developed for the properties in conjunction with their planners to facilitate this kind of data collection. Form I406A (see appendix) represents the initial data for those internal information requirements for small urban properties.

For the three (3) regional properties, the primary internal management need was to evaluate particular client group or contact group usage of the overall service. Trip efficiencies needed to be evaluated for these individual gropus in order to develop proper contracts and attribute appropriate costs. Demand response sampling techniques were developed in order to facilitate the collection of data by client group. Form I406B (see appendix) represents the initial data for those internal information requirements for the three (3) regional properties.

Both small urban and regional properties have the external reporting requirement connected with receiving State Transit Assistance. UDMS is the single reporting requirement of this funding source.

Small urban properties **generally have no other reporting requirement except** a minimal statistical report to their city councils and/or mayors. UDMS reporting fully satisfies these requirements.

Regional properties on the other hand have a variety of reporting requirements imposed by their more numerous funding sources. Meetings were held with representatives of the relevant funding sources either directly or by way of state level meetings to encourage them to accept the UDMS report as adequate for their reporting need. UDMS reports appear to be acceptable to the Agency on Aging, the Community Action Program, the County Boards of Supervisors, and the cities. It has not been accepted by Title XIX and Title XX. **The need for a special Section 16(B)(2) report is currently being discussed at the federal regional level.**

C. Introduce specific procedures and forms to transit personnel. Provide instructions as to the purposes and uses of the forms. Train transit personnel to perform the procedures and complete the forms.

Financial

Following is a discussion of the activities performed with a small urban property.

Using the UDMS input format, the city's financial activity was coded for input and reviewed in detail with the appropriate personnel.

The purposes and reasoning of each of the coding activities were explained. Coding for fiscal year 1980 cash activity was performed twice; once for three quarters year-to-date activity and once for the fourth quarter activity. Year end accrual adjustments were coded after the output reflecting cash activity had been received and reviewed.

Following is a discussion of the activities performed with a regional transit property.

The UDMS coding procedures and format were reviewed and explained to the bookkeeper. All the cash receipts and cash disbursements transactions for fiscal year 1980 were coded by the bookkeeper. The codings for year end accrual adjustments were made after the output reflecting cash activity was received and reviewed.

Non-Financial

Because of the small size of most of the transit properties and because personnel is limited and overworked, every attempt has been made to ease existing data collection forms and techniques. Generally, the approach that has been taken is to use the existing data collection forms but to redefine some of those data elements to be consistent with UDMS terminology.

The two areas of biggest divergence from common usage are in UDMS's definitions of "revenue service" and "roadcalls." It has been important to reemphasize that "revenue service" includes the miles and hours a vehicle travels if it is on a regular route or

is being dispatched. "Revenue service" excludes only those miles and hours that a vehicle travels before it enters "service" and after it leaves "service." Roadcall is defined only as interruption of service. The distinction between "mechanical" and "other" roadcall requires continual reference to Accounting & Reporting Release #1.

In order to assist those transit properties that have had inadequate data collection forms and procedures or are willing to adopt new forms, a specific, standardized set of data collection forms have been developed. These have been produced since Phase I because it became clear that the quality and extent of data collection was not very good. These forms (see appendix) grew out of collecting forms on the site visits and they represent a distillation of the best forms in use at Iowa transit properties. They are recommended for use by an implemented property but they are not required.

Concommitment to recommending these new forms, all unnecessary forms and procedures are recommended but not required for abandonment. All properties are required, however, to submit their input data on the standard input forms that were developed in Phase I.

Primary to the entire non-financial UDMS program is sampling. Because it is so important and has been so emphasized, its purposes have been expanded beyond Phase I design to include some additional data collection features.

In addition to the standard features of the demand response sample form in UMTA Circular 2710.1, the new UDMS form includes:

(1) Client group/contract group identification. This provides for designating the entire sample for a particular client group or coding the sample sheet to as many client groups as desired. I 406B can thus reflect the sampling statistics by client group. (2) Revenue miles and hours can be determined from the sampling, or the sample information can be used as a check on the revenue miles and hours otherwise recorded. This is accomplished by (a) recording the initial dispatching trip, (b) identifying service breaks during the sample and (c) recording non-revenue miles and hours of the vehicle's return to the facility or parking. These characteristics will be used in I 406.

For the small urban system, specialized sampling plans were developed to accomplish particular informational needs. These specialized sampling plans were developed in combination with the transit operator and transit planner.

