Report of the Advisory Council on School Finances for a Uniform Chart of Accounts

in Accordance with Rhode Island General Laws 16-2-9.3 and 16-2-9.4

May 2007

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Uniform Chart of Accounts (UCOA) Project

UCOA Structure Development and Findings

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Overview of the Uniform Chart of Accounts Project

This report provides a summary of the work performed, information analyzed, and findings to date on the Uniform Chart of Accounts Project (“*UCOA Project”).*

This report will refer to Districts, which for purposes of this report only, encompasses both School Districts as well as Charter Schools. There are two schools (Davies Career and Technology School and RI School for the Deaf), that use the state RIFANS system, both of which will remain on that system.

Mandate

Under R.I. General Law §16-2-9.4, the Office of the Auditor General and the R.I. Department of Elementary and Secondary Education (“RIDE”) are charged with promulgating a uniform system of accounting, including a Uniform Chart of Accounts (“UCOA”). Significant work has been performed to fulfill the mandate which will improve the level of decision-quality data for School Districts.

What is a Chart of Accounts?

A chart of accounts is an accounting tool. It is a uniform numbering system designed to logically track revenue and expenditures in accounting systems. This framework is used to capture original transactions, organize that data logically, and provide a robust basis for reporting on the results. A well-designed chart of accounts satisfies these requirements by providing the ability through recording original transactions to isolate the data into segmented “buckets” and by using tools to combine data from selected buckets to provide meaningful reports.

A Uniform Chart of Accounts is used by multiple entities such as School Districts and Charter Schools. A Uniform Chart of Accounts will **standardize** the way Districts account for resources budgeted and expended and provide greater accountability to assist decision-makers at all levels.

***Transparency** – Clear, detectable view of how dollars are invested in logical, granular detail;*
***Uniformity** – Conforming to the same principles, standards or rules used from district to district to ensure consistency;*
***Accountability** – Precise rules for capturing and reporting data aligned to specific goals and objectives; and*
***Comparability** – Uniformity of method and content to allow comparison between different, but like entities.*

The benefits include:

- Uniformity of Format and Application
- Isolation of Data in Segments creating Granularity of Data
- Power of Combining Segments to address specific questions
- Comparability of Data
- Numbering Methodology enhances Ad-hoc Reporting and Data Warehouse Searches
- Allows for more effective analysis when combined with non-accounting data

Objectives

The primary objective of the UCOA is to meet the internal and external budgeting, accounting, monitoring, and reporting requirements of the Districts and the State by providing consistent detail in the General Ledger to address the questions and need for information of stakeholders and decision-makers at all levels.

Another objective of the UCOA is to integrate the financial data into RIDE's CEIS (Comprehensive Educational Information System) Data Warehouse for school district data from all Districts. Still another benefit is to improve the consistency in tracking costs to enhance the consistency of the **In$ite** analysis. Those requirements include the flexibility to perform appropriate analysis, including an analysis of Return on Investment. The data, for effective analysis, must be prepared in a consistent and comparable method and must be provided using uniform categories and groupings.

Data Warehouse

A Data Warehouse is a software application designed for archiving and analyzing an organization's historical data, such as revenues, expenditures, student demographic and achievement/assessment data, teacher data, and other information from education operations and purposes. School Districts and other education-related entities will provide information from their operational systems to the Data Warehouse on a regular schedule.

RIDE's Data Warehouse will store the financial and other data from every District in Rhode Island along with other state-level data. Once completed, complex queries and analyses may be performed on the information that link the financial information with non-financial information.

Development Process

The goal of the UCOA Project is to gather and analyze necessary data resulting in a completed UCOA ready for use in Rhode Island School Districts.

RIDE recognized that EDmin.com Inc. ("EDmin") had the expertise and experience to assist RIDE in fulfilling these objectives. As the sole source provider of **In$ite**, the financial reporting tool mandated by RIDE for use in all districts, EDmin's expertise in designing a chart of accounts that will successfully integrate and enhance the reporting capabilities of **In$ite** is an integral component of this project.

The work described herein represents the first phase of three planned phases. The deliverables for Phase I include the development of the UCOA along with timelines and action plans for Phases II and III.

Much work has been accomplished to bring us to this point. The work performed includes the following:

- Gathered information from six (6) states concerning their Chart of Accounts structure and reporting requirements;

- Surveyed a wide variety of policy-makers and stakeholders from the state to the local level to determine their information needs;

- Surveyed all school districts to update information concerning their current accounting structures and systems to assist in the needs analysis;

- Met with representatives from the New Mexico Department of Education concerning their implementation of a statewide Uniform Chart of Accounts;

- Surveyed all vendors of accounting software currently in use in RI school districts concerning the capabilities and limitations of their systems;

- Met several times with the RI Association of School Business Officials to update them on the project and answer questions;

- Met with software vendors representing two or more RI school district clients to view their accounting software in more specificity;

- Conducted follow-up surveys with all vendors to gather vendor & district specific cost information concerning the implementation of the Uniform Chart of Accounts;

- Reviewed the vendor cost estimates with districts to validate the estimates for both external and internal costs; and;

- Meetings with the Advisory Council on School Finances to review the project status.

To gather necessary input and provide additional guidance for the successful outcome of this project, RIDE and the Office of the Auditor General established, in addition to the existing Advisory Council on School Finances, both a UCOA Workgroup and a UCOA Focus Group.

The UCOA Workgroup consists of representatives from the membership of the Advisory Council on School Finances along with Districts involved in the piloting of the UCOA. This group spent several months working with us on the structure and coding of the UCOA, providing feedback, as well as review and approval of the components developed during the process.

Members of the UCOA Workgroup are listed in **Appendix B**.

The UCOA Focus Group encompasses School Finance Officers and/or School Finance Staff not involved as pilot districts and other select representatives as desired for the purpose of expanding the input, guidance, and direction available to RIDE throughout this process. The UCOA was presented to the UCOA Focus Group in March 2007 and its members provided feedback on the structure and coding.

The Project Team

Key personnel assigned to the UCOA Project ("Project Team") included the following:

RIDE

- Carolyn Dias – Director, Office of Finance

- Cynthia Brown – Senior Finance Officer for Data & Analysis, Office of Finance (Project Manager)

EDmin

- Rick Wells, CPA – Vice President, Finance and Consulting Services (Project Manager)
- Kristine Bergford – Manager, Consulting Services

Ms. Brown directly assists EDmin to expedite issues and provides a communications link to Rhode Island school districts and RIDE.

Current Requirements and Deliverables

Since inception through the date of this report, the primary objective has been to address Tasks 1-3A of Phase I of the UCOA Project. Those tasks are as follows:

- Task 1: Data Collection
- Task 2: Data Analysis
- Task 3A: Development of Draft Proposed Uniform Chart of Accounts

The Deliverables for these tasks are as follows:

- Design and Development Rules
- Draft Account Code and Account String Structure
- Comparison of Draft Account Code and Account String Structure to existing structures
- Draft Account Code numbering methodology
- Comparison of Draft Account code numbering methodology to existing methodology
- Draft Chart of Accounts
- Draft listing of topics for inclusion in the to-be-created *RI UCOA Accounting Manual*
- Meet with the Advisory Council on School Finances as required

Task 3B, which is a continuation of the evaluation and revisions to the proposed UCOA, will carry on with the future meetings with the UCOA Workgroup and the UCOA Focus Group.

Task 4 which entails developing budget estimates, timelines, and action plans for Phases II and II will be completed shortly.

Process and Methodologies Used

Desired Outcome

The primary goal of the UCOA Project is to develop a UCOA for use by Districts in Rhode Island. A further goal is to develop a structure and methodology that will provide critical detail-level data for use not only at the local level, but also in the RIDE's CEIS Data Warehouse. The design and development of a UCOA must be based on logical business rules that are consistent

with the desired outcome. That is, the front-end design must align with the goals for back-end results.

Development "Rules"

The first process undertaken by the Project Team was to create Development Rules or principles for guiding the design of the UCOA. The following rules were adopted for development of the UCOA:

- The NCES Handbook framework as published in the *Financial Accounting for Local and State School Systems* 2003 Edition, will serve as a guideline for structure and methodology. The UCOA may differ from these guidelines if the UCOA structure and methodologies are better supportive of the reporting requirements
- RIDE will continue to retain financial data as currently reported to RIDE by Districts
- The UCOA will allow for expanding reporting capabilities
- The reporting capabilities using the UCOA will be enhanced for Districts and Charter Schools
- Codes from existing data systems within RIDE will be reviewed for capabilities and will be used wherever possible and practical
- The proposed structure will provide for future expansion for additional segments
- Standardized Fund sources will be identified and standard codes established
- Standardized Location codes will be included in the structure to provide comparative reporting capabilities by location
- Standardized Function codes will be included in the structure to provide comparative reporting capabilities by function
- Standardized Program codes will be included in the structure to provide program reporting
- Standardized Object codes will be included in the structure to provide consistent object reporting
- Standardized Job Class codes will be included in the structure to provide reporting capabilities by specific job classifications
- Flexibility will be provided to allow Districts to employ lower levels of detail where practical
- The proposed structure will support compliance with GAAP
- "XBRL" technology will be investigated to determine its use in conjunction with the UCOA and the Data Warehouse. **XBRL** (**Extensible Business Reporting Language**) is an emerging XML-based standard to define and exchange business and financial performance information. XBRL is a standards-based way to communicate business and financial performance data. These communications are defined by metadata set out in taxonomies.