In all the implemented properties the sampling procedures have been initiated and are ongoing on a regular basis. However, it did take considerable time to start this process and not very much actual sampling was accomplished during the fiscal year. In the small urban systems, providing the essential personnel to conduct sampling was difficult but in all these cases provisions have been made. In the regional systems, drivers had some difficulty with properly filling out the sheets, but all systems appear to be producing good quality samples. Fortunately, poor recording by a driver shows up quite readily.

D. Edit and keypunch data

Financial

Following is a discussion of the activities performed with a small urban property.

All codings for fiscal transactions were edited before the data was keypunched. The editing procedure included the following:

1. The total of coded cash receipts was verified by footing the city's transit cash receipts ledger cards.
2. The total of coded cash disbursements was verified by footing the city's transit disbursements ledger cards.
3. All entries were reviewed to determine that the proper mode, department, function, and object codings had been used.
4. Wage and salary accounts were reviewed to determine the employees' share of hospital and medical insurance was correct.
5. The proper amount of employees' FICA and IPERS contributions was determined and the corresponding entries verified.
6. The allocations of fringe benefits to functions were verified by comparing the percentages used to comparable percentages of wages by function.

Notification of, and the reasoning for, all changes and corrections made in the codings were transmitted to the city clerk.

The fiscal transactions were keypunched.

Following is a discussion of the activities performed with a regional transit property.

All codings for fiscal transactions were edited before the data was keypunched. Editing procedures included the following:

1. Total coded monthly cash receipts were verified by reviewing the monthly bank reconciliations and by reviewing the activity in the savings accounts.
2. Total coded monthly cash disbursements were verified by reviewing the monthly bank reconciliation, and by reviewing the activity in the savings accounts.
3. All entries were reviewed to determine that the proper mode, department, function, and object codings had been applied.
4. The **propriety** of distributions of fringe benefits to functions were reviewed and compared to the corresponding entries.

Notification of, and the reasoning for, all changes or corrections made in the codings were transmitted to the bookkeeper.

The fiscal transactions were keypunched.

Non-Financial

The input forms I 401 through I 408 were carefully edited and some information verified before the data was keypunched. Verification began with checking the headers on each of the forms to be sure proper system and departmental identification is made (see also Accounting and Reporting Release #2).

1. I 401 - For fixed route systems, this form was verified against the system's schedule of routes.

2. I 402 - Hours of maintenance were verified against the dollar amounts for labor appearing in the financial report for the same period. Numbers of gallons of fuel were compared with the number of vehicle miles registered in I 408.
3. I 404 - Because of the extensive use of "in-kind" labor and part-time personnel, each property was expected to identify personnel by category in notes on the form. These notes were verified against the numbers that appear.
4. I 406 - Revenue miles and hours vs. vehicle miles and hours were verified against the sampling (see Part C). Personnel were checked against I 404 and Service Supplied was checked against the sampling and I 406A and I 406B.
5. I 406A - Summary sheets from the sampling were compared with the totals that appeared on I 406A.
6. I 406B - D.R.S. summary sheets were compared with totals on I 406B. Proper coding of sample sheets was verified if I 406B was broken down by client group.
7. I 408 - Mileage was verified against I 406 and fuel consumption I 402.

Data from the forms was then keypunched.

E. Review output, make necessary corrections, provide transit system with output. Assist transit personnel with interpretation of output.

Financial

For small urban and regional properties, output reflecting financial activity for fiscal year 1980 was received and reviewed. Necessary adjustments were made and processed. Copies of adjusting entries were provided to the city clerk or bookkeeper. Final output for the fiscal year was furnished to and discussed with the city clerk, bookkeeper and transit managers.

Non-Financial

Output of the non-financial activity was received and reviewed. All corrections were made before the output was given to the property.

The primary limitation in the end of year FY 1980 non-financial reports was that the I 406 series (I 406, I 406A and I 406B) was based on a very limited amount of sample information. Only one property performed an entire quarter of sampling before the end of the year. Most of the regional properties got their sampling initiated before the new fiscal year began, but there was not enough information to produce definitive I 406B forms.

The urban property sampling was even more difficult to initiate because of the special personnel requirements of fixed route sampling. Coralville and Burlington produced sample information for 1st quarter FY 1981 which was included in their FY 1980 output.

Serious interpretation of the FY 1980 output will need to await several more quarters of information, particularly sample information. Also, the tools of interpretation are being developed in Phase IV, the performance measurement and performance auditing section, which will not be completed until November of next year.

However, there are some preliminary observations that can be made about these first printouts. Several tables were produced to statistically compare the properties with regard to some key indicators.

F. Monitor the system for procedural compliance and provide technical assistance to transit personnel.

Financial

Small urban and regional systems:

The system has been monitored primarily by review of the first quarter activity for fiscal year 1981. The same editing procedures described in Section D were employed in reviewing the coded financial data for the first quarter. In addition, any questions concerning UDMS financial procedures or techniques raised by the bookkeeper or transit manager have been responded to with an instructional demeanor.

Non-Financial

Each system was monitored to verify the accuracy of the data being collected. In all but one property the primary data needed to complete the UDMS forms was in-house. Only in Region 6 was the primary data not available. Region 6 relied on summary reports from the agencies providing transit. These reports were often inadequate or questionable. Occassionally the required information was acquired by a telephone call to an agency employee.

Additionally, each property was monitored to be sure that the sampling procedure was being regularly performed. During the FY 1980 period and 1st quarter of FY 1981, each property sent their

sample sheets for review. Any problems or deficiency in the sampling procedure or sample sheets were reported back to the property for correction.

G. Other Procedures Performed

Financial

In addition to the previously described implementation procedures, the following activities were performed of small urban and regional properties.

1. There was an in-depth review of the property's organizational and operational structure
2. A UDMS chart of accounts was prepared for the property, and
3. A beginning balance sheet for fiscal year 1980 was determined and entered for the property.

Non-Financial

In the process of implementing the UDMS program, a number of other procedures were routinely performed:

1. The state transit assistance contract was reviewed in each instance to verify that the financial and non-financial terms of the contract were being met.
2. At some point in the implementation process the planning agency (if different than the transit property) was invited to discuss the implications of UDMS information for the planning process and to determine whether particular UDMS information might be valuable to the Regional Transit Development Program or other planning studies.

3. Meetings were usually held with the principal funding agencies of the regional systems to discuss the efficacy of using the UDMS report as the single operating tool.
4. The reporting entity's organizational and operational structure were reviewed to determine its relationship to provided services. This evaluation helped determine the manner of recording financial and non-financial information. If, for example, there were not sufficient administrative controls over brokered services (i.e. - primary data was not available or forthcoming), those services were not detailed in the financial and non-financial reports.

UDMS TRANSIT FACT SHEET

	SMALL URBAN SYSTEMS			REGIONAL SYSTEMS			
	Iowa City	Coralville	Burlington	ECICOG	Great River Bend	ITS	Region 6
Income 401 A/CS	476,830	98,054	97,325	60,518	11,636	12,147	1,844
402 A/CS	11,820	29,004	-	143,899	69,987	213,142	18,378
TOTAL	488,650	127,058	97,325	204,417	81,623	225,289	20,322
Expense (exclusive of reconciling items)	1,100,097	309,835	498,891	421,995	152,599	369,573	105,950
Ratio	.44:1	.41:1	.20:1	.48:1	.53:1	.61:1	.19:1
Expenses by function -							
Vehicle Operation	716,944	212,408	304,330	319,530	89,572	277,275	51,409
Vehicle Maintenance	137,971	48,834	112,996	25,890	4,692	25,136	6,487
Non-Vehicle Maintenance	11,055	2,530	74	1,108	1,075	10	9
General Administration	134,127	46,063	81,491	74,357	57,260	67,152	48,045
TOTAL (excludes Recon. Item)	1,100,097	309,835	498,891	421,995	152,599	369,513	105,950
% of Total Expenses	%	%	%	%	%	%	%
Vehicle Operation	65.2	68.5	61.0	75.7	58.7	75.0	48.5
Vehicle Maintenance	21.6	15.8	22.7	6.1	3.1	6.8	6.1
Non-Vehicle Maintenance	1.0	.8	-	.3	.7	-	-
General Administration	12.2	14.9	16.3	17.9	37.5	18.2	45.4
State Transit Assistance	177,932	23,161	76,834	85,800	44,062	115,852	40,390
% of Total Expenditures	16.2	7.5	15.4	20.3	28.9	31.3	38.1
Purchase of Transportation Service	33,670	4,574	-	-0-	-0-	12,431	28,195
% of Total Expenditures	3.1	1.5	-	-	-	3.4	26.6