Design Considerations

Two key design features for a uniform chart of accounts are to provide for adequate segment (or field) lengths and a logical, hierarchy-based numbering methodology. Adequate segment lengths

are necessary to accommodate all of the items that will be tracked and also to provide for internal expansion of those items without modifying the segment length in the future.

A uniform chart of accounts should be restricted to numbers only to reduce the potential for input errors. By doing so, the segment length is necessarily limited as follows:

1 character	10 items	(0 to 9)
2 characters	100 items	(0 to 99)
3 characters	1,000 items	(0 to 999)
4 characters	10,000 items, etc.	(0 to 9,999)

A second, but closely related issue is the logic of the numbering methodology used within each segment. Each segment should have a hierarchy established so that "generational" relationships are created by the numbering methodology. By "generational hierarchy relationships", we refer to Parent, Child, Grandchild (often called Header, Sub Account, and Detail Account) type of accounts. This relationship can be illustrated like an outline as follows:

I. Parent
    A. Child
        1. Grandchild

The goal for the Grandchild is to be related to the Child and Parent such that a logical roll-up of information is possible. The relationship between the Child and the Parent is similar. An example of this is provided by the Object codes for Revenues. Under the Revenue from Local Sources (Parent) we find two Children and five Grandchildren as follows:

No.	Level 1 (Parent)	No.	Level 2 (Child)	No.	Level 3 (Grandchild)
41000	**Revenue From Local Sources**				
		41100	Taxes Levied/Assessed by the School District		
				41101	Local Appropriation (Taxes)
				41115	Other Special Revenue/ Taxes
		41200	Revenue From Local Governmental Units other than School Districts		
				41210	Other Taxes - Other Local Governmental Units
				41220	Sales and Use Tax
				41230	Income Taxes - Other Local Governmental Units

Note the commonality of the first two digits in all codes (41) for the Parent and the commonality to the third digit to each Grandchild to its higher level Child (1 and 2) for each Child.

The segment lengths and numbering methodology currently used by the Districts is based on the specific needs of those individual Districts. When developing a uniform chart of accounts to provide uniform reporting and analysis of comparable data the segment lengths used by Districts often need to be expanded to address the larger number of items to be reported by the larger number of reporting entities. Likewise, the numbering methodology currently used by Districts may require modification to provide both the Parent-Child-Grandchild reporting capabilities and uniformity of account content and comparability.

In summary, in order to accomplish the goals and objectives of the UCOA, the length of individual segments must be of sufficient size to provide necessary flexibility.

Further, the content and numbering methodology used in the UCOA must be of sufficient breadth to accommodate the varied needs of both RIDE and each individual District. In all instances, there will be the need by Districts to increase segment lengths, change descriptions, and/or modify the numbering methodology to adopt the UCOA.

Phase 1 Analysis and Deliverables

Pursuant to the Statement of Work ("SOW") governing the parameters of the UCOA Project, RIDE submitted information delineated in the SOW to EDmin. That material embraced four main categories:

- Reporting entities;
- RIDE;
- Other state-level agencies; and
- Other states.

EDmin reviewed this data as a prelude to developing the first drafts of the UCOA structure, methodology and content. The material reviewed is characterized by these categories:

- NCES Handbook;
- Account Codes and Account Strings;
- Data published or required by RIDE; and
- District/Municipality combined accounting systems.

As part of our investigation we analyzed the results of the technical accounting survey sent to all Districts and reviewed a number of Chart of Accounts submitted by Districts. In addition, at the request of the Providence School District, we met with their Finance and IT officials to view the structure, content, and methodology of their chart of accounts. This review was undertaken because Providence, along with a small handful of other Districts in the state, shares its accounting system and structure with a municipality.

UCOA Workgroup

In the fall of 2006, the UCOA Workgroup was formed. The UCOA Workgroup consists of representatives from the membership of the Advisory Council on School Finances along with

Districts involved in the piloting of the UCOA. The Workgroup provides feedback on the structure, methodology, content and use of the UCOA.

The UCOA Workgroup has proven to be an effective sounding board and represents the various interests that will be encountered once the UCOA is adopted. Many questions, theories, alternatives, and suggestions were provided and discussed at length. On several occasions, "homework" assignments were provided to seek more in-depth feedback.

As a result of the dedicated effort, the UCOA was revised several times; each representing improvements that will help achieve the objectives of the UCOA.

Review of Current Accounting System Software used by Districts

As part of our work to design and develop the UCOA, the UCOA Project Team determined the capabilities of the existing accounting systems currently used by Districts. This analysis included conducting on-site meetings with selected software vendors, demonstrations of the capabilities of selected systems, feedback from UCOA Workgroup members, and surveys sent to all relevant vendors.

The purpose of this analysis was to:

- Discern the technical capabilities for using a chart of accounts structure and length that was being developed as part of the UCOA Project;
- Ascertain any limiting factors that might require modification of the software to meet the UCOA requirements;
- Ascertain the products and services available from software vendors and potential costs from vendors for implementing a new Chart of Accounts and for converting historical data.

The results of this analysis are provided in the sub-section entitled, *Findings on Current Accounting Systems Used* in the section entitled, **Findings and Recommendations**.

RI UCOA Accounting Manual

A deliverable from Phase I includes the outline of the proposed table of contents for the *RI UCOA Accounting Manual*. For the UCOA to be successful it must be implemented across numerous Districts with varied accounting systems, skill-sets and users, and still maintain the uniformity sought. To help ensure uniformity and consistency, an Accounting Manual must be created that provides sufficiently detailed instructions, background and guidance on technical and accounting issues. This Accounting Manual will define the specific application and use of each of the codes within the segments of the account structure and provides the foundation for Audit Standards to be applied to the local district's accounting and reporting.

EDmin developed the Accounting Manual currently in use in the state of New Mexico and also reviewed accounting manuals from California and selected other states during the development of the topics for the RI UCOA Accounting Manual.

The full development of the *RI UCOA Accounting Manual* is a task for a later phase in the UCOA Project. However, a proposed Table of Contents has been drafted and presented to the UCOA Workgroup for comment and analysis.

How to Use Accounting Data, In$ite Data and the Data Warehouse

Overview

The UCOA Project will complement another current project underway – the multi-phase development and implementation of RIDE's CEIS Data Warehouse. The Data Warehouse will contain pertinent, relevant, and accessible data from many sources, including, but not limited to, student, teacher, course, and financial data from Districts, Charter Schools and RIDE.

The UCOA will support the Data Warehouse by developing uniformity and comparability of basic accounting data for all Districts and Charter Schools.

Accounting rules and laws are, by their nature, objectively determined and defined in the promulgated literature. Accounting literature provides for and allows for judgments, estimates, and approximations. Choices between different methods of application are allowed in numerous situations. Further, the experience and skill sets of accountants will play a factor in determining the actual recording of each transaction. Accordingly, whereas rules are objectively determined, they are subjectively applied by a variety of users with a variety of skills and experience. Although the Accounting Manual will provide for much uniformity and generic objectives, subjectivity of application at the local level will be prevalent. The UCOA is designed to help limit this subjectivity

In$ite data, generated from basic accounting data, will also provide financial data that has been analyzed and allocated in a uniform and consistent manner that reduces the subjectivity of accounting procedures.

An analysis of the relationship between these three initiatives is presented below.

Charts of Accounts and General Ledgers

A chart of accounts is the map for a general ledger in an accounting system. A general ledger's *highest and best use* is to capture original transactions as efficiently as possible and to maintain control of the data posted. The goal is to organize data in a manner that most effectively produces financial reports.

Financial reports have two main users, internal users such as Managers and Boards, and external users such as Oversight Agencies, Parents, Lenders, and Bankers. Internal reports are used to help manage the operations of the entity and maintain adherence with laws and regulations. External reports are designed to recount the sources and uses of funds, and to report on fiscal accountability and compliance with budgets. A well-designed chart of accounts enables better efficiency and reliability for both internal and external uses.

Financial accounting methodologies used by School Districts typically follow a control-budget for tracking revenue and expenditures. That is, *"Who can spend what for what purpose, or How much did we pay for X?"*

Accounting systems are designed to track revenues and expenses by chart of accounts and funds. Accounting systems identify who spent dollars, not who benefited from the dollars. They identify who controls the spending of dollars, not who gained or was helped.

Accordingly, while appropriate to maintaining a District's general ledger accounts, an accounting system does not satisfy the need for management reporting on the total costs of providing services at each school. RIDE recognizes that every District's costs will not be the same - there are many policy and education program decisions that every District has the ability to make in the best interests of their students with the resources available to them.