UDMS TRANSIT FACT SHEET

	SMALL URBAN SYSTEM			REGIONAL SYSTEMS			
	Iowa City	Coralville	Burlington	ECICOG	Great River Bend	ITS	Region 6
Revenue Summary							
Fares 401 & 402	488,650	127,058	97,325	204,417	81,623	225,289	20,322
Local Operating Assist.	425,208	183,586	291,774	85,829	-	44	45,782
State Operating Assist.	177,932	23,161	76,834	85,800	44,062	124,685	40,390
Federal Operating Assist.	-	-	-	8,741	22,060	6,624	-
Other Income	29,912	1,533	5,276	2,212	29	4,187	70
TOTAL Revenue	1,121,701	335,338	471,209	386,999	147,764	361,829	106,564
% of Total Revenue	%	%	%	%	%	%	%
Fares 401 & 402	43.6	37.9	20.7	52.8	55.3	62.3	19.1
Local Operating Assist.	37.9	54.7	61.9	22.2	-	-	43.0
State Operating Assist.	15.9	6.9	16.3	22.2	29.8	34.7	37.9
Federal Operating Assist.	-	-	-	2.2	14.9	1.8	-
Other Income	2.6	.5	1.1	.6	-	1.2	-

UDMS TRANSIT FACT SHEET

EMPLOYEE CLASSIFICATION	Iowa City		Coralville		Burlington		Small Urban Total		ECICOG		Great River Bend		ITS		Region 6		Regional Systems Total		All Systems Total	
	#	#/Total	#	#/Total	#	#/Total	#	#/Total	#	#/Total	#	#/Total	#	#/Total	#	#/Total	#	#/Total	#	#/Total
TRANSPORTATION EXECUTIVE, PROFESSIONAL & SUPERVISORY PERSONNEL	2.0	.04	1.0	.08	1.0	.05	4	.05	2.2	.07	1.5	.16	2.0	.05					9.7	.060
TRANSPORTATION SUPPORT PERSONNEL	1.8	.04			1.5	.07	3.3	.042	4.9	.16	1.8	.19	7.0	.19			13.7	.165	17	.105
REVENUE VEHICLE OPERATORS	38.3	.85	8.4	.70	16.0	.72	62.8	.791	22.8	.76	6.1	.65	26.0	.70	5.5	.85	60.4	.72	123	.758
MAINTENANCE EXECUTIVE, PROFESSIONAL & SUPERVISORY PERSONNEL					.3	.01													.3	.002
MAINTENANCE SUPPORT PERSONNEL					.3	.01													.3	.002
REVENUE VEHICLE MAINTENANCE MECHANICS			1.0	.08	3.0	.14	4	.05					2.0	.05			2	.024	6	.037
VEHICLE SERVICING PERSONNEL	3.0	.07	1.5	.12			4.5	.057											4.5	.028
GENERAL ADMINISTRATION EXECUTIVE, PROFESSIONAL & SUPERVISORY PERSONNEL															.7	.11	.7	.008	.7	.004
GENERAL ADMINISTRATION SUPPORT PERSONNEL			.2	.02			.22	.003					.3	.01	.3	.05	.6	.007	.8	.005
TOTAL TRANSIT SYSTEM EMPLOYEES	45.1		12.2		22.1		79.4		29.9		9.4		37.3		37.3		83.1		162.5	45.1

UDMS TRANSIT FACT SHEET

	SMALL URBAN SYSTEMS			REGIONAL SYSTEMS			
	Iowa City	Coralville	Burlington	ECICOG	GREAT RIVER BEND	ITS	REGION 6
TOTAL COST PER REVENUE MILE	1,100,097 / 737,266 = 1.492	309,835 / 180,471 = 1.717	498,891 / 211,587 = 2.358	421,995 / 651,339 = .648	152,599 / 112,152 = 1.361	369,673 / 509,374 = .726	105,950 / 202,516 = .523
OPERATING COST PER REVENUE MILE	716,944 / 737,266 = .972	212,408 / 180,471 = 1.177	304,330 / 211,587 = 1.438	319,530 / 651,339 = .491	89,572 / 112,152 = .799	277,275 / 509,374 = .544	51,409 / 202,516 = .254
REVENUE PER REVENUE MILE	488,650 / 737,266 = .663	127,058 / 180,471 = .704	97,325 / 211,587 = .460	204,417 / 651,339 = .314	81,623 / 112,152 = .728	225,289 / 509,374 = .442	20,322 / 202,516 = 0.100
TOTAL COST PER PASSENGER TRIP	1,100,097 / 2,010,455 = .547	309,835 / 484,870 = .639	498,891 / 524,023 = .952	421,995 / 287,385 = 1.468	152,599 / 34,075 = 4.397	369,573 / 207,913 = 1.778	105,950 / 25,957 = 4.082
REVENUE PER PASSENGER TRIP	488,650 / 2,010,455 = .243	127,058 / 484,870 = .262	97,325 / 524,023 = .186	204,417 / 287,385 = .711	81,623 / 34,075 = 2.352	225,289 / 207,913 = 1.084	20,322 / 25,957 = .783
TOTAL COST PER CAPACITY MILE	1,100,097 / 54,483,957 = .020	309,835 / 14,149,023 = .022	498,891 / 4,931,059 = .101	421,995 / 8,988,478 = .047	152,599 / 1,330,123 = .115	369,573 / 6,825,612 = .054	203,934 / 271,887 = .750