Benefit analysis, sometimes called return on investment or "ROI" is widely used to improve organizational results. Benefit analysis should properly determine the true costs of who benefited using a consistent methodology. **In$ite**® - The Finance Analysis Model for Education™, is a system designed to facilitate benefit analysis and determine who benefited, by how much over time.

To properly determine the true costs of who benefited, gained or was helped, on a consistent method for each District and to report District data to the public, each District currently utilizes **In$ite**.

In$ite – Dollar$ and Sense

In$ite assures comparability of school-level data. Comparable data is an essential ingredient to making decisions based on the benefits of alternative uses of funds. **In$ite,** is a *complementary* tool to a District's existing accounting system, and is applied outside of a general ledger. The *highest and best use* of **In$ite**, a managerial cost accounting decision support tool, is to organize accounting data as efficiently as possible for the purpose of making fact-based decisions on the relative benefits of the uses of resources.

Attempting to apply allocation techniques similarly to that used by **In$ite** *within* the accounting system will negatively impact the *highest and best use* of the accounting system by resulting in a massive chart of accounts, lead to increased data errors and result in data that is far less reliable. **In$ite** is applied outside the general ledger system so as to not impair the general ledger's main purpose - to provide useable data for managing District operations in the manner they believe is best.

Corporations that own businesses having common operations, for instance, McDonald's and its 30,000+ restaurants in 119 countries, utilize management tools to capture and analyze operating data in a similar method and use common methodologies. The common methodologies are essential to all levels of decision making: strategic, tactical and operational. While many factors influence decisions, nothing is more important than comparable data from all 30,000 stores to detect anomalies essential to improving performance and sustaining excellence. The ability of the home office to process, analyze and report the data captured from various sources and various accounting systems is enhanced by these tools.

The use of decision support tools for benefit analysis is important to districts and over-sight agencies in shaping policy, strategy and tactics. Districts will use the benefit analysis to drive operational decisions.

Accountability, efficient operations, and return on investment calculations have been long associated with corporate world operations. There is a growing desire and need to apply these concepts to education. This process will require many years and much effort. Nevertheless the goal is right and time is critical to the success of RI students.

In$ite is the tool that enables agencies such as a RIDE to obtain, analyze and report the data necessary to address these goals.

How does **In$ite** do this? By turning the government-oriented accounting data, that is designed to track who controls dollars into the more effective analysis of who used them; converting costs from who spent to who ***benefited***.

Using patented allocation methods and logical weighting methodologies **In$ite** determines the actual cost of key functions and programs that accounting systems cannot provide. Once completed, District to District, School to School comparisons are available on a properly weighted Per-Pupil basis. When used consistently in conjunction with student achievement data, **In$ite** provides the data to determine *"what works for which students, at what cost, year after year"*. Further, the reports are easy to read and reflect a "common man" presentation that eliminates much of the confusing composition of most government financial reports.

Data in the Data Warehouse

A data warehouse is a software application designed for archiving and analyzing an organization's historical data, such as revenues, expenditures, assorted student data, teacher data, and other information from education operations and purposes. An organization provides information from its operational systems to the data warehouse on a regular schedule.

RIDE's CEIS Data Warehouse will store the data from every District in Rhode Island along with other state-level data. Once completed, complex queries and analyses may be performed on the information.

For example, the information stored in the Data Warehouse can be used to determine which day of the week students were most commonly absent. Or how student assessment scores differed by teachers and how much and which kind of training was provided to those teachers.

Another example is analyzing various assessment, program and student data with **In$ite** cost data to determine the return on investment for selected programs and instructional areas.

In other words, the Data Warehouse will contain various types of raw material for an effective decision support system.

But as noted earlier, there is a significant difference between data that will be provided by the UCOA and data provided by In$ite.

Think of them as "twins". Twins come in two varieties, fraternal and identical. Both are derived from the same DNA of the parents (accounting data). Identical twins are just that, exact copies of

each other, with the same DNA, same color eyes, hair, etc. Fraternal twins, on the other hand, are similar to each other, but not exactly the same. They may share many attributes, but will be different in many ways. So it is with General Ledger Data and **In$ite** Data. They are Fraternal Twins, not identical.

The General Ledger data will be organized from original transactions and prepared on the budgetary basis of who can spend dollars. The In$ite data will be highly analyzed, allocated and weighted by logical methodologies to determine the true costs associated with who benefited from the expenditure of dollars.

Consequently, which data set one would use, the General Ledger Data loaded with the UCOA, or the **In$ite** Data, will depend on what one is intending to determine. If for example, one wanted to know how much money was directly spent on the subject of Mathematics for the High Schools in Rhode Island; one would query the UCOA data, focusing on the Subject and Locations segments. If, alternatively, one wanted to know the total costs incurred by each High School in Rhode Island on a per-pupil basis for Face to Face Teaching, one would query the In$ite data, focusing on the Function reports.

Findings and Recommendations

Overall Structure

The structure and hierarchy of the UCOA is presented below. This structure will give Districts the ability to report accurately and effectively on financial activities, to segregate and group accounts with the greatest amount of flexibility resulting in the ability to produce the most useful financial reports.

In addition to the goals noted earlier, the standardized account code structure will fulfill these key objectives.

- Provide more transparent information for administrators, parents, board members, legislators, and other interested parties;
- Create uniformity of content and methodology;
- Increase accountability by enhancing the quality and quantity of financial information;
- Improve financial data collection, reporting, transmission, accuracy, and comparability among Rhode Island districts and nationally;
- Aid in the creation and development of standard and ad hoc reports within the UCOA and for use in a Data Warehouse by using "wildcard" capabilities. This is enabled through the logical, hierarchical numbering methodology;
- Create a logical framework that can be used to determine where monies for education originate and how they are used;
- Reduce the administrative burden on districts in preparing required financial reports; and
- Enable school districts to better comply with U.S. generally accepted accounting principles (GAAP) promulgated by the Government Accounting Standards Board.

The required UCOA structure is composed of eight required segments. In addition, two segments, one at the beginning and one at the end of the string, were created and identified for optional use.

Based on the analysis and the collective input of the UCOA Workgroup, the structure for the UCOA is as follows:

Seg-ment	Description	Structure	Number Methodology Rule	Required	Optional	Total
1	ID Field (Optional)	X	User-defined	0	1	1
2	Fund	XX	Fixed	2	0	2
3	Subfund:			6	0	6
	Special Revenue: Federal and State Sources	XX / X / X / XX	Fixed			
	Special Revenue: Local Sources	XX / XXXX	Fixed			
	All other Fund Types	XXXXXX	Fixed			
4	Location:			5	0	5
	Departments	XX / X / XX	Fixed / Fixed / Validated			
	Schools and Other	XX / XXX	Fixed / User-defined			
5	Function	XXX	Fixed	3	0	3
6	Program	XX	Fixed	2	0	2
7	Subject	XX / XX	Fixed / Validated	2	2	4
8	Object:			5	0	5
	Balance Sheet	XX / XXX	Fixed / User-defined			
	Revenues	X / X / XXX	Fixed / Fixed / Fixed			
	Expenditures	X / X / XXX	Fixed / Fixed / Fixed			
9	Job Classification	X / X / XX	Fixed / Fixed / Validated	2	2	4
10	Management Responsibility Code	XX	User defined	0	2	2
Total				**27**	**7**	**34**

A brief description of these segments follows:

- ID Field – Identifies the "Company" or "Type" (Optional, but may be required by some accounting systems)

- The Fund (type of source) from which funds are being expended
- The Subfund (source) from which funds are being expended

- The Location (school or department) on which the funds are being used
- The Function (activity) for which the funds are being used
- The Program (broad objective) for which funds are used
- The Subject (curriculum or detailed objective) for which funds are used
- The Object (budget classification) for which the funds are used
- The Job Class (employees) associated with certain expenditures

- Management Responsibility – Code that can be used by Districts to assign Management Responsibility within the Accounting System (Optional)

Each segment within the UCOA has varying numbers of components within the segment. Some segments also maintain several numbering methodologies and logical hierarchy structure. Within these segments and components, there are three types of Coding and Number Methodology Rules that are used. Those three are described below:

Fixed Code (Fixed) – Codes are defined in the UCOA and cannot be changed.

Validated Flexible (Validated) – Codes can be defined for use by a District, but are subject to pre-use validation by RIDE for purposes of establishing and maintaining consistency of the data for use by all Districts.

User-defined Flexible (User-defined) – Codes that can be defined for use by any District at its discretion.

See below for an expanded analysis of the structure of each segment and components.

*Note: The following sections contain limited detail level account information to allow for a succinct overview of the UCOA. Complete details are available in the **UCOA Workbook**, maintained by RIDE and included herein by reference.*

ID Field

Seg-ment	Description	Structure	Number Methodology Rule	Required	Optional	Total
1	ID Field (Optional)	X	User-defined	0	1	1

Early in the analysis, we noted the use of an ID field at the front end of several chart of accounts. In several cases this was designed to be a "company" or entity identifier. In others, it was a transaction type identifier required by the specific accounting system software.

The preliminary structure proposed maintains this feature, which is optional for those that do not require this functionality. The ID field will not be required to satisfy the needs of the RIDE Data Warehouse, and therefore is **not** a required reporting segment.

Funds

Seg-ment	Description	Structure	Number Methodology Rule	Required	Optional	Total
2	Fund	XX	Fixed	2	0	2

Content	Purpose or Intent
Funding source and/or funding purposes. E.g. General Fund, Special Revenue Fund; Trust Fund, etc.	Segregates or isolates types of funding and activities aligned to the fund types.

The Fund segment represents the first "official" component in the UCOA structure. Many of the accounting system software packages require the fund be in the first position and this represents the most logical placement

A Fund is a fiscal and accounting entity with a self-balancing set of accounts in which cash and other financial resources, all related liabilities, and residual equities, or balances, and changes therein, are recorded and segregated to carry on specific activities or attain certain objectives in accordance with special regulations, restrictions, or limitations. School district accounting systems must be organized and operated on a fund basis.

Individual funds are first classified by Fund Type and then for specific purposes at the Subfund level. There are nine Fund Types that are used to record all related financial transactions. Funds are the primary component for accumulating and reporting financial results. Subfunds, which are described in detail below, are a further division of the Fund Type that are reported separately and also accumulated with the primary Fund Type to which the subfund belongs.

The Fund number is composed of two digits. The first digit provides a Fund Type designation. The second digit, in the case of Special Revenue funds will designate a funding source, such as the Federal Government or the State Government. In other types, the second digit will have no specific meaning. The numbering methodology and content for this segment is fixed and uniform in the UCOA.

RIDE will assign any new numbers that are required for this segment.

A complete description of each of the Fund Types to be used in the UCOA will be provided in the *RI UCOA Accounting Manual* to be developed in a subsequent phase of the UCOA Project.

The following is a list of the Fund Types along with the assigned account number.

No.	Description	Comment
10	General Fund	
20	**Special Revenue Funds**	**Header Account Number** *(for roll up purposes)*
21	Federal Revenue through State	Revenues received from Federal Agencies pass through the State

No.	Description	Comment
22	Federal Revenue – Direct from Federal Government	Revenues received from Federal Agencies directly by Districts
23	State Revenue	Revenues received from State Agencies
24	Local Revenue	Revenues received from Local resources including Foundations, Scholarships, Private Grants and other local sources
30	Capital Projects Funds	
40	Debt Service Funds	
50	Permanent Funds	
60	Enterprise Funds	
70	Internal Service Funds	
80	Trust Funds	
90	Agency Funds	

Subfunds

Seg-ment	Description	Structure	Number Methodology Rule	Required	Optional	Total
3	Subfund:			6	0	6
	Special Revenue: Federal and State Sources	XX / X / X / XX	Fixed			
	Special Revenue: Local Sources	XX / XXXX	Fixed			
	All other Fund Types	XXXXXX	Fixed			

Content	Purpose or Intent
Specific funding sources such as Title I, Food Service, State Aid, etc.	Each Subfund aligns with a specific Fund. Isolates sources of funding and activities in accordance with laws, restrictions, requirements, etc.

Subfunds are further divisions of funds that are reported separately and also directly aligned with only one Fund Type. Subfunds are bifurcated from the Fund segment to accommodate those accounting systems that have length limitations in the Fund segment.

The Subfunds are used to designate grants, capital projects, or other categories, as needed.

In all cases, the numbering methodology and content for this component will be uniform in the UCOA. RIDE will assign any new numbers that are required for this segment.

The numbering methodology of this segment is designed to accommodate the large numbers of grants that will accumulate over many years that are related to the **Special Revenue** funds. For different types of these fund types, specific meaning is associated with components within the Subfund segment. The Subfund number is composed of six digits.

Special Revenue – Federal and State Sources

For **Special Revenue** funds from **Federal and State Sources,** the numbering methodology divides this segment into four components as follows:

XX / X / X / XX

For these types of subfunds, the first component (two digits) represents a type of grant. Examples would include Title I, Title IV, and Early Childhood.

The second component (one digit) provides further designation of the category of the grant. Three categories of Federal grants have been identified as "Allocated", "Competitive" and "Targeted", to be designated as 1, 2, and 3, respectively.

The third component (one digit) represents a further designation of the type of grant. Examples would include Part A for Title I and Part B for Title I, etc.

The fourth component (2 digits) represents specific goals under the umbrella of the third component.

Special Revenue – Local Sources

For **Special Revenue** funds from **Local Sources**, the numbering methodology divides this segment into two components as follows:

XX / XXXX

Again, specifically relating to Special Revenue Funds, the first component (two digits) represents a type of grant. Examples would include Foundations, Scholarships and Private Grants.

The second component (four digits) represents a further identity of the type of grant or sources. This allows up to 10,000 specific funds for each type.

All Other Fund Types

For other fund types where these designations are not necessary, the entire string of 6 digits (XXXXXX) is available to identify the subfund.

Location

Seg-ment	Description	Structure	Number Methodology Rule	Required	Optional	Total
4	Location:			5	0	5
	Departments	XX / X / XX	Fixed / Fixed / Validated			
	Schools and Other	XX / XXX	Fixed / User-defined			

Content	Purpose or Intent
Internal departments, School types and School locations.	Isolates certain costs associated with specific departments, school types (e.g. elementary) and by school.

The Location segment contains two components in the local accounting systems, but will be *expanded to three components when District ID data is added in the Data Warehouse*.

The first component will be the Type identifier, composed of two characters, that specifies the Level of Education (e.g., Elementary, High School, etc.) or an Internal Department type. The numbering methodology and content for this component will be uniform in the UCOA.

A complete description of each of the Location Types to be used in the UCOA will be provided in the *RI UCOA Accounting Manual* to be developed in a subsequent phase of the UCOA Project.

The following is a list of the Location Types along with the assigned account number.

No.	Description
00	Central Office – (For possible allocation)
01	Education Services
02	Business Services
03	Elementary Schools
04	Middle Schools
05	High Schools
06	Alternative Schools
07	Other Schools
08	Non-public/Private
09	Preschools (in District)
10-99	Unassigned

Department Locations

The second component and third component (combined) is comprised of three digits to identify the specific Department. The codes used for these components will be specified in the UCOA.

For Departments (Type Code 01 - Education Services and Type Code 02 - Business Services), the numbering methodology and content for this component will be uniform in the UCOA. Accordingly, the application rule for this component is ***Fixed Code*.**

The third (one digit) component represents an area where more flexibility in numbering is useful for Districts. Accordingly, the applicable rule for this component is ***Validated Flexible*.**

School and All Other Locations

For all other Types Codes, which pertain to specific types of schools, the applicable rule for the second component is ***User-defined Flexible.*** That is, the District can assign their own numbers to the school locations. The only limiting rule is that all "common" locations such as special education centers, private/parochial schools, charter schools, etc., will be assigned (***Fixed Code***) numbers in the 800 and 900 series by RIDE for consistency.

Function

Seg-ment	Description	Structure	Number Methodology Rule	Required	Optional	Total
5	Function	XXX	Fixed	3	0	3

Content	Purpose or Intent
Group of activities aimed at accomplishing a major purpose such as Face to Face Teaching, School Management and Legal Obligations.	Isolates labor, materials, and other operating costs associated with the specific functions.

A Function is a group of related activities aimed at accomplishing a major service or program for which the local school district is responsible. The function describes the activity for which a service or material object is acquired. The functions of a school district are classified into six broad areas. The numbering methodology and content for this segment will be uniform in the UCOA.

RIDE will assign any new numbers that are required for this segment.

The Function names and numbers will follow the methodology and numbering used by **In$ite**. A complete description of each of the Functions to be used in the UCOA will be provided in the *RI UCOA Accounting Manual* to be developed in a subsequent phase of the UCOA Project.

The following provides the numerical hierarchical listing for this segment.

No.	Function (Parent)	Sub-Function (Child)	Detailed Function (Grandchild)
0000	**Revenue or Balance Sheet**		
1xxx	**Instruction**		
11xx		Face to Face Teaching	
1110			Instructional Teachers
1120			Substitutes
1130			Instructional Paraprofessionals
12xx		Classroom Materials	
1210			Pupil-Use Technology & Software
1220			Instructional Materials, Trips & Supplies
2xxx	**Instructional Support**		
21xx		Pupil Support	
2110			Guidance & Counseling
2120			Library & Media
2130			Extracurricular
2140			Student Health & Services
22xx		Teacher Support	
2210			Curriculum Development
2220			In-Service, Staff Development & Support
2230			Sabbaticals
23xx		Program Support	
2310			Program Management
2320			Therapists, Psychologists, Evaluators, Personal Attendants & Social Workers
24xx		Assessments	
2410			Academic Student Assessment
3xxx	**Operations**		
31xx		Non-Instructional Student Support	
3110			Transportation
3120			Food Service
3130			Safety
32xx		Facilities	
3210			Building Upkeep, Utilities & Maintenance

No.	Function (Parent)	Sub-Function (Child)	Detailed Function (Grandchild)
33xx		Business Services	
3310			Data Processing
3320			Business Operations

4xxx	**Other Commitments (Non-Operating)**		
41xx		Contingencies	
4110			Budgeted Contingencies
42xx		Capital	
4210			Debt Service
4220			Capital Projects
43xx		Out of District Obligations	
4310			Public, Parochial, Private & Charter School Pass-Throughs
4320			Retiree Benefits & Other
4330			Enterprise/Community Service Operations
44xx		Legal Obligations	
4410			Claims & Settlements

5xxx	**Leadership**		
51xx		School Management	
5110			Principals & Assistant Principals
5120			School Office
52xx		Program/Operations Management	
5210			Deputies, Senior Administrators & Researchers (Superintendent's Cabinet)
53xx		District Management	
5310			Superintendent & School Board
5320			Legal

Program

Segment	Description	Structure	Number Methodology Rule	Required	Optional	Total
6	Program	XX	Fixed	2	0	2

Content	Purpose or Intent
Different types of educational programs on a macro level, such as Regular Education, Special Education and Community Service.	Isolates labor, materials, and other operating costs associated with identified programs.