Form I 401

UDMS

TRANSIT SYSTEM SERVICE PERIOD SCHEDULE

Transit System Name _____ Department Name _____

Transit System I.D. #_____ Department # _____

Month/Quarter _____ Client Group _____

Date of Compilation _____ Mode _____

LINE NO.	ITEM	WEEKDAYS	SATURDAY	SUNDAY
	LIMITS OF SERVICE PERIOD:			
01	Time AM service begins			
02	Time AM *PEAK* service begins			
03	Time Midday service begins			
04	Time PM *PEAK* service begins			
05	Time Night service begins			
06	Time Night(service ends)			
	TOTAL HOURS			
07	AM Peak period			
08	Midday period			
09	PM Peak period			
10	Night period			
11	ENTIRE DAY–TOTAL HOURS			

REVENUE VEHICLE MAINTENANCE PERFORMANCE AND ENERGY CONSUMPTION SCHEDULE

Transit System Name _____ Department Name _____

Transit System I.D. # _____ Department # _____

Month/Quarter _____ Client Group _____

Date of Compilation _____ Mode _____

LINE NO.	ITEM	AMOUNTS
	NUMBER OF ROADCALLS	
01	For mechanical failure	
02	For other reasons	
03	TOTAL ROADCALLS	
04	**TOTAL LABOR HOURS FOR INSPECTION & MAINTENANCE**	
	NUMBER OF LIGHT MAINTENANCE FACILITIES	
05	Serving under 200 vehicles	
06	Serving 200-300 vehicles	
07	Serving more than 300 vehicles	
08	TOTAL LIGHT MAINTENANCE FACILITIES	
	ENERGY CONSUMPTION	
09	Kilowatt hours of propulsion power (000)	
10	Gallons of diesel fuel	
11	Gallons of gasoline	
12	Gallons of LPG or LNG	
13	Gallons of bunker fuel	

UDMS

Form I 403

TRANSIT WAY MILEAGE SCHEDULE

Transit System Name _____ Department Name _____

Transit System I.D. # _____ Department # _____

Month/Quarter _____ Client Group _____

Date of Compilation _____ Mode _____

LINE NO.	RAILWAY CLASSIFICATIONS	MILES OF DIRECTIONAL ROADWAY	MILES OF ELECTRIC TRACK	NUMBER OF CROSSINGS	NUMBER OF STATIONS
	RAIL RAPID				
01	At grade, exclusive row*				
02	At grade, with cross traffic				
03	Elevated on structure				
04	Elevated on fill				
05	Open cut				
06	Subway				
07	TOTAL				
	STREETCAR				
08	At grade, exclusive row*				
09	At grade, with cross traffic				
10	At grade, mixed and cross traffic				
11	Elevated on structure				
12	Elevated on fill				
13	Open cut				
14	Subway				
15	TOTAL				
16	FERRY BOAT MILES OF WATERWAY				

	BUS ROADWAY CLASSIFICATIONS	DIRECTIONAL MILES ON EXCLUSIVE ROW*	DIRECTIONAL MILES ON CONTROLLED ACCESS ROW*	DIRECTIONAL MILES ON MIXED TRAFFIC ROW*
17	MOTORBUS			
18	TROLLEY BUS			
19	TOTAL MILES			