A Program is a plan of activities and procedures designed to accomplish a predetermined objective or set of objectives. Ten broad program areas have been identified that are intended to capture similar instructional services delivered to both public and charter schools. The program classification provides school districts with a framework to classify instructional and other expenditures by program to determine costs. The numbering methodology and content for this segment will be uniform in the UCOA.

RIDE will assign any new numbers that are required for this segment.

A complete description of each of the Programs to be used in the UCOA will be provided in the *RI UCOA Accounting Manual* to be developed in a subsequent phase of the UCOA Project.

The programs and the codes to be used are as follows:

Number	Description
00	Other Programs
10	Regular Education
20	Special Education
30	Vocational Education
40	Bilingual/ESL Education
50	Nonpublic School
60	Adult/Continuing Education
70	Community/Junior College Education
80	Community Services
90	Co-Curricular/Extra-Curricular Activities

Subject

Seg-ment	Description	Structure	Number Methodology Rule	Required	Optional	Total
7	Subject	XX / XX	Fixed / Validated	2	2	4

Content	Purpose or Intent
Specific subject groups such as English, Mathematics, and Music	Isolates labor, materials, and other operating costs associated with identified subjects.

A Subject is a general group curriculum such as Mathematics, Science, Art, etc. and is a plan of activities and procedures designed to accomplish a predetermined objective or set of objectives.

A complete description of each of the Subjects to be used in the UCOA will be provided in the *RI UCOA Accounting Manual* to be developed in a subsequent phase of the UCOA Project.

The first component is comprised of two digits and represents major categories of subjects, such as Mathematics, Science, Special Education, etc. The numbering methodology and content for this component will be uniform in the UCOA.

RIDE will assign any new numbers that are required for this component.

The second component is comprised of two digits and represents subcategories of the major subjects. This optional subcategory was created to provide additional flexibility to Districts for local purposes. This component is not a requirement of the UCOA; however its use must be governed by logical application and consistency. Accordingly, for this component, RIDE will assign any new numbers that are required.

Numerous Subject areas have been identified that are intended to capture the costs associated with these topics. The categories noted in yellow are optional sub-category subjects. The last two digits of each subject area are provided to allow districts the opportunity to drill-down their detail at a deeper level where possible and necessary for the district's internal requirements.

No.	Description
0000	General Education
0001	Kindergarten
0100	Agriculture
0200	Art
0300	Business
0400	Distributive/Marketing Education
0500	English Language Arts
0600	ESL
0700	Foreign Languages
0800	Guidance

No.	Description
0900	Health Occupations Education
1000	Physical Curriculum
1100	Health Education
1200	Physical Education
1300	Family and Consumer Education
1400	Industrial Arts
1500	Mathematics
1600	Music
1700	Natural Sciences
1800	Office Occupations
1900	Social Sciences
2000	Technical Education/Computer Technology
2100	Special Education
2101	Special Ed - 32201 Spec Ed Regular Class
2102	Special Ed - 32202 Resource Program
2103	Special Ed - 32203 Self-Cont Pgm 180 Day
2104	Special Ed - 32204 Self-Cont Pgm 230 Day
2105	Special Ed - 32205 Self-Cont In State 180 Day
2106	Special Ed - 32206 Self-Cont In State 230 Day
2107	Special Ed - 32207 Homebound/Hospitalized
2108	Special Ed - 32208 Non-Public 180 Day Non-Beneficiary
2109	Special Ed - 32209 Non-Public 230 Day Non-Beneficiary
2110	Special Ed - 32210 Non-Public 180 Day Beneficiary
2111	Special Ed - 32211 Resident Schools Beneficiary
2112	Special Ed - 32212 Resident Schools Non-Beneficiary
2113	Special Ed - 32213 Pre-School P/T 180 Day
2114	Special Ed - 32214 Pre-School Full Time
2115	Special Ed - 32215 Service Performed for Non-Public
2116	Special Ed - 32217 Non-Public 230 Day Beneficiary
2117	Special Ed - 32218 Self-Cont Out of State 180 Day
2118	Special Ed - 32219 Self-Cont Out of State 230 Day
2119	Special Ed - 32221 Resource Program/Tuition
2120	Special Ed - 32615 Social Work Services
2121	Special Ed - 32640 Psychological Services
2200	Co-curricular Activities - Athletics
2300	Co-curricular Activities – Non Athletics
2400	Literacy
2500	General Ed - Non Instruction
2600	Library Science

Objects

Seg-ment	Description	Structure	Number Methodology Rule	Required	Optional	Total
8	Object:			5	0	5
	Balance Sheet	XX / XXX	Fixed / User-defined			
	Revenues	X / X / XXX	Fixed / Fixed / Fixed			
	Expenditures	X / X / XXX	Fixed / Fixed / Fixed			

Content	Purpose or Intent
Category of Revenues such as Federal or State funds, local funds and earned revenue. Category of Expenditures such as salaries, benefits, books, fuel, etc. Category of Assets, Liabilities and Equity accounts.	Revenues are segregated by sources and specific categories. Expenditures are segregated by type such as compensation, purchased services, debt service, and property costs, etc.

An Object is the segment that contains the specific balance sheet account, revenue, or expenditure for which funds are received or expended. The purpose of an expenditure object is to classify in detail the services or commodities bought from the financial resources in the fund source from which the expenditure is being made. The methodology involving the Object code is similar to commercial accounting in that Object codes contain all the "Operating or Budgeting" accounts for the Balance Sheet, Revenue and Expenditure accounts.

The Object number is composed of five digits. The first digit in this segment is used to designate the five major account types used in the Object segment. Its use allows for a greater range of numbers and detail in the revenue and expenditure account codes. The account code segment is used to designate the following:

1 Assets
2 Liabilities
3 Fund Equity
4 Revenue
5 Expenditures

A complete description of each of the Objects to be used in the UCOA will be provided in the *RI UCOA Accounting Manual* to be developed in a subsequent phase of the UCOA Project.

Balance Sheet Accounts

The structure for Balance Sheet accounts is as follows:

XX / XXX

For Balance Sheet accounts, the first component represents the account type (first digit) and the group (second digit). The numbering methodology and content for this component will be uniform in the UCOA. It is believed that only data from this first component will be provided to the Data Warehouse relating to Balance Sheet accounts.

The first digit in this component is used to designate:

1 Assets
2 Liabilities
3 Fund Equity

The second digit represents a specific account group such as Cash, Accounts Receivable, Fund Balance, etc.

RIDE will assign any new numbers that are required for this component to ensure consistency in the data.

For Balance Sheet accounts, the second component represents the specific account and is available for use at the discretion of each district as the specific account would fit logically underneath the first component.

Revenue Accounts

The structure for Revenue accounts is as follows:

X / X / X / XX

For Revenue accounts, the first component represents the account type (first digit). The numbering methodology for this segment will be uniform in the UCOA.

RIDE will assign any new numbers that are required for this segment to ensure consistency in the data.

The first digit in this component (always a 4) is used to designate Revenue items.

The second component (second digit) represents the group. These names and numbers are assigned in the UCOA. The second component represents a specific revenue source, such as Revenue from Local Sources, Revenue from State Sources, etc. The numbering methodology and content for this component will be uniform in the UCOA.

The third component (third digit) represents further segregation of funding sources such as Tuition, Taxes, Food Services, etc. The numbering methodology and content for this component will be uniform in the UCOA.

The fourth component (fourth and fifth digit) represents the specific detail account as the specific account would fit logically underneath the auspices of the first three components. The numbering methodology and content for this component will be uniform in the UCOA.

Expenditure Accounts

The structure for both Revenue and Expenditure accounts is as follows:

X / X / X / XX

For Expenditure accounts, the first component represents the account type (first digit). The numbering methodology and content for this component will be uniform in the UCOA.

The first digit in this component (always a 5) is used to designate Expenditure items.

The second component (second digit) represents the group. These names and numbers are assigned in the UCOA. The second component represents a specific expenditure type such as Salaries, Benefits, Purchased Services, etc. The numbering methodology and content for this component will be uniform in the UCOA.

The third component (third digit) represents a further segregation of expenditure types such as Professional Development, Overtime, Medical benefits, Contractors, etc. The numbering methodology and content for this component will be uniform in the UCOA.

The fourth component (fourth and fifth digit) represents the specific detail account as the specific account would fit logically underneath the auspices of the first three components. The numbering methodology and content for this component will be uniform in the UCOA.

Balance Sheet Accounts

The structure and methodology of the Parent and Child levels is presented below.

No.	Level 1 (Parent)	Level 2 (Child)
10000	**Cash Accounts and Investment Accounts**	Added by Districts for their specific use.
11000	**Taxes Receivable**	Added by Districts for their specific use.
12000	**Accounts Receivable**	Added by Districts for their specific use.
13000	**Other Receivables**	Added by Districts for their specific use.
14000	**Due from Others**	Added by Districts for their specific use.
15000	**Prepaid Expenses**	Added by Districts for their specific use.
16000	**Other Assets**	Added by Districts for their specific use.
17000	**Provision for Long Term Debt**	Added by Districts for their specific use.
18000	**Fixed Assets**	Added by Districts for their specific use.
19000	**Due from Other Funds**	Added by Districts for their specific use.
20000	**A/P - Current**	Added by Districts for their specific use.
21000	**Accrued Expense Payable**	Added by Districts for their specific use.
22000	**General Obligation Bonds**	Added by Districts for their specific use.
23000	**Deferred Revenue**	Added by Districts for their specific use.
24000	**Due to Others**	Added by Districts for their specific use.

No.	Level 1 (Parent)	Level 2 (Child)
25000	**Other Liabilities**	Added by Districts for their specific use.
26000	**Unassigned**	Added by Districts for their specific use.
27000	**Unassigned**	Added by Districts for their specific use.
28000	**Unassigned**	Added by Districts for their specific use.
29000	**Due to Other Funds**	Added by Districts for their specific use.
31000	**Fund Balances**	Added by Districts for their specific use.
32000	**Unassigned**	Added by Districts for their specific use.
33000	**Unassigned**	Added by Districts for their specific use.
34000	**Proprietary Fund Balances**	Added by Districts for their specific use.
35000	**Unassigned**	Added by Districts for their specific use.
36000	**Unassigned**	Added by Districts for their specific use.
37000	**Unassigned**	Added by Districts for their specific use.
38000	**Unassigned**	Added by Districts for their specific use.
39000	**Unassigned**	Added by Districts for their specific use.

Revenue Accounts

The structure and methodology of the Parent and Child is presented below; the detail (Grandchild) accounts have been added through the work of the UCOA Workgroup.

Note: The following represents only an excerpt of the Revenue Accounts to represent the methodology by example. The total listing is provided in the UCOA Workbook incorporated herein by reference.

No.	Level 1 (Parent)	No.	Level 2 (Child)
41000	**Revenue From Local Sources**		
		41100	Taxes Levied/Assessed by the School District
		41200	Revenue From Local Governmental Units other than School Districts
		41300	Tuition
		41400	Transportation Fees
		41500	Investment Income
		41600	Food Services
		41700	District Activities
		41800	Revenue From Community Services Activities
		41900	Other Revenue From Local Sources

Expenditure Accounts

The structure and methodology of the Parent and Child is presented below; the detail (Grandchild) accounts have been added through the work of the UCOA Workgroup.

Note: The following represents only an excerpt of the Expenditure Accounts to represent the methodology by example. The total listing is provided in the UCOA Workbook incorporated herein by reference.

No.	Level 1 (Parent)	No.	Level 2 (Child)
51000	**Personnel Services - Compensation**		
		51100	Salaries Expense (Pensionable)
		51200	Overtime Expense
		51300	Additional Compensation (Non-pensionable)
		51400	Stipends
52000	**Personnel Services - Benefits**		
		52100	Health and Medical Benefits
		52200	OPEB and Retirement Payments
		52300	FICA and Medicare
		52400	Voluntary Savings Contributions
		55000	Unemployment Compensation
		52700	Workers Compensation
		52900	Other Benefits

Job Classification

Seg-ment	Description	Structure	Number Methodology Rule	Required	Optional	Total
9	Job Classification	X / X / XX	Fixed / Fixed / Validated	2	2	4

Content	Purpose or Intent
Job Class categories such as Teachers, Custodians, School Administrators, etc.	Isolates the cost of employees associated directly with two types of Object codes – Compensation and Benefits

The Job Classification segment provides for the accumulation of selected expenditures by employee job classifications. This segment is directly associated with the Object codes relating to compensation and benefits.

The numbering methodology and content for this segment will be uniform in the UCOA.

RIDE will assign any new numbers that are required for this segment to ensure consistency in the data.

A complete description of each of the Job Classifications to be used in the UCOA will be provided in the *RI UCOA Accounting Manual* to be developed in a subsequent phase of the UCOA Project.

The following is a list of the Job Classifications segment along with the assigned account number.

No.	Parent	No.	Child
0000	None	0000	None
1000	Instructional & Instructional Support		
		1100	Teachers
		1200	Instructional Coaches
		1300	Guidance Counselors, Placement Officials, Financial Aid Advisors
		1400	Therapists, Social Workers, Psychologists
		1500	Nurses
		1600	Library and Media
		1700	Aides
		1800	Student Activity Advisors & Coaches (Stipend Staff only)
2000	Leadership		
		2100	Executive

No.	Parent	No.	Child
		2200	Finance and Administration
		2300	School Administration
		2400	Curriculum and Assessment
		2500	Principals and Asst Principals
3000	Non-Instructional Support and Operations		
		3100	Executive - Clerical
		3200	Finance and Administration - Clerical
		3300	School Administration - Clerical
		3400	Curriculum and Assessment - Clerical
		3500	Transportation
		3600	Crossing Guards
		3700	Custodial
		3800	Officials
		3900	Facilities Maintenance
4000	Non-active Employees		
		4100	Retirees

The first component (first) digit in the segment represents a job class.

The second component (second) digit represents a specific job group, such as Teachers, Nurses, Finance and Administration professionals, School Administration – Clerical, etc. The numbering methodology and content for this component will be uniform in the UCOA.

There is an *optional* third component (third and fourth digits) which represents specific jobs that fit under the groupings of the first two components. Examples include Kindergarten Teacher, ROTC Officer, Chief Financial Officer, Reading Coordinator, etc. This subcategory was created to provide additional flexibility to Districts for local purposes. This component is not a requirement of the UCOA; however, its use must be governed by logic and consistency. Accordingly, these subcategories must be related to the required levels in a logical and consistent fashion.

Management Responsibility

Seg-ment	Description	Structure	Number Methodology Rule	Required	Optional	Total
10	Management Responsibility	XX	User defined	0	2	2

Content	Purpose or Intent
Optional code for use in aligning budget responsibility items to assigned Managers.	Isolates the items for which each Manager is assigned. This is a local code only and not required for transmission to the Data Warehouse.

Several Districts use their accounting system to track areas of Management Responsibility – expenditures that individual Managers are responsible to govern.

The preliminary structure proposed maintains this feature, which is optional for those that do not need this functionality. The Management Responsibility field will not be required to satisfy the needs of the RIDE Data Warehouse, and therefore is **not** a required reporting segment.

Redundancy Analysis

A cursory review of the UCOA might suggest there may be duplication or redundancy within the UCOA structure or methodology. For example, within the Function segment we note the use of the terms Instruction and Leadership as major categories. We also note the same terms used in the Job Class segment.

On the surface, while this may appear to be redundant because of the use of the same terms, a detailed study of each segment will reveal that there is no duplication of purpose. One must remember that one goal of the UCOA is to capture data in such a way that data can be both isolated and combined in a logical fashion. The following summarizes the content and intent of each required segment.

Segment	Content	Purpose or Intent
Fund	Funding source and/or funding purposes. E.g. General Fund, Special Revenue Fund; Trust Fund, etc.	Segregates or isolate types of funding and activities aligned to the fund types.
Subfund	Specific funding sources such as Title 1, Food Service, State Aid, etc.	Each Subfund aligns with a specific Fund. Isolates sources of funding and activities in accordance with laws, restrictions, requirements, etc.
Location	Internal departments, School types and School locations	Isolates certain costs associated with specific departments, school types (e.g. elementary) and by school.
Function	Group of activities aimed at accomplishing a major purpose such as Face to Face Teaching, School Management and Legal Obligations	Isolates labor, materials, and other operating costs associated with the specific functions.
Program	Different types of educational programs on a macro level, such as Regular Education, Special Education and Community Service.	Isolates labor, materials, and other operating costs associated with identified programs.
Subject	Specific subject groups such as English, Mathematics, and Music	Isolates labor, materials, and other operating costs associated with identified

Segment	Content	Purpose or Intent
		subjects.
Object	Category of revenues such as Federal or State funds, local funds and earned revenue. Category of expenditures such as salaries, benefits, books, fuel, etc. Category of assets, liabilities and equity accounts.	Revenues are segregated by sources and specific categories. Expenditures are segregated by type such as compensation, purchased services, debt service, and property costs, etc.
Job Class	Job Class categories such as Teachers, Custodians, School Administrators, etc.	Isolates the cost of employees associated directly with two types of Object codes – Compensation and Benefits

The UCOA, by its nature, will necessarily use common names in many segments. This is due to the related nature of the segments and the commonality of intent: *the business of education*. The overlap, though, is limited to names and descriptions and not to actual content. The isolation of data into the various segments provides content that is more specific within each segment and is combinable in logical fashion with other segments.