Form I 404

UDMS

TRANSIT SYSTEM EMPLOYEE COUNT SCHEDULE

Transit System Name _____ Department Name _____

Transit System I.D. #_____ Department # _____

Month/Quarter _____ Client Group _____

Date of Compilation _____ Mode _____

LINE NO.	EMPLOYEE CLASSIFICATION	EMPLOYEE EQUIVALENTS	
		OPERATING LABOR	CAPITAL LABOR
01	11. Transportation Executive, Professional and Supervisory Personnel		
02	12. Transportation Support Personnel		
03	13. Revenue Vehicle Operators		
04	21 Maintenance Executive, Professional and Supervisory Personnel		
05	22. Maintenance Support Personnel		
06	23. Revenue Vehicle Maintenance Mechanics		
07	24. Other Maintenance Mechanics		
08	25. Vehicle Servicing Personnel		
09	31. General Administration Executive, Professional and Supervisory Personnel		
10	32. General Administration Support Personnel		
11	TOTAL TRANSIT SYSTEM EMPLOYEES		

TRANSIT SYSTEM ACCIDENTS SCHEDULE

Transit System Name _____ Department Name _____

Transit System I.D. #_____ Department # _____

Month/Quarter _____ Client Group _____

Date of Compilation _____ Mode _____

LINE NO.	ITEM	COLLISION	NON-COLLISION	STATION
	NUMBER OF ACCIDENTS CLASSIFIED AS:			
01	Fatality, Personal Injury & Property Damage			
02	Fatality & Personal Injury			
03	Fatality & Property Damage			
04	Fatality Only			
05	Personal Injury & Property Damage			
06	Personal Injury Only			
07	Property Damage Only			
08	**TOTAL ACCIDENTS**			
	NUMBER OF FATALITIES CLASSIFIED AS:			
	Revenue Vehicle Occupants			
09	On-Duty Occupants			
10	Others			
	Other Vehicle Occupants			
11	On-Duty Employees			
12	Others			
	Pedestrians			
13	On-Duty Employees			
14	Others			
	NUMBER OF PERSONS INJURED CLASSIFIED AS:			
	Revenue Vehicle Occupants			
15	On-Duty Employees			
16	Others			
	Other Vehicle Occupants			
17	On-Duty Employees			
18	Others			
	Pedestrians			
19	On-Duty Employees			
20	Others			

Form I 406

TRANSIT SYSTEM SERVICE SUPPLIED, SERVICE CONSUMED AND SERVICE PERSONNEL SCHEDULE

Transit System Name _____ Department Name _____

Transit System I.D. # _____ Department # _____

Month/Quarter _____ Client Group _____

Date of Compilation _____ Mode _____

LINE NO.	ITEM	Reporting Period Totals	AM PEAK*	MIDDAY*	PM PEAK*	NIGHT*	AVERAGE WEEKDAY	SATURDAY**	SUNDAY**
	SERVICE SUPPLIED								
01	Number of vehicles in operation								
02	Total vehicle miles								
03	Total vehicle hours								
04	Total vehicle revenue miles								
05	Total vehicle revenue hours								
06	Revenue capacity miles								
07	Charter Service Hours								
08	Charter Service Miles								
09	School Bus Hours								
10	School Bus Miles								
	SERVICE CONSUMED								
11	Unlinked passenger trips								
12	Unlinked passenger miles								
13	Av. time per unlinked Trip (min)								
	SERVICE PERSONNEL (No.)								
	Scheduled vehicle operators								
14	Full-time								
15	Part-time								
16	Revenue vehicle movement control personnel								
17	Ticket/Token sales agent, fare collectors, gate keepers								
18	Route/schedule information operators								
19	Security agents								
20	TOTAL SERVICE PERSONNEL								

*For average weekday **Average Saturday or Sunday

Form I 406A

UDMS

FIXED ROUTE REPORT

Transit System Name _____ Department Name _____

Transit System I.D. # _____ Department # _____

Month/Quarter _____ Client Group _____

Date of Compilation _____ Mode Fixed Route

LINE NO.		ITEM	WEEKDAYS b AM PEAK	c MIDDAY	d PM PEAK	e NIGHT	SATURDAY	SUNDAY	TOTAL
		Accumulations from Daily Record Sheet							
*	1	(20) Passengers Boarded							
	2	(21) Passengers on Board							
	3	(22) Bus Trip Distance							
*	4	(23) Passenger Miles							
	5	(24) Bus Trip Time							
*	6	(25) Passenger Minutes							
	7	(26) Capacity Miles							
	8	(27) Seat Miles							
*	9	(28) Trips in Sample							
*	10	(29) Total Number of Bus Trips							
		Sample Averages							
*	11	Unlinked Passengers per Trip (1/9)							
*	12	Passenger Miles per Trip (4/9)							
*	13	Unlinked Passenger Trip Time (6/9)							
		Annual Totals							
*	14	Unlinked Passenger Trips (10x11)							
*	15	Passenger Miles (10x12)							