With this understanding, we can address the example noted previously wherein we noted the use of the terms Instruction and Leadership in both the Function segment and the Job Class segment. Using the Instruction category of the Function segment we will gather costs associated with direct and indirect labor, materials, services, textbooks, etc.; essentially every cost related to providing Instruction services. In contrast, the Instruction category of the Job Class segment will only gather costs associated with direct labor to provide Instruction services.

As can be seen, the Job Class *Instruction* category cost is a subset of the Function *Instruction* category cost; however one that is only isolatable using the Job Class segment.

To answer the question, "*How much were our compensation costs for Teachers?",* one must access the data from the Job Class segment, supported by the detail from the Object segment. This could not be answered by accessing the Function segment. Accordingly, although there was both commonality in naming convention and overlap of selected data, the specific question could only be answered by the isolated data from another segment.

Other examples to illustrate this point are these questions:

How much did we spend for instruction for Math classes?
How much did we spend for textbooks for Math classes?

The first can be answered by analyzing the data from the intersection of the Function segment and the Subject segment.

The second can be answered from the intersection of the Object segment and the Subject segment.

If one wanted to know how much was spent on Teachers in Special Education from Title I Federal funds, one would need to access data from the intersection of these segments: Fund, Subfund, Program, Subject and Job Class.

As illustrated, the structure supports our goal to provide *for isolation of data as well as combining of data*. Therefore the structure and methodology used does not lead to redundancy, but rather to classifying expenditures to enhance segregation and analysis.

Findings on Current Accounting Systems Used

A survey and analysis of the accounting systems used by School Districts is included in **Appendix A**. A summary of those findings is as follows:

Most of the systems will accommodate the UCOA with no modifications to the existing software.

There are five systems that do not have the capabilities required and will need to be replaced. Those systems are *Peachtree* (3 systems in RI - 2 Charter Schools and 1 State School) and *Quickbooks* (7 systems in RI - All Charter Schools), *Texex* (North Smithfield), *Banyon* (Cumberland), and *Govern* (Barrington). The owners of *Banyon*, *Govern* and *Tenex* have stated they will **not** modify their code to meet the requirements of the UCOA.

Another system that does not presently meet the requirements is *Keystone* (3 systems in RI – Woonsocket, Johnston and Chariho). The owners of *Keystone* have indicated that they will upgrade their product to meet the requirements of the UCOA for no cost to the end users.

The user of the *Unifund* system (Bristol Warren) will be upgraded to a more current version which will accommodate the requirements of the UCOA.

One other system, *Solomon*, used by one District, can meet the required elements of the UCOA, but cannot accommodate the optional items. The District in question (Kingston Hill Academy, a Charter School) will need to determine if the current system will meet their own needs without the benefit of the optional elements of the UCOA.

There are four systems we did not analyze. The systems used by Newport, North Providence, and Central Falls are scheduled to be replaced by other systems that will have the required capabilities. The third, the RIFANS system (RI School for the Deaf and Davies Career and Technical Academy), which is a state-sponsored site and was also not analyzed as part of the UCOA Project, as the system will not be changed or modified for this purpose. Costs for these accounting systems have not been included in this analysis.

The remaining 25 systems in place will all accommodate the requirements of the UCOA.

There were three key factors noted in the review of the accounting systems that impacted the final structure of the UCOA. Those factors were:

- Optional lead character – some systems required this feature to function properly;
- Size of the Fund segment – some systems were hard coded and could not meet the requirements if the Fund and Subfund segments were combined; and
- Number of characters in any segment – some were limited to 6.

A few Districts share an accounting system with the local municipality. The accounting systems used by these Districts reported their ability accommodate bifurcation of the chart of accounts or identification of the entity. Further discussions will be held with the Districts and municipalities to determine the impact on the municipality for a change to the chart of accounts for the Districts.

Preliminary Implementation Conversion Cost Analysis

In conjunction with our review of the Accounting systems, we inquired of the tools and services available from vendors for assisting with the implementation of the UCOA and any conversion of historical data.

Nearly all vendors have tools and services available for changing an "Account Mask" – that is the structure, size and placement of the Chart of Accounts. Further, all vendors can provide services to convert historical data. With little variation, these services are provided based on an agreed upon scope of work and time and material basis. Billing rates ranged from $150 to $225 per hour depending on the experience level of the persons performing the work.

The requirements of each District will, of course, be different as the existing structure and nuances of each accounting system are unique to each District. Notwithstanding, in generic terms, to complete the implementation of the Account Mask each District will need to perform the same tasks; what will vary is the time required to develop the "Crosswalk" A Crosswalk is the analysis of how the prior Chart of Accounts will map to the new UCOA.

Crosswalks have three varieties: ones that involve a one-to-one relationship (i.e. one account from the prior COA to one account in the new COA), those that involve a many-to-one relationship (i.e. many accounts from the prior COA to one account in the new COA), and those that involve a one-to-many relationship (i.e. one account from the prior COA to many accounts in the new COA).

The first two are easy and simple conversions to accomplish. They require a modicum of planning, analysis and input.

Conversely, the latter variety often requires a lengthy analysis period and a large number of subjective decisions for many transactions that occurred during the periods to be converted. This can be a very large amount of data, require extensive work and provide limited benefit.

For these reasons, the members of the UCOA Workgroup and the UCOA Focus Group have opted not to convert historical data. Instead they will perform ad-hoc analysis when a historical analysis is required. This decision lessens the level of services required for vendors to change the chart of accounts to the structure and content of the UCOA.

Each of the vendors was surveyed on several items including a proposed scope of work that could apply to each District. That scope of work is presented below.

I. Planning with Vendor
   - A. Review New Structures and Definitions
   - B. Identify changes and issues in each Segment
   - C. Identify changes and issues in each sub-module
   - D. Identify changes and issues in supporting and ancillary systems
   - E. Develop Tactical Plan

F. Develop Time and Responsibility Schedule

II. Define Change Criteria
   A. Chart of Accounts Crosswalk (simplified version to be used for training and reference purposes)
   B. Reporting Requirements (Existing and New)
   C. Naming Conventions
   D. Module Interface
   E. Security and Access Levels
   F. Short-cut Keys (if available)
   G. Quality Control Procedures

III. System Modifications
   A. Develop Crosswalk for each Segment
   B. Input New Structure in Mask
   C. Input new Numbers and Definitions (import provided)
   D. Re-define Reporting Links
   E. Create new Reports as needed
   F. Re-code Module Interfaces
   G. Re-code Security and Access Levels
   H. Re-code Short-Cut keys
   I. Perform Quality Control Tests

The uniqueness and complexity of the various systems will require varying lengths of time for each task. We reviewed this list with each relevant vendor. As a whole, they believed it was a representative list of the tasks they normally perform in implementing and converting data.

They also estimated (and we concur) that the smaller Districts of which Rhode Island is mostly comprised, would require approximately 80-120 hours of vendor time each to accomplish the tasks. At average hourly rates ranging from $150 per hour to $200 per hour that translates to $12,000 - $24,000 per District.

We should also point out that larger installations, such as in Providence School District, will require more time owing to the size differential and number of transactions.

Based on the data received to date, we estimate the External (third party vendors) and Internal (RIDE and Districts) costs to be as follows:

Topic	External	Internal	Total
Change to new UCOA: *Costs for the necessary work to modify the accounting systems to accommodate the new COA. Includes vendor costs to support and assist as well as district internal costs. Nearly every district requires some work in this area.*	449,900	183,710	633,610
Software Modifications: *Costs related to the vendor modification and reinstall of accounting software.*	0	45,540	45,540
License Fee for Upgrade and Services to Upgrade: *Costs related to upgrading existing software packages and includes both license fees and internal costs.*	69,115	20,080	89,195
New Accounting Software*: Internal and external costs associated with installing and implementing a new system*	552,405	129,700	682,105
New Hardware: *Costs related to acquiring new hardware required*	168,000	57,180	225,180

Topic	External	Internal	Total
for upgrades or new software.			
Develop Accounting Manual: *Costs related to the development of a detailed RI UCOA Accounting Manual.*	77,285	25,000	102,285
Develop Training Materials	88,190	14,400	102,590
Level 1 Training: *Training for Chief School Business Officials*	55,480	57,518	112,998
Level 2 Training: *Training for Accounting Personnel in Districts*	33,950	73,231	107,181
Level 3 Training*: Training for other users of accounting system and accounting information in Districts*	0	111,590	111,590
Total Costs	**1,494,325**	**717,949**	**2,212,274**

The total of External and Internal costs is estimated to be $2,212,274.