Form I 406B

UDMS

DEMAND RESPONSIVE REPORT

Transit System Name _____ Department Name _____

Transit System I.D. #_____ Department # _____

Month/Quarter _____ Client Group _____

Date of Compilation _____ Mode DRS

LINE NO.	ITEM	TOTAL, ALL SAMPLES
	ACCUMULATIONS FROM DRS SUMMARY SHEET	
*01	(18) Total passengers in samples	
02	(19) Total trips	
03	(20) Total trip distance	
*04	(21) Total passenger miles	
05	(22) Total vehicle trip time	
*06	(23) Total passenger minutes	
07	(24) Total capacity miles	
08	(25) Total seat miles	
	SAMPLE ESTIMATES	
*09	Average passenger trip distance (4/1)	
*10	Average passenger trip time (6/1)	
	ANNUAL TOTALS	
*11	Total passengers *(From weekly count sheet)*	
*12	Total passenger miles *(11 x 9)*	

**Required by the Section 15 Reporting System*

Revenue Vehicle Inventory Schedule

Form I 408

Transit System Name _____ Department Name _____

Transit System I.D. # _____ Department # _____

Month/Quarter _____ Client Group _____

Date of Compilation _____ Mode _____

LINE NUMBER	VEHICLE NUMBER	VEHICLE TYPE CODE	OWNERSHIP CODE	YEAR OF MANUFACTURE	MANUFACTURER CODE	MODEL & SERIAL #	FUEL TYPE CODE	SEATING CAPACITY	STANDING CAPACITY	REPORTING PERIOD MILES	TOTAL VEHICLE MILES
01											
02											
03											
04											
05											
06											
07											
08											
09											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											

UDMS

NON-PASSENGER SERVICE

Form I 409

Transit System Name _____ Department Name _____

Transit System I.D. # _____ Department # _____

Month/Quarter _____ Client Group _____

Date of Compilation _____ Mode _____

Type of Non-Passenger Transit Service Supplied

1. Parcels

2. Medicines

3. Meals

4. Other (Identify)

# of Trips

# of Miles of Service

#of Hours of Service

comment ____________________

DRS VEHICLE TRIP SHEET

Client group ____________________

(1) Survey Date ________ (2) Day of Week ________ (3) Survey Vehicle No. ________

(4) Driver Number ________ (5) Vehicle Total Capacity ________ (6) Vehicle Seated Capacity ________

(7) Number of Pass.	(8) Pick-up Address	(9) Pick-up Odometer Reading	(10) Pick-up Time	(11) Drop-off Address(es)	(12) Drop-off Odometer Reading	(13) Drop-off Time	(14) Trip Distance (12)-(9)	(15) Passenger Miles (7)x(14)	(16) Trip Time (13-10)	(17) Passenger Minutes (7)x(16)
(18) Total Passengers in Sample				Total Vehicle Trips (19)			(20)	(21)	(22)	(23)

(24) Capacity Miles [ ]

(25) Seat Miles [ ]

Mileage begins ________

Mileage ends ________

Total miles ________

Starting time ________

Ending time ________

UDMS - FIXED ROUTE

SURVEY TRIP SHEET

Comment ____________________

(1) Trip Serial No. ________ (2) Date ________ (3) Day of Week ________ (4) Time Period ________

(5) Route No. ________ (6) Vehicle Inventory Number ________ (7) Total Capacity ________ (8) Seated Capacity ________

(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Stop No.	Stop Description	Arrival Time	Odometer Reading	Passengers Boarded	Passengers De-boarded	Passengers on Board	Distance Between Stops	Passenger Miles (15)x(16)	Minutes Between Stops	Passenger Minutes (15)x(18)

(26) Capacity Miles (7)x(22)

TOTALS

(20) (21) (22) (23) (24) (25)

(27) Seat Miles (8)x(22)

Mileage begins ________

Mileage ends ________

Total miles ________

Starting time ________

Ending time ________

GLOSSARY AND BIBLIOGRAPHY

Accrual Basis Accounting

Under the **accrual** basis of accounting, revenues and expenses are recorded in the fiscal period in which they were earned or incurred. The accrual basis reflects income in the period the services were rendered whether or not payment was actually received; expenses are reflected in the period the goods or services were received whether or not payment was actually made. (See also: Cash Basis Accounting)

Cash Basis Accounting

Under the cash basis of accounting, cash receipts and cash disbursements are recorded in the fiscal period the actual cash transaction occurred. The cash basis reflects the actual flow of cash in and out regardless of when the income was earned, or when the liabilities for expenses were incurred. (See also: Accrual Basis Accounting)

Client

A member of an identifiable group whose membership is limited to those taking advantage of a specific program, service or facility.

Comprehensive Employment and Training Act of 1973 (CETA)

Provides job training and employment opportunities for economically disadvantaged, unemployed, or underemployed persons, and also funds for transportation to training centers, work sites, educational and counseling centers.

Contributed Services

In-kind labor, see in-kind.

Demand Response

Synonymous with Dial-A-Ride, meaning transportation systems in which shared vehicles (usually vans) provide door-to-door service on a demand response basis to a number of individuals with different origins and destinations.

Ecosometrics

Ecosometrics, Inc. is a consulting firm that authored: A Model Billing and Accounting System for Coordinated Transportation Systems, January 31, 1979.

F.A.R.E.

Federal Accounting and Reporting Elements was the developmental predecessor to the Section 15 program.

Function

Function is the classification of expenses as to the type and purpose of the expenditures. Functions are identified with a three-digit code. Level C classifies expenses to four separate functions as follows:

	Function Code
Vehicle operations	010
Vehicle maintenance	041
Non-vehicle maintenance	042
General administration	160

In-Kind Services

The receipt of physical goods from, or the payment of operational costs by a related agency or department without monetary reimbursement by the receipient.

Level C

U.M.T.A. Uniform System of Accounts and and Reporting System, Level C Reporting Manual and Sample Forms. Level C applies to transit properties with 100 revenue vehicles or less.

Medicaid

Title XIX of the Social Security Act supports the Medicaid program, which seeks to enable those persons who cannot afford good medical care to receive high-quality care through a federally subsidized program. Funds are available to cover the cost of transportation to health facilities for Medicaid recipients.

Metropolitan Planning Organization (MPO)

The organization that is charged with planning a metropolitan area's mass transportation program and comprehensive highway program. An MPO is recognized by UMTA and FHWA for transportation planning programs in metropolitan areas with populations of 50,000 or more.

Mode

Mode refers to the type of transportation service provided. In Level C, six (6) different transportation modes are specifically identified and accorded distinctive numbers:

1. Motor Bus
2. Rail Rapid Transit
3. Street Car
4. Trolley Bus
5. Demand Response
6. Ferry Boat
9. Other

OASC - 10

A Guide for State and Local Government Agencies, Cost Principles and Procedures for Establishing Cost Allocation Plans and Indirect Cost Rates for Grants and Contracts with the Federal Government, U.S. Department of H.E.W. , December, 1976.

Object

Object is the identification of the articles or types of services given or received. Objects are identified with a five-digit code. An example of articles purchased is gasoline or tires. An example of a type of service given could be fares for transportation provided. Labor is an example of a type of service received.

Regional Transit System

Public transit systems serving all or part of multi-county areas with the administrative and overhead support services for the overall regional transit system consolidated into one existing or new agency to be mutually agreed upon by the participating members.

Section 15

Section 15 of the Urban Mass Transportation Act, as amended, November, 1974, contains the provisions of the Uniform System of Accounts and Records and Reporting System.

Social Security Act

Title XX - Provides federal financial support for social services other than income maintenance provided to low-income individuals and families. Transportation services can be provided under Title XX as a support component of a primary service to improve service delivery or as a primary service to improve the self-sufficiency of low-income individuals.

Transportation Authority

A local or regional organization with responsibility for planning, funding, and sometimes operating public transportation services in an area.

U.D.M.S.

Uniform Data Management System. This acronym refers to Iowa's accounting and reporting system only.

Urban Mass Transportation Act of 1964

Section 16(b)(2) - Provides money to each state by formula to help private, nonprofit organizations provide for the special transportation needs of elderly and handicapped persons that are currently not being met.

U.M.T.A.

Urban Mass Transportation Administration.

Volume II

Urban Mass Transportation Industry Uniform System of Accounts and Records and Reporting System, January 10, 1977. This volume contains the definitions and hierarchical relationships for this uniform system of accounts and records.