A total of 14 Districts and Charters Schools will require new accounting software. The costs for this replacement have been included in the cost analysis.

The costs for those Districts that had previously decided to replace their systems (Newport, North Providence and Central Falls) are not included in the cost analysis. Also, the costs for those Districts (totaling 8) that had previously decided to upgrade to the SQL version of the *Phoenix* software are not included in the cost analysis.

The significant costs are associated with changing the existing chart of accounts to the UCOA, providing new accounting software, and developing and providing training to ensure the UCOA is used properly and consistently.

RIDE will seek funding from grants, targeted aid, and the RI Legislature to provide the necessary funds to assist Districts with the costs associated with implementing the new Uniform Chart of Accounts.

For budget purposes, the costs will be incurred over two years as follows:

Topic	External	Internal	Total
Pilot Districts - Year 1	570,946	270,546	841,493
All Other Districts - Year 2	923,379	447,403	1,370,781
Total Costs	**1,494,325**	**717,949**	**2,212,274**

XBRL Technology

"XBRL" (**Extensible Business Reporting Language**) technology is an emerging XML-based standard to define and exchange business and financial performance information. XBRL is a standards-based way to communicate business and financial performance data. These communications are defined by metadata set out in taxonomies.

We investigated the use or existence of XBRL technology in the various accounting systems used by Districts in Rhode Island. None of the systems currently supported this technology, which is a more common feature of large commercial organizations that are subject to SEC reporting requirements.

The lack of this technology has no impact on the UCOA, the Districts ability to utilize the UCOA and the ability of the Data Warehouse to fulfill its purpose.

Timelines and Deliverables

Timelines

Timeline and Tasks: The timeline and tasks for Phase I - the design of the UCOA is as follows:

Item	Start Date	End Date
Phase I		
Task 1: Data Collection	9/1/06	11/24/06
Task 2: Data Analysis	9/1/06	12/31/06
Task 3A: Development of Proposed Uniform Chart of Accounts	9/1/06	2/28/07
Task 3B: Evaluation and Revisions to Proposed Uniform Chart of Accounts	2/1/07	6/30/07
Task 4: Establishment of Budget Estimates, Timelines and Action Plans for Phases II and III	2/1/07	5/15/07

Deliverables

All Deliverables to date have been provided and within the timelines provided. Additional deliverables for Tasks 3B and 4 will be provided as noted.

Next Steps

Continued Use of the UCOA Workgroup

The next phase of work assigned to the UCOA Workgroup will be to assist in evaluating the estimated costs associated with implementing the UCOA in the pilot Districts. In addition, further input into the account codes, content and use are expected.

The next work performed on Task 3B will be to develop a proposed training plan and a proposed Implementation Plan. The UCOA Workgroup will be used to evaluate and develop these plans further.

Focus Group Presentations and Feedback

The first meetings of the Focus Group occurred in March 2007. Those meetings concentrated on presenting the UCOA to the group and receiving feedback. The feedback will be evaluated and any modifications to the UCOA will be considered. Should modification appear to be warranted, the UCOA Workgroup will be informed to obtain their feedback on any proposals.

Finalize Cost Analysis

The cost analysis performed to date will be updated with further analysis from vendors.

Phase II and Phase III Planning

During the next few weeks, Task 4 will commence. The Project Team will develop a two-year budget estimate of the work to be accomplished in Phases II and III. This estimate will include a projected budget for the following:

- development of budget and reporting tools;
- training; and
- enhancing hardware and software capabilities for both state and local levels.

Timelines, Tasks and Action plans will be provided.

Phase II is presently expected to include the following:

- Develop RFP for items necessary for Implementation Plan
- Development of the *RI UCOA Accounting Manual*
- Finalize the Implementation Plan
- Issue RFP and evaluate responses
- Select vendor(s) to support the Implementation Plan
- Develop Training Materials and Tools

Phase III is presently expected to include the following:

- Provide Training sessions
- UCOA Workgroup Districts to begin using the UCOA during budget preparation process
- Revise the UCOA based the experiences of the UCOA Workgroup
- UCOA Workgroup Districts to begin Operational use of the UCOA by 7/1/08

RI UCOA Accounting Manual

As noted earlier in this report, the Table of Contents of the *RI UCOA Accounting Manual* has been drafted for review and feedback from the UCOA Workgroup. Once the UCOA Workgroup finalizes the content to be included, work can begin on the detail of this document.

For those reasons specified earlier, the *RI UCOA Accounting Manual* is expected to be a comprehensive document that will support training and enhance the financial operations of the Districts. In addition, this Manual will provide the specific, detailed documentation upon which future audit standards can be applied.

* * * * *

Appendix A

Accounting System Survey Results

Name	No. in Use	Survey Response	CRITERIA 1	2	3	4	5	6	7	8	9	10	Comment
ADMIN	2	Y	Y	13	Y	Y	50	6	Y - 6	N	Y	A	
Banyon	1	Y	N	7	N	Y	28	8	Y - 8	First	N	A	Cannot Accommodate; must be replaced
FMS	1	Y	Y	12	Y	N	66	24	Y - 24	N	Y	A	
GEMS	1	N/A											Not evaluated. Being replaced by user District
Govern	1	Y	N	8	20	Y	20	20	N	First	N	A	Version in use cannot accommodate, but may be upgradeable; pending determination
Innovak	1	Y	Y	10	Y	N	50	10	Y - 6	N	N	A	
Keystone	3	Y	Y	U	N	Y	30	NL	N	First	Y	A	Cannot accommodate, but vendor will upgrade
Lawson	1	In Person	Y	NL	Y	N	255	NL	N	N	Y	C	
Munis	7	Y	Y	10	Y	N	45	10	Y - 4	First	Y	B	
NE Systems	2	Y	Y	9	Y	N	486	18	N	N	Y	A	
Peachtree	3	N/A											Must be replaced

Name	No. in Use	Survey Response	CRITERIA 1	2	3	4	5	6	7	8	9	10	Comment
Pentamation	1	Y	Y	11	Y	N	150	16	16	First	Y	A	
Phoenix	11	Y	Y	12	Y	N	36	8	Y - 8	Second	Y	A	
Quickbooks	6	N/A											Must be replaced
RIFANs	2	N/A											Not evaluated. Will not be modified.
Solomon	1	Y	Y	8	N	N	24	6	N	N	N	A	Can accommodate the Required structure, but not the Optional
Tenex	1	Y	Y	64	Y	Y	255	NL	N	N	Y	A	Replacing Tenex with APTA Funds software
Unifund	1	Y	Y	U	Y	Y	42	NL	N	N	Y	A	

Criteria

1	Does the software accommodate the number of segments projected in the UCOA?
2	What is the total number of segments that are allowed in the software?
3	Does the software accommodate the number of characters projected in the UCOA?
4	Does the software count delimiters in determining the number of characters allowed?
5	What is the total number of characters that are allowed in the software?
6	What is the total number of characters that are allowed in each segment?
7	Does the software limit the number of characters in the Fund Segment? If so, how many?
8	Does the software require the Fund segment to be located in a specific location in the Account String?
9	Do you have tools to assist in the conversion of data from the existing structure to a new structure?
10	How are services priced for assisting with a data conversion?

Footnotes

Y	Yes

Name	No. in Use	Survey Response	CRITERIA 1	2	3	4	5	6	7	8	9	10	Comment
	N	No											

A	Scope is determined by requirements and billed on an hourly basis.
B	Creating a special package for Rhode Island clients, expected to be around $10,000
NL	No Limit
U	Unlimited

Appendix B

Members of the UCOA Workgroup

1. Jane Correia & Pauline Silvia (Pilot) – Bristol Warren Regional School District
2. Robert Murray (Pilot) – Central Falls School Department
3. Toni Beaudreau & Brian Stanley (Pilot) – Chariho Regional School District
4. Melissa Devine (Pilot) – Johnston School Department
5. Christopher Mallett & Ron DiFabio (Pilot) – Narragansett School Department
6. Michael Saunders (Pilot) – Newport School Department
7. Linda Celona (Pilot) – North Providence School Department
8. Lisa Cournoyer (Pilot) – Smithfield School Department
9. Donna Chase-Larsen (Pilot) – Times^2 Academy
10. Robin Reasor & Dottie Eckersley (Pilot) – Tiverton School Department
11. Miriam Goodman (Pilot) – Woonsocket School Dept

12. Steve Janelle (Potential Pilot) – Warwick School Dept – RIASBO Representative
13. Joseph Balducci – Cranston School Dept – RIASBO Representative
14. Michael D'Antuano & Ralph Salvatore (Potential Pilot) – Providence School Department
15. Azim Mazagonwalla – Education Partnership
16. Peder Schafer – Office of Municipal Affairs
17. Tim Duffy – RI Association of School Committees
18. Linda Ide & John Carroll – Office of the Auditor General
19. Gary Sasse – RI Public Expenditure Council

Carolyn Dias – RIDE, Director of Finance
Cynthia Brown – RIDE, Senior Finance Office for Data and Analysis
Rick Wells – Vice President, EDmin.com, Consultant